NHTI
Concord's Community College

# College Catalog

## Fall, Spring, and Summer 2025-2026

*Community focused, career driven.*

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# Academic Calendar

For the most current and comprehensive academic calendars, click here.

## Summer Semester 2025

| | |
|---|---|
| **April** | |
| 28 | Tuition due for Summer 2025 full semester and first ½ semester classes |
| **May** | |
| 12 | Full summer session classes begin (end August 23) |
| 12 | First ½ semester and Dental Assisting classes begin (end July 5) |
| 12 | Last day to add a first ½ summer session class without instructor permission |
| 12 | Orthopaedic Technology courses begin (end June 27) |
| 12 | Dental Hygiene 10 weeks begins (end Jul 18) |
| 14 | System Symposium |
| 16 | Commencement |
| 19 | Last day to add a full summer session class without instructor permission |
| 19 | Radiologic/Radiation\|Diagnostic Med Sono courses begin (end Aug 1) |
| 19 | Paramedic courses begin 7 weeks (end Jul 3) |
| 19 | Nursing (10 weeks) begins (end Jul 25) |
| 19 | Last Day of Responsibility-10 Month Faculty-Spring Semester (except as determined by commencement duties) |
| 19 | Last day to drop a first ½ summer session class with a refund |
| 20 | Last Day of Responsibility -180 Day Staff – Spring Semester (as determined by assigned commencement duties) |
| 26 | Memorial Day holiday – NHTI closed |
| 27 | Summer 10 Week classes begin (end June 3) |
| 27 | Last day to drop a full summer session with a full refund |
| 30 | Last day to resolve “I” grades from Spring 2025 |
| **June** | |
| 2 | Last day to drop a first ½ summer 5 Week or 10 Week class with a full refund |
| 13 | Health Program Orientation |
| 13 | Last day to drop a first ½ semester course with a “W” grade \| (60% point) |
| 16 | Last day to drop a first ½ summer 5 week session I course with a “W” grade \| (60% point) |
| 16 | Tuition due for Summer 2025 second ½ semester courses |
| 19 | Juneteenth Day Holiday – NHTI closed |
| **July** | |
| 4 | Independence Day holiday observed – NHTI closed |
| 5 | First ½ semester Dental Assisting classes end |
| 7 | Second ½ semester classes begin (end August 23) |
| 7 | Last day to add a second ½ summer session class without permission |
| 7 | Last day to drop a 10 week course with a “W” grade \| (60% point) |
| 7 | Final course grades due for first ½ summer session |
| 9 | General Orientation |
| 10 | Last Day of Responsibility for 11 Month Faculty for the 2024-25 Academic Year |
| 10 | Final course grades for first ½ summer session available on SIS |
| 14 | Last day to drop a summer second ½ summer session class with a refund |
| 14 | Last day to drop a full semester course with a “W” grade \| (60% point) |
| 21 | Last day to drop a summer second ½ session II 5 Week class with a “W” grade \| (60% point) |

| | |
|---|---|
| 23 | Express Admissions Day/Walk-In Wednesday |
| **August** | |
| 2 | Summer 10 Week & second ½ Summer Session Day – 5 Week classes end |
| 6 | Express Admissions Day/Walk-In Wednesday |
| 7 | Last day of 2024-2025 Academic Year |
| 7 | Final grades for summer day 10 week & session II day classes available on SIS |
| 13 | General Orientation |
| 20 | Express Admissions Day/Walk-In Wednesday |
| 23 | Full summer session and second ½ summer session classes end |
| 27 | Final grades for summer courses available on SIS |

## Fall Semester 2025

| | |
|---|---|
| **August** | |
| 8 | 180 Day Staff Return for Fall Semester |
| 11 | Tuition due for Fall 2025 full semester and first ½ semester classes |
| 12 | 10 Month and 11 Month Faculty Return for Fall Semester |
| 22 | Residence Halls open at 12pm |
| 25 | Full semester classes begin |
| 25 | First ½ semester classes begin (end October 18) |
| 25 | Last day to add a first ½ semester class without instructor permission |
| **September** | |
| 1 | Labor Day Holiday-NHTI Closed |
| 2 | Last day to add a full semester class without instructor permission |
| 2 | Last day to drop a first ½ semester class with a refund |
| 8 | Last Day to Drop a Full Semester Course with Full Refund |
| 9 | Convocation |
| 12 | Last Day to Resolve “I” Grades from Summer 2025 |
| 23 | Mid Semester grades available on SIS for first 1/2 semester classes |
| 29 | Last day to drop a first ½ semester course with a “W” \| (60% point) |
| **October** | |
| 6 | Tuition due for second ½ semester classes |
| 18 | First ½ semester classes end |
| 20 | Second ½ semester classes begin (end December 13) |
| 20 | Last day to add a second ½ semester class without instructor permission |
| 22 | Final grades available on SIS for first ½ semester classes |
| 27 | Last day to drop a second ½ semester class with a refund |
| 29 | Mid semester grades available on SIS for full semester classes |
| 30 | Last Day to Withdraw with “W” Grade from a Full Semester Course (60% point) |
| **November** | |
| 5 | Open House |
| 11 | Veterans’ Day Holiday – No Classes and CCSNH Institutions Closed |
| 18 | Mid semester grades available on SIS for second ½ semester classes |
| 24 | Last day to drop a second ½ semester class with a “W” grade \| (60% point) |
| 26 | Residence Halls close for Thanksgiving at 5:00 pm |
| 27 | Thanksgiving Holidays – No Classes and CCSNH Institutions Closed |
| 28 | Thanksgiving Holidays – No Classes and CCSNH Institutions Closed |
| **December** | |

| | |
|---|---|
| 5 | Last Day of Classes for Fall Semester (Day classes) |
| 8-11 | Final Exams for full semester Day Classes |
| 11 | Residence Halls close at 5pm |
| 12 | Snow Day for Final Exams |
| 13 | Last Day of Classes for Fall Semester (Evening/Online) |
| 15 | Grades Due for full semester courses |
| 15 | Last Day of Faculty Responsibility for 10 Month & 11 Month Faculty for Fall Semester |
| 17 | Final Grades available for students on SIS |
| 17 | Last day of responsibility for 180 Day staff |
| 24 | Chancellor Holiday/Winter Recess Day – CCSNH Institutions Closed |
| 25 | Christmas Day Holiday – CCSNH Institutions Closed |
| 26 | Winter Recess Day – CCSNH Institutions Closed |
| 29 | Winter Recess Day – CCSNH Institutions Closed |
| 30 | Winter Recess Day – CCSNH Institutions Closed |
| 31 | Winter Recess Day – CCSNH Institutions Closed |

## Spring Semester 2026

| | |
|---|---|
| **January** | |
| 1 | New Year's Day Holiday – NHTI closed |
| 5 | 180 Day Staff return for spring semester |
| 6 | Tuition due for the Spring 2026 full semester and first ½ semester classes |
| 8 | 10 Month and 11 Month Faculty return for spring semester |
| 8 | Winter Open House |
| 13 | Winter Convening |
| 14 | Winter General Orientation |
| 14 | Express Admissions/Walk-In Wednesday |
| 19 | Martin Luther King, Jr./Civil Rights Day holiday – NHTI closed |
| 19 | Residence Halls open at 12pm |
| 20 | Full semester classes begin (Day, Eve, Online) |
| 20 | First ½ semester classes begin (end March 14) |
| 20 | Last day to add a first ½ semester class without instructor permission |
| 26 | Last day to add a full semester class without instructor permission |
| 26 | Last day to drop a first ½ semester class with a refund |
| **February** | |
| 2 | Last day to drop a full semester class with a refund |
| 6 | Last day to resolve 'I' grades for fall 2025 semester classes |
| 13 | Mid semester grades due for first ½ semester classes |
| 15 | Mid semester grades for first ½ semester classes available on SIS |
| 16 | Presidents' Day holiday – NHTI closed |
| 23 | Last day to drop a first ½ semester class with a "W" grade \| (60% point) |
| **March** | |
| 9 | Tuition due for second ½ semester classes |
| 13 | Residence Halls close for Spring Break at 5pm |
| 14 | First ½ semester classes end |
| 15-22 | Spring Break; No Classes |
| 16 | Final course grades due for first ½ semester classes |
| 18 | Final course grades for first ½ semester classes available on SIS |

| | |
|---|---|
| 22 | Residence Halls reopen at 12pm |
| 23 | Second ½ semester classes begin (end May 9) |
| 23 | Last day to add a second ½ semester class without instructor permission |
| 23 | Mid semester grades due for full semester classes |
| 24 | Registration for Summer 2026, Fall 2026 & Spring 2027 Semesters Begins |
| 25 | Mid semester grades for full semester classes available on SIS |
| 30 | Last day to drop a second ½ semester day/evening class with a refund |
| 30 | Last day to drop a full semester course with a “W” grade \| (60% point) |
| **April** | |
| 12 | Mid semester grades available on SIS for second ½ semester classes |
| 21 | Last day to drop a second ½ semester class with a “W” grade \| (60% point) |
| **May** | |
| 4 | Last day of full term Spring semester classes (Day) |
| 5-8 | Final Exams for full-semester (Day) Classes |
| 8 | Residence Halls close at 5pm |
| 9 | Last day of full term Spring semester classes (Evening/Online) |
| 11 | Final grades due for full term classes |
| 13 | Final grades for full term classes available on SIS |
| 13 | System Symposium |
| 18 | Last Day of Responsibility-10 Month Faculty -Spring Semester (as determined by Commencement duties) |
| 19 | Last Day of Responsibility-180 Day Staff-Spring Semester (as determined by Commencement duties) |
| 25 | Memorial Day Holiday-CCSNH Institutions Closed |
| **June** | |
| 19 | Juneteenth Day Holiday-No Classes and CCSNH Institutions Closed |
| **July** | |
| 3 | Independence Day Holiday Observed- CCSNH Institutions Closed |
| 9 | Last Day of Responsibility of 11 Month Faculty for the 2025-2026 Academic Year |
| **August** | |
| 6 | Last Day of the 2025-2026 Academic Year |

# College Catalog 2025-2026

## Academic Programs

Welcome to NHTI! Our mission is to help you reach your academic and career goals on your terms in a way that makes sense for you! We offer daytime, evening, hybrid, remote, and online class options with 8- and 16-week sessions.

We are more than just your local community college; we offer 80+ degree and certificate programs in the following departments:

- Business & Professional Studies
- Criminal Justice
- Dental Education
- Education & Child & Family Studies
- Healthcare Professions
- Human Service & Social Sciences
- Liberal Arts
- Math, Engineering & Information Technology
- Natural Sciences
- Nursing Education

View our list of programs.

Ideally, you should plan on taking 30 credits per academic year (including the fall, spring, summer, and interim sessions) in your chosen degree or certificate program to reach your optimal college experience while saving you time and money.

If you have any questions about individual focus areas, programs, or courses, contact our Office of Academic Advising at NHTIadvising@ccsnh.edu or your personal academic advisor.

### Courses

### Academic Policies

# Academic Policies

# About NHTI

## Community College System of New Hampshire

NHTI is a member of the Community College System of New Hampshire (CCSNH) and since 1969 has been accredited by the New England Commission of Higher Education, a nongovernmental, nationally recognized accrediting agency. NHTI upholds all CCSNH policies and procedures. To learn more about specific CCSNH policies and procedures please visit the CCSNH Student Handbook.

## Mission, Purpose, Values Statement

### Mission

NHTI cultivates potential in every learner.

### Values

- We love who we are and who we serve.
- We are responsible for ourselves, our college, and our community.

### Strategic Vision

- We serve New Hampshire's best interest.
- We deliver a comprehensive college experience.
- We relentlessly pursue excellence.

## Educated Person Statement of Philosophy

Acknowledging that students will not only be workers but also citizens, family members, consumers, and lifelong learners in a democratic society, NHTI integrates academic, technical, experiential, and work-based learning. These are grounded in a general education core to prepare graduates with the knowledge and skills for successful engagement in their communities, workplaces, life roles, and educational and career endeavors. We commit ourselves to educating graduates to be:

- **Knowledgeable of human cultures and the physical and natural world.** Graduates evaluate the effects of historical trends and events on institutions and social systems and demonstrate respect for and understanding of diverse ideas and modes of expression as conveyed through the humanities.
- **Thinkers, problem solvers, and innovators.** Graduates evaluate and apply information rationally and consistently to guide decision-making. They apply critical and creative thinking skills to the analysis of problems; demonstrate scientific thought, both quantitatively and qualitatively, by evaluating human and technical problems; generate ideas by consolidating knowledge; and reflect critically on their learning.
- **Collaborators.** Graduates demonstrate cultural competence, work effectively in teams, and can negotiate and manage conflict; they demonstrate constructive engagement with diverse populations and viewpoints; and they exhibit empathy in their work with others and demonstrate the ability to motivate and/or follow others.
- **Communicators.** Graduates are active listeners and respond constructively; they read, write, speak, listen, and present on a level that facilitates engagement with others.
- **Principled and ethical citizens.** Graduates make reasoned, ethical decisions and learn from mistakes; they demonstrate the values of integrity, responsibility, perseverance, and tolerance of ambiguity.
- **Career-ready professionals.** Graduates organize and prioritize their work; they translate acquired knowledge and skills to real-world applications, are competent in the use of technology and mathematical/numerical operations, and actively develop strategies for continuous improvement in the areas of time management, documentation, self- evaluation, self-determination, and personal and professional growth. These outcomes are given in numerical reference for improved tracking; these values do not establish hierarchal emphasis. Each outcome is of equal importance.

# Statement of Non-Discrimination

CCSNH does not discriminate in the administration of its admissions and educational programs, activities, or employment practices on the basis of race, creed, color, religion, ancestry or national origin, age, sex, sexual orientation, gender identity and expression, physical or mental disability, genetic information, or law enforcement, military, veteran, or marital status. This statement is a reflection of the mission of CCSNH and refers to, but is not limited to, the provisions of the following laws:

- Title VI and VII of the Civil Rights Act of 1964,
- Age Discrimination in Employment Act of 1967
- Title IX of the Education Amendment of 1972
- Section 504 of the Rehabilitation Act of 1973
- Americans with Disabilities Act of 1990 (ADA)
- Section 402 of the Vietnam Era Veteran's Readjustment Assistance Act of 1974
- NH Law Against Discrimination (RSA 354-A)
- NH Law RSA 188-F:3-a
- Genetic Information Nondiscrimination Act of 2008

Inquiries regarding discrimination may be directed to:

- **Sara A. Sawyer**
  Director of Human Resources, CCSNH 26 College Drive
  Concord, NH 03301
  603-230-3503
- **The Equal Employment Opportunity Commission**
  JFK Federal Building
  475 Government Center
  Boston, MA 02203
  617-565-3200, 1-800-669-4000, fax: 617-565-3196
  TTY: 617-565-3204 or 1-800-669-6820

Inquiries may also be directed to:

- **The NH Commission for Human Rights**
  2 Industrial Park Drive
  Concord, NH 03301
  603-271-2767, fax: 603-271-6339

# Motto and Emblem

**Motto:** Scientia Cum Manu; Knowledge with Skills

**Seal symbolism:**

- Hand and torch symbolize the skills needed to understand and control man's environment to his best interests.
- Abstract symbol represents the energy and structure of the universe.
- Open book emphasizes education and theoretical knowledge as factors, without which there would be no skills.
- Laurel comes from the state seal/symbol.

# Definitions

- **Active:** A matriculated student who has not officially withdrawn from a program or the college, or has not registered for classes within a given semester but returns to the college within 3 semesters. They are eligible to register for classes under the original program of study; all others must reapply to the program/college and follow the new program of study. Non- matriculated students who are registered for the semester are considered active for that semester.

- **Full time:** A student who is registered for at least 12 credits in any given semester. Only the credits as part of a student's program of study will be considered when determining financial aid eligibility.
- **Part time:** A student who is registered for fewer than 12 credits.
- **Matriculated:** A student who applies to and is officially accepted by the college in a program. The status remains until the student withdraws officially from the program/college or is dismissed for academic/ disciplinary reasons or upon graduation. Matriculation defines a student's program of study and ensures that courses taken will meet program requirements.
- **Non-matriculated:** A student who is enrolled in a course or courses but who has not officially been accepted into a college program. A student who has taken individual courses and decided to work for a degree should commit to a specific program and formally matriculate after proper counseling prior to the satisfactory completion of 9 semester hours in appropriate courses. To ensure that credits earned meet program of study requirements, a student should matriculate as early as possible.

# Institutional Accreditation

NHTI is accredited by the New England Commission of Higher Education (NECHE), which indicates the college meets or exceeds criteria for the assessment of institutional quality periodically applied though a peer review process. An accreditedcollege or university is one that has necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the commission applies to the institution as a whole. It is not a guarantee of every course or program offered, or the competence of individual graduates. It provides reasonable assurance about the quality of opportunities available to students who attend the institution. Inquiries regarding the status of NHTI's accreditation by the NECHE should be directed to NHTI's Office of Academic Affairs. A hard copy of the most recent Accreditation Self-Study Report may be viewed at the NHTI Library or Office of Academic Affairs. Individuals may also contact:

New England Commission of Higher Education
3 Burlington Woods Drive, Suite 100
Burlington, MA 01803-4514
781-425-7785 cihe@neche.org

NHTI has been accredited since 1969. Initial accreditation was through the Commission on Technical and Career Institutions. In 2001, NHTI earned accreditation from the New England Association of Schools and Colleges (NEASC) Inc.'s Commission on Institutions of Higher Education. In 2018, NEASC became NECHE. Click here to view NHTI's accreditation history with NECHE.

## Specialized Accreditations

- Accounting, Business Administration, Hospitality and Tourism Management, Sports Management: Accredited by the Accreditation Council for Business Schools and Programs
- Architectural, Computer, Electronic, Mechanical Engineering Technologies: Accredited by the ETAC Commission of ABET, www.abet.org
- Dental Assisting, Dental Hygiene: Accredited by the Accreditation Commission on Dental Accreditation and granted the accreditation status of "approval without reporting requirements." The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611 and at www.ada.org/en/coda
- Diagnostic Medical Sonography: Accredited by the Commission on Accreditation of Allied Health Education Programs
- Early Childhood Education: Accredited by the Commission on the Accreditation of Early Childhood Higher Education Programs of the National Association for the Education of Young Children, www.naeyc.org. The accreditation term runs from July 2019 through September 2026.
- Legal Nurse Consultant: Approved by the American Bar Association
- Nursing: Approved by the New Hampshire Board of Nursing, 7 Eagle Square, Concord, NH 03301; 603-271-2152; https://www.oplc.nh.gov/new-hampshire-board-nursing. The program is also accredited by the Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326; 404-975-5000; www.acenursing.org

- Orthopaedic Technology: Recognized by National Board for Certification of Orthopaedic Technologists
- Paralegal Studies: Approved by American Bar Association as a legal assistant education program
- Paramedic Emergency Medicine: Accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions
- Radiation Therapy, Radiologic Technology: Accredited by the Joint Review Committee on Education in Radiologic
  Technology, www.jcert.org
- The Teacher Education Conversion Programs has Program Approval by the NH State Board of Education.

## Affiliations and Memberships

NHTI is one of the 7 colleges that are part of CCSNH, the public system of comprehensive community colleges that serves all of New Hampshire.

NHTI is a full institutional member of the American Association of Community Colleges and the League of Innovation. NHTI also has National League for Nursing agency membership in the Council of Associate Degree Programs. Memberships are also held in the New England Association for College Admission Counseling, National Association for College Admission Counseling, New England Board of Higher Education, Institute of Electrical and Electronics Engineers, National Association of Colleges, and American Society for Engineering Education. The college is a member of Campus Compact for New Hampshire. NHTI is affiliated with the New Hampshire Forum on Higher Education with the New Hampshire College and University Council (the membership of the Community College System of NH). NHTI is a member of the National Collegiate Honors Council.

NHTI's intercollegiate athletics program is a member of, and its teams compete in, the Yankee Small College Conference and the United States Collegiate Athletic Association.

# Technology and Software

NHTI uses technology to support students as they navigate their academic career at the college. The college, as part of CCSNH, provides support to help students get and stay connected to faculty, fellow students, and staff.

## EasyLogin

EasyLogin is used to access student email, SIS, Canvas, Navigate, and the Learning Commons Library's online resources. Your EasyLogin username and student email address is emailed to your personal account from CCSNH upon acceptance to NHTI or upon registration for classes. If you did not receive your EasyLogin information, email NHTIitsupport@ccsnh.edu.

## Student Email

Official CCSNH email accounts are created automatically for all matriculated students and registered students and are available within 24-48 hours after matriculation or registration. Students' CCSNH email accounts serve as the official account for all electronic communications with the college. Students are expected to check their email frequently and to safeguard their password and access.

# College Services

## Bursar

At the Bursar's Office, we provide payment-related administrative support in planning for tuition expenses. We're here to help students determine the best payment options to achieve their educational goals.

- How to Pay for College: An Informational Guide

- Fees
- Tuition
- How to Pay Tuition and Fees
- Residence Costs

To allow our office staff to be able to speak with anyone other than the student (e.g. a parent/guardian), the students must must sign and file a Release of Student Information form with the Registrar's Office.

# Payment and Refund Policies

**Payment of Tuition and Fees**

Each semester, tuition and fees are due 2 weeks prior to the first class day. It is the student's responsibility to view their tuition, fees, and housing charges online through the Student Information System (SIS). Accounts should be monitored routinely throughout the semester. NHTI does not send paper bills. Students can make payment through their SIS account using a bank account (e-check) or credit/debit card and at the Bursar's Office using cash, check, MasterCard/VISA, Discover, and debit cards. Checks can be mailed to NHTI, Attn: Bursar Office, 31 College Drive, Concord, NH 03301. NHTI also offers an online installment payment plan.

**Unpaid Balances**

If payment arrangements have not been made for the entire balance by the tuition due date, a late fee of $50 may be applied. Students with outstanding balances at the end of the semester will be sent to an outside collection agency, which will result in additional fees being added to the student's balance.

# Financial Aid Recipients

All financial aid requirements must be completed to have financial aid applied to the tuition bill. To verify that financial aid requirements are completed, students should:

- Be sure all financial aid requirements are met: Go to SIS and click on the Financial Aid tab. Choose Overall Financial Aid Status. Select Campus. Select 2022-2023 Aid Year. If requirements need to be completed, the message, "You have unsatisfied student requirements for this aid year," will be displayed. Click on the link to view requirements.
- Verify financial aid will cover tuition charges: Go to SIS and click on the Financial Aid tab. Choose Award, then Award for Aid Year. Select Campus; select 2022-2023 Aid Year. Click on Award Overview Tab. Scroll to Financial Aid Award by Term. If financial aid has been awarded, the amount of estimated aid for the term will be displayed. Deduct the estimated total amount of the award for the term from tuition charges.

Students that do not have financial aid in place by the tuition due date or have a remaining balance due after the estimated financial aid award may have a $50 late fee assessed. Students with questions about financial aid should contact the Financial Aid office at NHTIfinaid@ccsnh.edu or 603-230-4013.

**Military Benefit Recipients**

Students eligible to receive military education benefits should complete the following steps:

- Complete all paperwork required through military service and/or the VA at least 8 weeks prior to the start of the term (the VA may take 8 weeks to process paperwork).
- Submit VA eligibility paperwork (COE, NOBE), Military Semester Worksheet, Guard and Reservist tuition assistance/tuition waiver authorizations to NHTI's school certifying official (SCO) in the Registrar's Office.
- Make payment arrangements for semester charges not covered by military benefits by the semester due date. Tuition is due 2 weeks prior to the start of the semester.

In accordance with the Veterans Benefits and Transition Act of 2018, students receiving GI Bill® and VR&E (Chapter 33 and Chapter 31 beneficiaries) are considered in good financial standing once the student provides a certificate of eligibility (COE) or valid VAF 28-1905 to the SCO and establishes an approved payment arrangement for any tuition and fees (not covered by their GI Bill® and VR&E benefit) by the tuition due date each semester. If a student's eligibility for GI Bill® and VR&E should change during the semester, the student is responsible for making payment arrangements for any balance that may be due as a result of the change.

The college will not impose a penalty or require the beneficiary to borrow additional funds to cover tuition and fees due to late payments from the VA. The college allows up to 90 days from the date the beneficiary provides a COE or valid VAF 28-1905 form to receive payment from the military. During this time, the beneficiary should not experience interruption in educational services, such as being withdrawn from their course for non-payment.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

**Third-Party Payments**

For NHTI to invoice an employer, company, or agency for courses, the following conditions are required:

- If the employer, company, or agency (insurance company, VOC rehab, CAP, etc.) is paying for tuition, students need an official letter or Tuition Authorization Form from the company authorizing NHTI to bill them. This should be submitted at the time of registration for day, evening, online, or business training courses prior to the first class. The company must be willing to pay upon receipt of invoice.
- If the third-party states there are contingencies, (i.e. grade of C or better upon completion, etc.), NHTI cannot bill the third party. The student must pay the semester charges by the tuition due date and receive reimbursement directly from the third party.
- For NHTI to send an invoice to a company, the letter must be on official letterhead and include student name, company contact name, company billing address and email address, company telephone, the course and/or maximum amount of tuition allowable.
- It is the student's responsibility to make sure the company pays the invoice. If the company fails to pay the invoice, the student is responsible for the bill and will not be eligible to register for future courses until the bill is paid in full.
- A separate letter is needed for each semester.
- If the company offers a reimbursement program, the student is responsible for tuition. NHTI does not offer deferments.
- NHTI reserves the right to not accept payment authorization from companies that are not in good standing with NHTI.
- Students with questions should contact the third-party payables representative in the Bursar's Office at 603-230- 4000 x4112.

**Delinquent Accounts Collections Policy**

Any account balance 90 days past due may be turned over to an independent, outside collections agency. When this happens, no payments will be accepted by NHTI and the debt will be reported to the credit bureau. The cost of the outside collection agency (up to 35% of the amount due) and any legal/bounced check fees will be added to the total amount owed. Students who owe a past-due balance will not be eligible to receive official transcripts or register for courses at NHTI and/or other CCSNH colleges until the balance is paid in full.

**NHTI Refund Policies**

For refunds due to overpayment (including but not limited to Title IV Stafford sub/unsub loans, scholarships, grants, and Parent Plus loans), students can choose to receive a refund through SIS. Students may check SIS to find out when a credit has been issued or when an NHTI refund has been posted. Once the NHTI refund is processed, students can expect to receive it as follows:

- ACH direct deposit and/or reloadable debit card 3 business days from the date the refund is viewable on the Student Choice Refund page of SIS
- Check refunds up to 14 business days from the date the refund is viewable on the Student Choice Refund page of SIS

All Federal Title IV funds (i.e. PELL, SEOG, Perkins Loan) are refunded according to the rules and regulations mandated by the U.S. Department of Education. Students are responsible for making sure their most current mailing address is on file with our college; any address changes should be made through the Registrar's Office.

**Refunds from Cancelled/Dropped Courses or Withdrawing**

Students need to contact the Registrar's Office or the Academic Advising Center by phone, fax, or email or in person prior to the published date for last day to withdraw with refund. Students that do not formally withdraw from a course by this deadline will be responsible to pay for the course.

# Career Services

NHTI career counseling services support students deciding on a college major or career direction, exploring interests, and seeking employment. Students are encouraged to use our online resources as one strategy for maximizing career success. Visit our Career Center online.

# Financial Aid

The Financial Aid Office recognizes education is an investment to last a lifetime and is committed to working with students to secure eligible funding so they can achieve their goals. Whether students are enrolled full time or part time, they may qualify for financial aid to bring down their college costs or cover them entirely.

Things to know:

- Students need to apply for financial aid each academic year.
- Students need to be matriculated (formally accepted) into a financial aid-eligible program (16 credits or more).
- Every matriculated student could be eligible for federal aid.

## Federal Financial Aid

Students that complete the FASFA will have their application emailed to Financial Aid automatically. The Financial Aid Office will review it to determine a student's eligibility for funding. Some students may be randomly selected for verification. If a student is selected, they will receive an electronic letter from the Financial Aid Office.

## Additional Sources of Financial Aid

Financial aid can come from a variety of sources. Students should also consider:

- Scholarships and grants
- Work-study opportunities
  - Students may be eligible for work-study opportunities at NHTI if there is a documented financial need and checked the box on the FAFSA form for work study. Students can request and/or apply for work-study funds any time during the academic year.
  - Work-study jobs
    - Clerical/office positions on campus in various departments
    - Community service positions on campus, at college extension sites, and in community agencies
    - America Reads/America Counts
    - Non-profit community agencies
  - Interested students should contact Financial Aid at 603-230-4013 for eligibility and a list of work-study job openings. In-state students may be eligible for state-funded Community College Work-Study funding.
- Additional loans
  - Federal Direct Stafford Loan: These fixed-rate student loans do not require students to make any payments until 6 months after they leave college or reduce their course load below 6 credit hours.
  - Parent Loan for Undergraduate Students (PLUS): This program allows parents of dependent students to borrow in their own name through the Federal Direct Loan Program to help meet educational expenses. For more information: www.studentaid.gov
  - Private educational loans may be available to students who have exhausted all federal and state aid options. For more information: www.elmselect.com

# Learning Commons Library

The NHTI Learning Commons Library building is the learning and information hub of the college. The library accommodates different learning styles through a variety of study spaces, including reservable study rooms, a state-of-the-art instructional lab outfitted with hyflex technology, abundant natural lighting, soft seating, standing desks, data ports, scanning capabilities, and wireless printing. The Learning Commons Library provides community members an inclusive, comfortable, and dynamic environment for research and study.

To learn more, visit the NHTI Learning Commons Library online.

# Student Support

## Academic Assistance

**Academic Center for Excellence**

The Academic Center for Excellence (ACE), located in the Learning Commons Library building, supports students by promoting independent self-directed learning. We offer free tutoring programs for students in need of extra help or looking to further their educational goals. Our tutoring programs include open labs and tutorials for A&P and Biological Sciences, Math Lab, Writing Center, Study Skills, peer tutoring, and group study sessions. During tutoring sessions, students can ask questions, learn at their own pace, and receive immediate feedback.

Students who want to discuss academic support offerings can meet with an ACE tutor to talk about their learning strengths and challenges. ACE can help refresh essential study skills such as organizing time and materials, taking lecture notes, reading and studying textbooks, and preparing for tests. ACE offers help in the following areas:

- Placement Testing
- Writing Center, Math Lab, and Study Solutions Lab
- The SQR3 Method of Textbook Study

Visit ACE online today for more information.

**Academic Advising**

NHTI academic advisors help define students' academic, career, and life goals. Whether students need guidance selecting classes, transferring to a 4-year school, or clarifying long-term goals, an academic advisor is here to help. NHTI's advising program provides the knowledge to identify personal, academic, and career goals; develop an educational and career plan; and monitor progress toward achieving these goals. Academic advisors can help:

- Empower students to be active participants in their decision-making processes.
- Connect students to the community using school resources, student clubs and organizations, athletic teams, work-study programs, and student activities.
- Help students understand themselves, develop critical thinking and reasoning skills, and clarify values.
- Provide advising services that are visible and available to everyone.

The Academic Advising Center is located in the Learning Commons Library Building. Visit the Academic Advising Center online to schedule your appointment.

## Accessibility Services

Accessibility Services supports students according to individual needs. Information regarding student disabilities is confidential. In compliance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act of 1991, NHTI does not discriminate against students with disabilities in terms of program admissions and/or opportunities for academic success. Students are encouraged to report their disabilities prior to their first semester of classes. Accessibility Services supports student goals and program of study through:

- Letter of accommodation
- Academic coaching
- Assistive technology and equipment loans
- Referral for diagnostic testing
- Request for reduced course load
- Verification for health insurance and athletic participation

Students can qualify for assistance if they have:

- A diagnosed disability
- A history of a disability, but have not previously received service
- A history of school difficulties
- An undiagnosed learning disability, ADD, or other disability

Documentation is required; some restrictions apply. Students needing housing accommodations for medical needs should contact Accessibility Services. Eligibility is determined by the Accessibility Services coordinator.

## Behavioral Intervention Team

The Behavioral Intervention Team (BIT) is a central network focused on preventive and timely intervention before a crisis arises. BIT is a resource for faculty, staff, and students by which they can report behaviors that may evoke alarm or concern. The BIT process does not replace faculty classroom management, disciplinary processes, and/or public safety responses to incidents. Students with questions about BIT or the need to report a concern can contact a BIT team members or submit an incident report. Those who need immediate assistance with a threat or concern should contact Campus Safety at 603-224-3287.

## Counseling Services

NHTI offers individual short-term counseling and prevention services to all NHTI students. Counseling services are provided by mental health professionals who are sensitive to issues of race, gender, ethnicity, sexual orientation, ability, culture, and learning differences. Counseling sessions are confidential and not part of the academic record. For longer-term services, referrals are made to local mental health professionals. Crisis intervention services are offered during open hours. After-hours crisis coverage is coordinated with community mental health services.

NHTI Counseling provides the following services:

- Short-term student counseling based on the Wellness Model
- Consultation to students, staff, and faculty
- Crisis intervention
- Resource and referral services
- Sexual and relationship violence prevention

Visit NHTI Counseling Services online.

## NAMI Suicide Prevention

In partnership with NAMI New Hampshire, NHTI provides education to the college community on recognizing the signs of a person at risk for suicide and how to connect the person to help. We focus on increasing protective factors and building relationships and a network of support. A key component is ensuring NHTI has an effective “postvention” plan in place, if the need should arise. These efforts are accomplished by partnering with faculty, counseling staff, residence life staff, and all stakeholders and student groups.

## NHTI Cares

NHTI Cares helps students with immediate, emergency, and one-time expenses. This covers situations such as loss of employment, unanticipated medical issues, changes in family dynamics, and unanticipated expenses with NHTI course work. To support to as many students as possible, the amount of funding support provided is limited. Examples of what NHTI Cares can pay for include but are not limited to medical expenses, weather- and work-appropriate clothing, groceries, car repairs, and professional licenses. Contact the Office of Student Success at 603-230-4040 or visit NHTI Cares online for more information.

## NHTI Lynx Pantry and Closet

The NHTI Lynx Pantry and Lynx Closet are on-campus resources located in Little hall that provide free food and professional clothing options to promote academic and career success.

The Lynx Pantry is an on-campus food pantry that offers all members of our campus community access to food for free. We offer non-perishable, shelf-stable food, and personal care items, and perishable (fruits, vegetables, bread, refrigerated, and frozen) food options.

The Lynx Closet is a donation-based clothing supply resource that provides members of our campus community professional clothing options including, suits, dresses, shoes, and accessories to help with job interviews and career options.

Visit the Lynx Pantry and Lynx Closet online.

## Student Concerns and Complaints

Students who have a complaint or concern should discuss the situation directly with the person(s) involved. In the event this does not resolve the issue, the matter should be taken directly to the Student Success office, located in the Academic Center for Excellence in the Learning Commons Library building.

The director of Residence Life should be notified of any unresolved issues pertaining to the residence halls and dining services. The Student Senate Concerns Committee should be notified of any unresolved concerns which do not directly involve the residence halls.

Information on how to file a complaint about NHTI to the N.H. Department of Education Division of Higher Education may be found at https://www.education.nh.gov/pathways-education/higher-education-new-hampshire.

# Campus Resources

## Bookstore

The NHTI Bookstore, located in the Learning Commons Library building, is the one-stop shop for all things NHTI. It's the place to get textbooks, books, course materials, and supplies. Students can get t-shirts, sweatshirts, hats, and hoodies, plus gift items like mugs, decals, cups, and NHTI Lynx fan gear. We take all forms of payment including financial aid.

Buying textbooks and other course materials can be expensive. Follett, the college's bookstore provider, works to help students get course materials at the lowest possible cost. Follett provides a variety of affordable solutions to our campus. Whether it's digital, used, or rental, these course material options give students the tools to be successful in the classroom with cost savings and ease of accessibility. PayPal and PayPal Credit are accepted.

- The NHTI Bookstore has access to the industry's largest selection of used textbooks at lower costs.
- Renting books costs, on average, less than half the new textbook price.
- The NHTI Bookstore has partnerships to provide digital content for ebooks and study guides.
- Find a lower price somewhere else? The NHTI Bookstore will match it.

## Health Insurance

NHTI requires proof of current health insurance for students enrolled in an Allied Health program or playing on an NHTI athletic team. NHTI does not provide access to health insurance; it is up to the student to obtain health insurance. A copy of a student's current insurance card must be provided to Health Services prior to the start of any Allied Health or athletic team program. Active military can submit a copy of a military ID.

Health insurance must meet the following criteria:

- Be a U.S.-based insurance plan
- Provide the 10 essential health benefits specified in the Affordable Care Act (ACA)
- Include access to hospital and physician providers local to NHTI
- Remain in effect for the entire semester

The following plans do not meet the criteria:

- An accident-only policy
- A short-term limited duration health plan that does not meet ACA requirements
- A ministry sharing plan
- Any other health benefits program not recognized by the state of N.H. as being health insurance

## NHTI Health Requirements

NHTI requires students enrolled in an Allied Health program, living on campus, or playing on an NHTI athletic team to provide health record documentation. Health record requirements must be completed prior to the start of any of these programs. Health records will be reviewed and the program(s) will receive notification of clearance once a student has completed all requirements.

# Community Assets

## Community Service

NHTI encourages students to get involved in community service by working with non-profit organizations in Concord and in their local communities. NHTI is committed to promoting service-learning opportunities that infuse a community service experience into the course curriculum to enrich the educational experience and provide meaningful service to the community. Service-learning opportunities link theory with direct experience, giving students greater responsibility for their learning and developing a richer context by making the academic subject relevant to real-world experience.

## Dental Hygiene Clinic

The NHTI Dental Hygiene program provides comprehensive patient-centered care through our community-based Dental Hygiene Clinic. NHTI's dental hygiene clinic is place where community members can get dental hygiene care at a minimal cost in a classroom/learning environment with NHTI's student hygienists providing services.

The clinic helps to educate NHTI Dental Hygiene students to become competent professionals and increase public awareness of oral health. Quality dental hygiene care is critical to the well-being of every patient treated. NHTI Dental Hygiene students have been evaluated for lab and clinical competency prior to treating patients in the clinic and are closely supervised during treatment to provide optimal care.

The Dental Hygiene Clinic is located in MacRury Hall and is open to all NHTI students, faculty, and staff, as well as the public.

## NH Police Standards and Training

The New Hampshire Police Standards and Training Council, responsible for state certification and training of all police and state correctional and probation/parole officers in New Hampshire, is located across the street from the Sweeney Hall, just outside the NHTI campus facilities. Students will oftentimes see these cadets training on campus and are asked to not interfere with this training.

Among the programs conducted by Police Standards and Training is the New Hampshire Police Academy, a residential 12-week paramilitary training program that uses some NHTI facilities, including the Capital Commons Dining Hall and the Dr. Goldie Crocker Wellness Center. The program's recruits have been hired as police officers by a state agency or municipality and attend this program to achieve certification and the right to serve as an officer.

# Admissions

Admission to NHTI and its academic programs is based on a number of considerations. Waiver of any portion of NHTI admission requirements because of special situations may be achieved only through consultation with department chairs and the director of Admissions. To apply to NHTI, visit www.NHTI.edu, call the Admissions Office at 603-230-4011 or 800-247 -0179, or email NHTIadmissions@ccsnh.edu.

## General Admissions Requirements

Many NHTI programs have prerequisites, are competitive, or have other specific admissions requirements. For admission to these programs, students need official transcripts forwarded to NHTI by secondary and postsecondary institutions. Application materials should be sent to:

**NHTI – Concord's Community College**
ATTN: Admissions Office
31 College Drive
Concord, NH 03301-7412

Students can also request that the school email official transcripts to NHTIadmissions@ccsnh.edu.

Students are encouraged to submit an official high school transcript, diploma, or equivalent (GED/HiSET) documentation, as these may be used for advising or to waive placement testing. Students will complete a High School Self-Certification as part of the application; documentation of high school (or an equivalent) completion may be required to receive federal financial aid.

# Application Deadlines

While we offer rolling admissions for most programs, our competitive Allied Health programs have specific application deadlines.

For 2026, these dates are:

- **Radiologic Technology:** December 15, 2025
- **Diagnostic Medical Sonography:** January 9, 2026; *through May 1, 2026 on a space availability basis*
- **Dental Hygiene:** February 1, 2026
- **Dental Assisting:** March 1, 2026; *through May 1, 2026 on a space availability basis*
- **Nursing RN: Early Action:** November 30, 2025; **Priority:** February 1, 2026; *through May 1, 2026 on a space availability basis*
- **Nursing - LPN to RN Completion:** January 9, 2026
- **Nursing - Paramedic to RN Completion:** November 1, 2025
- **Paramedic Emergency Medicine:** March 31, 2026; *through July 31, 2026 on a space availability basis*
- **Radiation Therapy:** March 1, 2026
- **Orthopaedic Technology:** March 1, 2026; *through July 31, 2026 on a space availability basis*

The Radiologic Technology and LPN-RN Completion programs begin in the Summer term only. The Paramedic to RN program begins in the Spring term only. The other programs listed above begin in the Fall term only.

# Additional Admissions Requirements and Recommendations

**SAT/ACT/Placement Testing**

Though not required, NHTI recommends that students submit scores for standardized national college admission tests taken within the last 5 years. These scores may be used to waive the placement testing requirements.

**Mathematics Requirement**

All of our degree programs require the successful completion of at least one semester of college-level mathematics. NHTI recommends students complete high school Algebra I with a C or better prior to NHTI admission. Many STEM programs require additional math for admissions. If a student's placement testing does not demonstrate readiness for college-level mathematics, their degree program may take more than 2 years to complete.

# Transferring to NHTI

Students requesting transfer to NHTI should submit all documents listed for general admission and must meet the specific admission requirements for their desired program. In addition, official transcripts from postsecondary institutions attended are needed to evaluate transfer credit.

- Only those courses required in the desired program will be considered.
- Courses must be equivalent in content and credit hours to those required in the desired program.
- Grades must be a C or higher, based on NHTI standards.

- Science and other technical courses, including but not limited to Anatomy and Physiology I and II and Microbiology, taken more than 5 years prior to the desired date of entry must be repeated or challenged to be applied toward most Allied Health programs. Time limits may apply to computer or major field courses; final decisions rest with the department chair.
- Most general education courses do not have time limits; final decisions rest with the department chair.
- College credit will be granted to students with military training, experience, or coursework recognized by the American Council on Education. Students seeking credit for their military experience will submit a hard copy of their military transcript to the Admissions Office for the review/evaluation process.
- International Baccalaureate (IB) exams are considered for transfer credit if scores from the International Baccalaureate Organization are submitted. Of the 2 IB exam levels, only the higher-level exams where a score of 5, 6, or 7 has been achieved will be considered for transfer credit. Credit will not be given for standard-level exams.
- CLEP and AP exams are considered for transfer credit if scores from the College Entrance Examination Board are submitted. Students who have taken AP and IB exams do not receive credit for both.
- Challenge exams, credit by exam, and pass/fail courses taken at other institutions will not be considered for transfer credit.
- Course descriptions, syllabi, and course outlines may be requested.
- The director of Admissions, in consultation with the VPAA and department chair, if necessary, is responsible for determining the appropriateness and acceptance of transfer credits.
- Students seeking transfer credit for prior completed college coursework at an institution outside the U.S. need to provide an official foreign credential evaluation to the Admissions Office for review; a list of accredited credential evaluation services can be viewed at www.naces.org/members.html.

Transfer credits may be used to satisfy degree course requirements. Grades associated with such credits will not be included in the determination of GPA, which reflects only achievement in courses completed at NHTI.

Transferring into an Allied Health program for advanced standing (i.e., transferring a clinical course from another institution to begin the program in an upper-level course at NHTI) is based on clinical site availability and the specific transfer policy of the individual department.

In the event a student fails an NHTI course, subsequently and satisfactorily completes a comparable course at another institution, and requests transfer, those credits may be used to satisfy NHTI program requirements at the discretion of the department chair. The grade received at NHTI will remain a part of the student's transcript, and it will be used in determining the student's GPA. Only by successfully repeating the failed course at NHTI will the failing grade be discounted from the student's GPA calculation.

# Testing and Experiential Credits

- **Placement Testing:** Academic advisors will use multiple measures, including placement testing, to determine appropriate placement in first semester college coursework. Placement testing may potentially be waived based on factors such as high school GPA, transfer credits, and standardized test scores such as SAT, ACT, or ATI TEAS exam scores. If not waived, the student is may be required to complete their placement testing before registering for classes. Non-matriculated students and students in certificate programs do not need to complete placement testing. Contact the Academic Center for Excellence at 603-230-4027 to make an appointment to take required tests and register for courses.
- **Advanced Placement Testing:** AP exams are considered for transfer credit with a minimum score of a 3. Official exam scores from the College Board have to be submitted to the Admissions Office for review.
- **SAT Scores:** If a student submits SAT scores that are fewer than 5 years old, they may be waived from taking certain placement tests. An SAT Math score of 530+ places them directly into college-level math and waives them from taking the math placement test. An SAT Evidence-Based Reading and Writing score of 480+ waives the reading comprehension test, and an Essay writing score of 6+ waives them from taking the writing placement test. All SAT scores should be submitted to Admissions prior to or at the point of acceptance to best facilitate registering for first semester courses.
- **Criminal Justice Program:** Students who have previous training through Police Standards and Training, County Corrections, the state Corrections Academy, or in-service training may be eligible to receive credit for courses in the NHTI Criminal Justice program. For more information, contact the Admissions Office or the Criminal Justice department.

- **Advanced Standing Credit:** Evaluation of credit received from a college or hospital-based program in a health-related field may result in advanced-standing credit toward the General Studies associate degree. Students need current certification to be eligible. Credentials include licensed nurse assistant, dental assistant (national certification), and paramedic (New England EMS Institute). For more information, contact the Admissions Office.

# NHTI/USNH Dual Admission

The N.H. Dual Admissions and the N.H. Transfer Programs provide a seamless academic pathway from NHTI to one of the institutions of the University System of New Hampshire in a broad range of programs. Students enrolling in this program will receive academic advising to chart a seamless transfer pathway.

For more information, visit NHTI Academic Advising online.

# Home-Schooled Students

NHTI encourages applications from students who are home-schooled. We understand that your academic background differs from students who attended traditional public, private, or charter schools. Our small class size and active campus life allows you to engage closely with faculty, staff, and fellow students and become part of our community.

While the nature of home schooling is unique to each student, the college requires appropriate documentation to determine admission. Applicants are expected to meet the same general and specific admission requirements (or their equivalent) as other applicants and to document the academic work they have accomplished. Documents to be submitted may include:

- A list of courses taken, and grades earned, an official transcript, or portfolio of work accomplished
- High school equivalency or other testing, if applicable
- Self-Certification of High School or Equivalent (PDF)
- A letter or other documentation from the student's local school district stating the student has completed a home school program at the high school level in accordance with their State regulations.

Contact the director of Admissions with any questions regarding documentation and/or admission to NHTI programs at 603-230-4011.

# International Students

At NHTI, we welcome students with diverse backgrounds and experiences. Our student body includes over 600 students speaking 60+ native languages. Our small class size and active campus life allows International students to engage closely with faculty, staff, and fellow students and become a vital part of our community.

We offer courses in English for Speakers of Other Languages (ESOL), which are designed to help students develop the language skills necessary for academic success at NHTI. ESOL tutoring and support services and International Student Advising are available to aid you with your studies and as you learn more about life in New Hampshire.

**Application Deadlines:** International students must apply and submit all required application materials at least 90 days prior to the start of the semester OR by the application deadline if applying to a competitive allied healthcare program, whichever comes first. The deadline for Fall 2025 is May 30, 2025 and for Spring 2026 is October 20, 2025.

### How to Apply

NHTI is authorized by the U.S. Student Exchange and Visitor Program (SEVP) to issue I-20 (Application for Student Visa) forms for students accepted into associate degree programs only. In addition to the general admission requirements and specific admission requirements for their desired program, international students must submit:

- Official transcripts of all secondary school and university academic records; if transcripts are not in English, they must be accompanied by an official English translation.
- English Language proficiency is required. Applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) and earn a score of 500 or higher on the paper-based test; 173 or higher on the computer-based test, or 61 or higher on the internet-based test.
    - Students can view information on completing their TOEFL exam online at https://www.ets.org/toefl. Official TOEFL scores must be sent from the testing site to the Admissions office.
    - Students earning a TOEFL score lower than those listed above may be evaluated for language study. Applicants who score between 380-499 on the paper-based exam, 83-172 computer-based, or 26-61 internet-based may be accepted into the General Studies program and take preparatory ESOL coursework for their first 2 semesters. Students scoring below a 380 on the TOEFL will not be admitted to the college or a program at NHTI.
    - International students already in the U.S. may complete an on-campus Institutional Language Assessment to determine their English proficiency. NHTI also accepts the International English Language Testing System (IELTS) test in place of the TOEFL exam. Students must receive an overall score of 6 or higher for admission into a major. Students who score between 4.5-6 may begin in the General Studies program and take preparatory coursework.
- Letter of support from the person(s) who will be financially responsible for the student; the letter should include the student's name, the intent to attend NHTI, and the amount of funding available. It must be in English and funds must be stated in U.S. dollars.
- Letter or statement from the financial institution that holds the funds of the person(s) financially responsible for the student. The statement on official letterhead must be in English and include the sponsor's names, and the funds currently available for the student in U.S. dollars.
- Copies of current passport and any additional immigration documents such as any current visas, I-94 Arrival records, and/or I-20.
- A one-time International Student Admissions fee of $100 at the time of application
- Proof of health insurance to the Health Services Department prior to registration

International students currently in the U.S. with an F-1 visa at another college must forward official transcripts from that college and submit an International Student Transfer Form to the Admissions Office. Dollar amounts promised by the sponsor and available in the sponsor's bank account should be sufficient to cover a minimum of one year of expenses (out-of-state tuition, fees, room, board, books, and miscellaneous expenses). Before an I-20 can be issued, applicants must have submitted all documents required to be considered for admission, be accepted into a program, and have submitted the required English Language Proficiency exam score and financial documents.

Any international student planning to request an F-2 visa for dependents must submit copies of the dependents' current passport and immigration documents and plan to include the cost for the dependents' expenses in their financial support documents (an additional $9,900 for the first dependent, $3,500 for each additional dependent). A letter must accompany the dependents' documents, specifying name, date of birth, country of birth, country of citizenship, and relationship to the international student.

# Readmission

When applying for readmission, students must meet current entrance requirements for the desired program. Upon readmission, students will follow the curriculum in the current catalog. Any common courses will be carried forward, and every attempt will be made to make substitutions when previous courses have been replaced with updated ones. To approve a substitution, the department chair will make a recommendation to the VPAWE, who will make the final decision.

Students who have been absent for more than 3 semesters will be declared inactive; an inactive student wishing to return to NHTI must apply for readmission and meet current entrance requirements. Readmission to the Allied Health programs is based on clinical site availability and recommendation of the department. Contact the program department chair regarding the specific departmental readmission policy.

# Change of Program

Enrolled, matriculated students may request a change in major by using the Change of Program/Dual Major Request Form, available in the Registrar's Office. Signatures must be received from the current major and new major department chairs. Signatures do not guarantee or imply acceptance into the new program.

# Collaborative High School Programs

NHTI offers high school students a unique opportunity to take supplemental college courses while still in high school. These course credits can then be transferred to a 4-year institution or counted toward your associate degree at NHTI. In fact, some high school classes mirror courses that NHTI requires for our Liberal Arts associate degree. When these requirements overlap, there's opportunity to optimize a student's high school course load to earn credits in NHTI's Liberal Arts program – this decreases time, saves money, and offers students the freedom to explore options without an expensive 4-year college commitment.

**Early College at Your High School**

This is a concurrent enrollment partnership between participating high schools and NHTI for students in grades 10, 11, and 12. Students have the opportunity earn credit toward high school graduation while earning college credit at NHTI at the same time. Courses are taught by qualified high school faculty who have the same credentials as a CCSNH adjunct instructor and are taught during the regular school day. The teachers work with the NHTI faculty partners to align the curriculum to the NHTI requirements.

**Early College on a College Campus**

Take a course on the NHTI campus for a discounted rate of 50% off the tuition!* There is no application to this program – it is open to any N.H. high school student. We average 50-60 Early College students attending NHTI courses per semester.

**Early College Online**

This is a dual-credit program that gives N.H. high school students the opportunity to take 100% online college courses through the Community College System of New Hampshire (CCSNH) while earning high school and college credit simultaneously.

**This does not include books or other materials required for the courses.*

# Individual Course Enrollment

Students may wish to register for individual courses without applying to degree or certificate programs. Most general education and some program-specific courses are open to all, assuming course prerequisites are met and space is available after matriculated students have registered.

Non-matriculated students must meet the same course prerequisites, complete the same course requirements, and follow the same college and course rules, policies, and procedures as other students. Individuals who are considering registering as non-matriculated students are directed to consult with an academic advisor at NHTI prior to enrolling. The academic advisor will assist in evaluating readiness for specific course(s). In some cases, the advisor may recommend that the individual work with the Academic Center for Excellence to take one or more NHTI assessment tests in reading, writing, and/or mathematics. The advisor may also recommend that the individual consult with the department chair responsible for the course, especially in situations involving the evaluation of relevant work experience.

Non-matriculated students are not eligible to apply for financial aid. To be considered for admission to an academic program, contact the Admissions Office at 603-230-4011 or NHTIadmissions@ccsnh.edu.

# Academic Policies

## Registrar

The Registrar's Office is available to assist students with questions about records including but not limited to:

**Ordering Transcripts**

*If you attended after 1991:* Electronic and paper transcripts are available when ordered online through the National Student Clearinghouse (NSC).

Transcripts are typically processed within 48 hours of receipt, but during peak periods (such as the start or end of semesters), processing may be delayed. Effective March 2022 a $5.00 transcript fee will be charged for each transcript.

**Confidentiality of Student Records**

NHTI maintains the confidentiality of student records in compliance with the Family Educational Rights and Privacy Act of 1974 (Buckley Amendment). The law protects the privacy of educational records, the right of students to inspect and review their educational records, and to provide for the correction of inaccurate or misleading data through informal and formal hearings. Students may authorize the release of their records to individuals or institutions by completing the "Authorization to Release Information" form, available online or in the Registrar's Office. Student information maintained by Residence Life, Health Services and Counseling offices require a separate signed release of information form available from each office.

Family Educational Rights and Privacy Act of 1974 (Buckley Amendment)

The Family Educational Rights and Privacy Act of 1974 was passed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. The federal law includes provisions for disclosure of directory information by educational institutions.

NHTI considers the following to be directory information: student's name, address, telephone number, email address, date of birth, major field of study, enrollment status (e.g. full-time or part-time), participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees, awards, honors, and recent educational institution attended.

If a student does not wish disclosure of any of the categories of identifiable directory information, they must submit the Nondisclosure of Directory Information Form.

Students should carefully consider the consequences of any decision to withhold general directory information. Should the student decide to inform NHTI not to release general directory information, future requests for such information from noninstitutional persons or organizations will be refused, except as provided by law. NHTI does not assume responsibility to contact students for subsequent permission to release directory information. NHTI assumes no liability for honoring a student's instructions that such information be withheld.

Copies of the Family Educational Rights and Privacy Act of 1974, Part 99 of Title 45, dealing with Privacy Rights of Parents and Students, may be obtained from the VPSS or the office of the VPAWE.

Student Records

Students have the right to review the contents of their NHTI records. Students will be given access to their records within a reasonable period of time, but in no case shall access be withheld for more than 45 days after the request has been made. The Registrar is authorized to release this information. Students wishing access to their records must contact the Registrar and complete a Student Request for Record Review form. In cases involving the possibility of data misinterpretation, the VPAWE or their qualified designee shall interpret the data to the student.

Students shall have the opportunity for a hearing to challenge the contents of their college records to ensure they are not inaccurate, misleading, or in violation of their privacy or rights. This challenge must be made in writing to the VPAWE. Students may authorize the release of their records to intended persons or institutions by completing the

Authorization to Release Information form. No access or release of any personally identifiable records or files on students will be allowed to any individual, agency or organization without prior written consent of the student, except as follows:

- The president, VPAWE, VPSS, NHTI counselor, coordinator of Admissions, and the registrar shall have unlimited access, without permission, to all student records (with the exception that letters of recommendation submitted on the basis of a pledge of confidentiality prior to Jan. 1, 1975, will not be shown to students and financial records of the parents of the students will not be made available to students). They cannot, however, release information without prior written authorization from the student, except as follows:
    - To officials (faculty, staff, student workers/interns) and department chairs within NHTI who are directly involved in a legitimate educational concern for the student
    - To authorized federal/state officers as identified in Section 438 (b) 3) of Public Law 93-380
    - To appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of any persons; NHTI maintains records on students, although some students may not have all these items in their records: academic transcript of all work completed at NHTI; student financial accounts.
- Academic folder containing military education information for students eligible for military education benefits or medical records (in a separate file)
- Financial aid folder containing:
    - Application for admission
    - All correspondence to and from NHTI
    - Transcripts of previous academic records
    - Financial Aid applications
    - Recommendations
    - Standardized test results
    - Semester grade reports
    - Copy of parent's Confidential Statement or student's Confidential Statement
    - Financial aid correspondence
    - Financial aid awards and award acceptance forms
    - Records of money disbursed and/or hours worked
    - Affidavits
    - Promissory notes
    - Documents from any outside agencies awarding money to students
- Judicial proceedings (in a separate file) non-disclosure

# Medical Leave

A matriculated student who, because of a serious medical condition that requires extended inpatient treatment in a medical facility and/or ongoing outpatient medical treatment, becomes unable to complete the academic requirements and/or unable to meet the program's technical standards and/or the requirements of the Student Code of Conduct, may apply for a formal Medical Leave of Absence (MLA) for up to 2 consecutive semesters.

Students considering an MLA should be aware that granting of such leave does not relieve a student from financial responsibility to the college. A student seeking MLA who is also a financial aid recipient should contact the Financial Aid Office to discuss the leave and any potential implications for changes in eligibility. Students who have concerns about health insurance coverage may wish to consult www.michelleslaw.com for important information.

Students requesting MLA must:

- Provide a letter to the VPAWE identifying their program of study, the medical reason for the request, the proposed date on which the leave would begin, and the proposed date of readmission
- Provide the VPAWE documentation of the medical condition from a licensed healthcare professional directly involved in the student's treatment sufficiently comprehensive to facilitate the decision-making process.

The VPAWE (or designee) will decide the appropriateness of the leave request and notify the student in writing whether the request for MLA was granted and what conditions for readmission may apply. Students whose MLA

requests are granted will not be required to reapply for admission at the end of the leave period provided all conditions for readmission have been met. These may include, but are not limited to, submission of documentation from a licensed healthcare professional directly involved in the treatment of the student's condition that is sufficiently comprehensive to provide reasonable assurance that the returning student will be able to meet all college academic, technical, and behavioral requirements; an in-person meeting with the VPAWE and/or the student's program department chair; compliance with any new admission criteria implemented in the student's absence; following a new curriculum plan that may have been implemented in the student's absence; and/or repeating courses and/or clinical experiences to ensure clinical competence following the absence.

Students wishing to return to a residence hall may be required to meet additional, separate criteria. Students should directly negotiate any return to residence life with the college's Student Affairs Office.

Students who choose to seek MLA under the provisions of this policy should be aware that information they voluntarily disclose during the application and readmission processes will be handled under the confidentiality guidelines of FERPA and disclosed only to those persons with a direct academic need to know.

# Academic Amnesty

A student who has previously attended NHTI and is admitted may be eligible for academic amnesty, which provides for the following:

- All grades taken during the student's previous time at NHTI will not be used to calculate the student's new cumulative GPA. However, grades C- and above taken during the student's previous time at NHTI will be used to meet course requirements (where appropriate).
- All previous grades will remain on the student's transcript.
- To be eligible for academic amnesty, a student must meet all of the following conditions:
    - The student has not taken courses at NHTI for at least 3 years from the last semester of attendance.
    - The student applies for academic amnesty before the start of their second semester after readmission.
    - The student has never before received academic amnesty.

Academic amnesty is designed for students who exhibited poor academic performance during previous attendance. It is not designed for students who achieved a cumulative GPA above 1.7 during previous attendance. Students granted academic amnesty should be aware that previous grades will be used to evaluate "satisfactory academic progress" for financial aid purposes in accordance with Federal Financial Aid Regulations. Download the Application for Academic Amnesty Form.

# Academic Credits

Each course is assigned a number of credits based on the time obligated for formal enrollment in that course: One credit represents (on a per-week basis) 1 hour of classroom work, 2-3 hours of lab, 3-5 hours of clinical experience, 3 hours of practicum experience, or 3-6 internship hours plus 2 or more hours of student work outside of class each week for 15-16 weeks. For complete information, see the Academic Policies of CCSNH.

**Credit by Exam**

In certain instances, a matriculated student may present evidence suggesting they may be eligible to receive credit for a course or courses either through aggregate educational experience or occupational experiences. In such cases, an application for a Credit by Exam must be made within the first 2 weeks of a semester and be approved by the student's department chair. The department chair will assign a faculty member to discuss the subject area to be tested with the student and administer the test. A fee of $25 per credit hour is required for each exam administered under this policy. The Credit by Exam is comprehensive; grades are either "pass" (E grade) or "no pass," with full course credit granted for an E.

If a student passes the exam, appropriate credit(s) will be applied to their academic record and a notation entered on their transcript indicating successful completion. Since a traditional grade is not entered, the Credit by Exam is not calculated into the student's GPA. If the student does not pass the exam, no entry is made on the academic

transcript, but a record of the unsuccessful completion will be maintained in the student's file. A student who gets "no pass" on a Credit by Exam will be ineligible for another Credit by Exam in that course and must successfully complete the course as needed to fulfill program requirements. A student who has previously received a failing grade in a course (or less than C for transfer) may not request Credit by Exam in that course. Financial aid does not cover courses for which a student earns credit in this way.

College-Level Examination Program

College-Level Examination Program (CLEP) exams are available in 34 college-level introductory subjects and are administered at NHTI. Through CLEP testing, students can demonstrate their knowledge and competency in a subject area and earn college credit. NHTI recognizes competency demonstrated through CLEP exams in such areas as English, Humanities, Social Science, History, and Calculus.

Experiential Learning

Credit for prior learning offers students the opportunity to demonstrate the knowledge they have gained through life experiences and apply this toward credit in a degree/professional certificate/certificate program. To prepare for this option, students will develop a portfolio to be assessed by appropriate college personnel. A student must be matriculated in an NHTI program to be eligible to apply for experiential credit. Not all programs provide this credit option; students should consult with their advisors for eligible programs and the application process.

- Students may be awarded a maximum of 24 credits for experiential learning.
- Students will be assessed a fee based on 50% of the current tuition rate on the total credits awarded.
- Financial aid does not cover courses for which a student earns credit through experiential learning.

# Academic Excellence

**Academic Research**

Students wishing to broaden their learning experiences may participate in academic research by using the independent study option. This format allows students to study a topic in greater depth or a topic not currently offered at NHTI. Please refer to the Independent Study Policy. Financial aid does not cover credits earned via academic research or independent study.

**Dean's List/Scholastic Honors**

A Dean's List is published at the end of each semester. It includes the names of all matriculated, full-time students whose GPA for that semester is 3.3 or higher (while enrolled in 12 credits). Students who achieve a cumulative GPA of 3.7 or higher graduate with high honors, and those who achieve a cumulative GPA of 3.3-3.69 graduate with honors. Cumulative GPA is calculated using all courses completed at NHTI.

**Phi Theta Kappa – International Honor Society**

Phi Theta Kappa (PTK) is the largest international honor society in American higher education with 2 million+ members and 1,200+ chapters internationally. NHTI's Alpha Upsilon Omicron Chapter of PTK provides opportunities for scholarship, leadership, service, and fellowship for PTK students at NHTI while offering an intellectual climate for continued academic excellence. To be eligible for membership consideration, a student must complete a minimum of 12 credit hours of associate degree coursework and earn a cumulative GPA of 3.5 or higher. Eligible students are invited to join PTK each semester, and induction ceremonies are held each Fall and Spring semester. Once inducted, students must maintain a high academic standing of 3.3 cumulative GPA throughout their enrollment; this allows them to retain a lifetime membership in PTK.

**Vice President's Award for Academic Excellence**

The Vice President's Award for Academic Excellence is presented at the Spring Awards Ceremony to the student(s) achieving the highest overall cumulative GPA in the graduating class. The following criteria apply:

- A minimum of 48 credit hours must be used in the calculation of the cumulative GPA.
- All students are eligible for the award, including those who have exercised Academic Amnesty, changed programs, or have previously graduated from an NHTI program.

- For the purposes of this award, students who have previously graduated from an NHTI program will have their GPA calculated using courses taken in the new program and any prior courses that may be applicable to the new program.
- Students who have exercised the Academic Amnesty option will have their GPA based only on courses taken after the option has been exercised. No previous courses will be used.
- Students who have changed majors will have their GPA calculated on the basis of all courses taken at NHTI and not just those in the new program.

# Academic Honesty

Faculty will gather all material evidence (e.g., papers, crib notes, copied materials and the source[s] from which it came, et al.). If the charges have arisen from an inconsistency in quality, prior work samples along with the work in question should be presented to the student. Names of those who have knowledge of the situation will also be presented.

Once the information is gathered, a meeting between the individual faculty member and the accused should be held within 5 class days (or within 5 business days of a final exam) to discuss the matter. All parties shall maintain confidentiality. The faculty member may seek advice/counsel from their department chair. The student may seek advice/counsel from an individual of their choice.

Following the meeting, the faculty member shall have these options available if disciplinary action is warranted:

- Have the student redo the assignment or do a different assignment.
- Reduce the student's grade a specified amount.
- Give the student an F for the assignment.
- Give the student an AF or F for the course.
- Issue the student a letter of sanction (copies to registrar and student's department chair).
- Other options as appropriate.
- Available options that require department chair and VPAWE approval include:
  - Suspend the student from the program or college for one semester.
  - Suspend the student from the program or college for more than one semester.
  - Dismiss the student from the program or college.

The faculty member's decision will be sent in writing to the student within 2 class days of the meeting. If another student was complicit in the cheating/plagiarism, the faculty member will pursue disciplinary action against that student. Appeals are handled using the grade appeal/grade change process and/or the student judicial process.

**Academic Progress**

Any student whose academic progress is deemed less than acceptable by their department chair may be referred to the Academic Standards Committee, which considers each case and recommends action to be taken by the VPAWE. That action may involve, but is not limited to, a warning, academic probation, program suspension, NHTI suspension for a specified period of time, conditional probation, or dismissal. Dismissal is permanent.

All credit courses are used for this calculation. Students entering with advanced standing should add their transfer credits to those credits earned at NHTI to determine their positions in the guidelines. Any matriculated student registered for 2 or more courses during any semester will be subject to review by the Academic Standards Committee. Academic progress may affect financial aid. Check with the Financial Aid Office for more information.

**Academic Warnings**

At mid-semester, academic warnings are formally issued by faculty to students with grades of C- or below, NP, or PP. Warnings are submitted to the Registrar's Office, which then emails the letters to students. Warnings may also be issued at any time during a semester when deemed appropriate by faculty.

**Academic Probation**

Academic probation usually will last for one semester only. The student's department chair will recommend to the committee if a student can take courses in their major field during academic probation. Students placed on

academic probation may be eligible to continue receiving financial aid if they meet the minimum GPA requirements. To ensure that adequate academic progress toward a degree is being made, the college uses the guides above in determining which students are automatically brought to the attention of the Academic Standards Committee.

**Suspension**

Suspension may be for any period of time established by the Academic Standards Committee but must be for a minimum of one semester excluding the Summer (unless it is required by the student's program). A matriculated student suspended from a program may not take major field courses during the suspension; non-major courses may be taken.

Students under academic suspension may seek course selection and academic planning help from Academic Advising. Students who are under academic suspension from NHTI and wish to return must, prior to the completion of the suspension, submit a new application with an explanatory letter, to the NHTI Admissions Office.

Guidelines for Suspension

- NP or F in clinic
- Probation status for third consecutive semester
- Violations of the Student Code of Conduct
- Failure to meet published technical standards

**Conditional Probation Partnership**

The conditional probation partnership assists students whose cumulative GPA would be placed on program suspension. This involves a contractual arrangement with the student that incorporates mentoring/counseling elements. A department chair designates students for this program by making a recommendation to the Academic Standards Committee based on the department's judgment they could reasonably be expected to achieve academic success with guided assistance and realistic academic goals. A contract is then forwarded to the student with a letter from the VPAWE explaining that the student is being given the opportunity to continue in the program if they agree to the contract conditions.

The student must sign the contract and return it to the Office of Academics and Workforce Education by a predetermined date. If the student chooses not to sign the contract, status will be determined by the guidelines for suspension. A student who accepts the contract but fails to abide by its provisions will be returned to suspension immediately and not be eligible to apply for readmission until the end of the subsequent semester.

# Academic Standards

Any student whose academic progress is deemed less than acceptable by their department chair may be referred to the Academic Standards Committee, which considers each case and recommends action to be taken by the VPAA. That action may involve, but is not limited to, a warning, academic probation, program suspension, NHTI suspension for a specified period of time, conditional probation, or dismissal. Dismissal is permanent.

All credit courses are used for this calculation. Students entering with advanced standing should add their transfer credits to those credits earned at NHTI to determine their positions in the guidelines. Any matriculated student registered for 2 or more courses during any semester will be subject to review by the Academic Standards Committee. Academic progress may affect financial aid. Check with the Financial Aid Office for more information.

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| Total Credits Accumulated (GPA Hours) | Minimum Acceptable Grade Point Average |
|---|---|
| 0-13 | 1.5 |
| 14-27 | 1.7 |
| 28-40 | 1.8 |
| 41 or more | 2.0 |

## Suspension

Suspension may be for any period of time established by the Academic Standards Committee but must be for a minimum of one semester excluding the Summer (unless it is required by the student's program). A matriculated student suspended from a program may not take major field courses during the suspension; non-major courses may be taken. Students under academic suspension may seek course selection and academic planning help from Academic Advising. Students who are under academic suspension from NHTI and wish to return must, prior to the completion of the suspension, submit a new application with an explanatory letter, to the NHTI Admissions Office.

***Guidelines for Suspension***

- NP or F in clinic
- Probation status for third consecutive semester
- Violations of the Student Code of Conduct
- Failure to meet published technical standards

| Total Credits Accumulated (GPA Hours) | Minimum Acceptable Grade Point Average |
|---|---|
| 0-13 | .50 |
| 14-27 | 1.10 |
| 28-40 | 1.25 |
| 41 or more | 1.50 |

## Conditional Probation Partnership

The conditional probation partnership assists students whose cumulative GPA would be placed on program suspension. This involves a contractual arrangement with the student that incorporates mentoring/counseling elements. A department chair designates students for this program by making a recommendation to the Academic Standards Committee based on the department's judgment they could reasonably be expected to achieve academic success with guided assistance and realistic academic goals. A contract is then forwarded to the student with a letter from the VPAA explaining that the student is being given the opportunity to continue in the program if they agree to the contract conditions. The student must sign the contract and return it to the Academic Affairs office by a predetermined date. If the student chooses not to sign the contract, status will be determined by the guidelines for suspension. A student who accepts the contract but fails to abide by its provisions will be returned to suspension immediately and not be eligible to apply for readmission until the end of the subsequent semester.

## Appeal of Suspension or Dismissal

A student who wishes to appeal an academic suspension or dismissal may do so by writing a letter of appeal to the VPAA in accordance with procedures and deadlines outlined in the letter sent to each suspended and dismissed student informing them of their status. Appeal letters received by the required deadline are reviewed by the

Academic Standards Committee. In some cases, students may be asked to appear before the committee, which will render a decision on the appeal based on the information provided by the student and department chair. Decisions of the Academic Standards Committee are final.

# Adding a Class

To add a class, students must use the Add/Switch Class Form and submit it to the Registrar's Office.

**Adding a Full Semester Class**

Students may add a full semester course up to and including the 7th calendar day of the semester, as long as space is available. Classes may only be added after the 7th day with the permission of the instructor.

**Adding a Half Semester (8-Week) Class**

Students may add a half semester course up to and including the first day of the semester or part of term, as long as space is available. Classes may only be added after the first day with the permission of the instructor.

# Attendance

Registration for any course presupposes the student will participate in all scheduled activities. In addition to academic issues relative to attendance, veterans and students receiving financial aid are expected to be in regular attendance as a condition of receiving such aid. While occasional circumstances over which the student has no control may necessitate absence, the content presented in the activities missed by the student is a segment of information being taught.

For any course offered in any format, there is a limit to the amount of time and content a student can miss without compromising the integrity of the learning experience and the credit award. If illness, accident, emergency, or an NHTI sponsored activity prevents a student from meeting attendance obligations, it is the responsibility of the student to inform faculty in a timely manner to discuss either the requirements for continued enrollment in the course or the options for course withdrawal.

Instructors may include an assessment of attendance behaviors into their overall grading structure for the course. Such assessment strategies are published in the course syllabus distributed at the start of the course. A faculty member may issue a grade of AF at any point in the semester at which they feel a student's absence record precludes the reasonable possibility of meeting course objectives based on published attendance expectations.

Any student who has been suspended or dropped from a course for failure to meet published course attendance requirements may appeal following the procedures outlined in the Grade Appeal/Grade Change Policy.

# Audits

Under the Audit Policy, students may enroll in courses that provide an opportunity to learn about the challenges of college work, explore a discipline of interest, refresh prior learning, or supplement existing knowledge. Typically, a student attends lectures, seminars, and/or labs but does not complete graded assignments. When enrolled as an audit, the student will not be given a final grade nor credit towards graduation (the academic transcript will reflect an AU for the course).

Not all courses can be taken for audit, and entry into a course as an auditing student is by permission of the instructor. A student must complete a registration as an audit during the first week of classes. Once admitted as an audit the student may not change to credit status after the designated add period; a student registered for credit may not change to audit status after the designated add period. Exceptions may be made by the VPAWE. Students must pay the full tuition for the course. Financial aid does not cover costs for an audited course.

# Change of Program/Dual Major

Enrolled, matriculated students may request a change of their major program by using the Change of Program/ Dual Major Request Form. Signatures must be received from the department chairs of the current and new major. Signatures do not guarantee or imply acceptance into the new program. The request must be made within the "add" period at the beginning of a semester for the same semester. Requests for the subsequent semester made after the "add" period will not take effect until after final grades for the semester have been reviewed. The student will be informed of the decision by the Admissions Office. Students will follow the curriculum for the semester to which they are accepted.

When calculating the GPA of a student who has changed programs, all courses taken at NHTI and courses taken in the new program will be used. For purposes of academic review, the Academic Standards Committee will consider the student's semester-by-semester performance in the new program rather than the overall GPA.

# Classroom Etiquette

Academic integrity is of primary importance in the classroom, whether the classroom be face-to-face or online. Students and faculty are responsible for creating and maintaining an environment that supports an effective learning community. It is therefore imperative that students and faculty demonstrate mutual respect.

Inappropriate behavior may compromise the learning and performance of all students. Such inappropriate behaviors include but are not limited to: late arrivals/early departures; loud or prolonged side conversations; use of cell phones; computers (other than for legitimate academic use); iPods (or similar devices); and use of derogatory or vulgar language. All students are expected to abide by the Student Code of Conduct and are subject to sanctions as described therein for any violations.

**Plagiarism/Cheating Policy**

Honesty is expected of all NHTI students. In academic matters, this includes the submission of work that clearly indicates its source. Dishonest acts include cheating and plagiarism. Cheating includes, but is not limited to:

- Use of any unauthorized assistance from other persons or technologies in taking quizzes, tests, or exams or in the preparation and completion of class assignments
- Dependence upon the aid of resources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments
- The acquisition, without permission, of tests or other academic material belonging to a member of the CCSNH colleges faculty, staff, or students
- Knowingly providing unauthorized assistance of any kind to another for the purpose of providing unfair advantage to the recipient in the completion of course assessments/assignments

Plagiarism includes, but is not limited to, the use (intentional or unintentional), by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It includes the unacknowledged use of materials prepared by another person or agency engaged in providing term papers or other academic materials via direct sale, barter, or other means.

Cheating and plagiarism are considered serious disciplinary matters and are subject to the same penalties and procedures as other NHTI disciplinary matters. Students should be aware that penalties levied in proven cases of cheating or plagiarism may include the issuance of a grade of AF (which may in turn lead to delay of graduation), suspension or dismissal from a program or from the college, or other sanctions as deemed appropriate.

# Classroom Recording Policy

As per CCSNH policy: "Students are not permitted to record any class lectures, activities or discussion using electronic video, still photo, or audio recording unless the student first obtains permission from the instructor. If the

recording is made as a recommended, reasonable accommodation or modification for a student with a disability, permission shall not be unreasonably withheld." To view the entire policy please go to: https://www.ccsnh.edu/about-ccsnh/policies/ and select the System Policies for Academic Affairs (section 600).

## Clinical/Practicum/Internship

Evaluations are conducted on students who enroll in any course designated as a clinical, practicum, or internship experience. It is the student's responsibility to understand the goals, objectives, and evaluation criteria of each clinical/practicum/internship and adhere to all policies, rules, and procedures outlined by the department and/or clinical/practicum/internship site. Students enrolled in these experiences are evaluated on their technical skills, knowledge, behavior, attitude, attendance, and adherence to policies, rules, and procedures set forth by NHTI, the academic department, and the participating agency.

A student will be removed from a clinical/practicum/internship site and issued a grade of AF if performance or behavior is deemed unsatisfactory or unsafe as a result of a formal evaluation conducted by a faculty member/agency supervisor in accordance with published department criteria and procedures. In such situations, students are prohibited from receiving a W grade. In the event that a Withdrawal Form submitted by a student is processed prior to submission of the AF grade, the student-initiated W grade will be replaced in the student record by the faculty-assigned AF grade.

## Course Repeat

A student may repeat a course for credit one time. Registration for further repetitions will require permission from the matriculated student's department chair or, for a non-matriculated student, an academic advisor. When calculating the cumulative GPA, when a student repeats a course the grade achieved in the most recent course will be the grade used in the GPA calculation. All previous grades will remain on the transcript but will not be used in the calculation. Though credits for courses repeated at a college other than NHTI may be applied as transfer credit as appropriate, grades for those courses will not be used in the calculation of the GPA; the grade received at NHTI will remain a part of the transcript and continue to be used in determining the student's cumulative GPA.

## Course Substitution/Waiver

A student may substitute  a comparable course from the same program. The substitution can be made only with the approval of the student's department chair/program coordinator. Substitute course credits will appear on the student's NHTI transcript and can be used to meet the credit requirement for the program. A student may be eligible to substitute a higher-level course in the same subject for the one prescribed in the curriculum if indicated by an evaluation of the student's competencies. The substitution can be made with approval of the student's department chair/program coordinator. A student may substitute a comparable course from another program to meet degree requirements with the common agreement of the department chairs and the approval of the Vice President of Academic and Workforce Education.  All of the substitutions can be made with email approvals or Approval Form available  in the Registrar's office.

A course waiver is an exemption from a required course.  A course waiver may be granted by the  by the student's department chair/program coordinator.  Waivers apply only to courses required in the curriculum, and not prerequisites for a given program. A waiver may only be approved if the program learning outcomes are met and the general education requirements for graduation are satisfied.  A waiver is for the course only; credit will not be awarded for the waived course. All students must complete a minimum of 60 credits to be awarded an Associate in Science or Associate in Arts degree. Students with fewer than 60 credits as a result of a waiver must make up the credits. Any make-up credits must have the approval of the student's department chair.

## Directed Study

Under certain circumstances, a matriculated student with a cumulative GPA of 2.0 or higher may take a course via directed study in a semester when the course is not offered at NHTI. A directed study allows them to pursue the learning objectives/outcomes for a course independently under the guidance of a faculty member. The student must

explain why the course was not taken in a previous semester and demonstrate why the course could not be taken in a subsequent semester. Barring exceptional circumstances, a directed study will not be granted for a course currently being offered at NHTI. Non-matriculated students are not eligible for a directed study.

A department chair who requests that a student take a course via directed study must present a proposal to the VPAWE detailing the rationale for the request, the specific learning activities that will be required of the student, and the specific assessment and evaluation tools that will be used to evaluate the student's learning. The proposal should identify the faculty member who will supervise the directed study.

A student may not take a directed study for a course they have taken at NHTI and failed or for a course taken at another institution and received a grade that will not transfer to NHTI. The VPAWE must give final approval to all directed study proposals. Grading of directed study projects will follow standard NHTI policies and procedures.

# Dropping Classes/Withdrawing

**Dropping Classes with a Refund**

We understand that students may face adverse consequences such as loss of financial aid eligibility, loss of athletic eligibility, loss of residence life eligibility, loss of VA Education Benefits, or inability to meet program completion expectations. Students should consult with their academic advisor before making any moves to drop a course.

- Students who drop a full-semester class by the end of the fourteenth calendar day of the semester will receive a 100% refund of tuition, less non-refundable fees.
- Students can drop an 8-week course within 7 days from the start of the alternative semester for a full refund.
- To drop a course that is 2 weeks or fewer in length, students must drop it by the end of the first day of the class to receive a refund.
- If the last day to drop with a refund falls on a weekend or holiday, the drop refund date is the first business day following the weekend or holiday.

Students are urged not to just stop attending a course and should contact the Registrar's Office or Academic Advising Center or drop a class online via SIS (during open registration periods). Students must notify the Registrar's Office or the Academic Advising Center before the above date to receive a refund.

**Dropping Classes after the Refund Period**

If a student decides to drop a class after the refund period, the Registrar's Office is the only official authority that can accept the withdrawal notification. Officially dropping a course prior to the completion of 60% of the scheduled duration of the course will result in a grade of W (withdrawn) on the student's transcript, with no effect on their cumulative GPA. A withdrawal after the 60% completion mark requires the instructor to issue a grade of WP (withdraw passing) or WF (withdraw failing) on the drop form. A grade of WP will not affect cumulative GPA; a WF will be calculated into the student's cumulative GPA.

If the student stops going to class without providing official notification, the default withdrawal date for financial aid purposes will be the midpoint of the semester. Those students who stop attending class may be dropped by their instructor with an AF grade, or they will receive an AF from the instructor at the end of the semester. The AF will affect the student's cumulative GPA and financial aid.

**Withdrawing from NHTI**

- Do courses seem overwhelming? Our Academic Center for Excellence offers free tutoring to all NHTI students.
- Are finances problematic? Contact our Financial Aid office for help , and apply for scholarships and grants to help offset costs.
- Need to speed things up? Consider our 8-week online programs.
- Need to slow things down? Students can take only a few courses rather than a full workload. Academic Advising can help answer questions and help devise individual solutions.
- Does it feel like college isn't the right path? It's our Academic Advising Center's job to help you figure out what you really want.

If the student is certain they want to withdraw from NHTI, the Registrar's Office is the official authority to accept their withdrawal notification. Students must submit a signed Withdrawal Form to the Registrar's Office to show their intent

to withdraw. The date the form is submitted to the registrar with the withdrawal date and the date of notification to the school. Students can also withdraw by phone, fax, or mail. The Registrar's Office will fill out the appropriate form and date stamp it with the submission method.

If a student's withdrawal occurs at the 60% or later period, the student will be subject to the same academic assessments and actions as students completing the semester. If they are in good standing, they may apply for readmission by submitting a new application, with an explanatory letter, to the NHTI Admissions Office.

**Credit/Waiver Appeal Policy**

For extenuating circumstances, students may submit a request for a credit or waiver appeal. Tuition credit(s) or waiver appeals are granted **only in cases of rare and extreme circumstances including medical, death in immediate family, military activation, academic advisement, or a catastrophic life event**. Requests should be made only by the student, not parents or other parties. Requests must be submitted to the Department of Academic and Workforce Education at NHTIAcademicAffairs@ccsnh.edu and received by the end of the semester for which the student is submitting an appeal for. Requests will be reviewed by the Credit/Waiver Committee.

# Enrollment Status

A matriculated student is one who has been formally accepted to and is actively enrolled in a program. Students who are enrolled in courses but have not been formally accepted into an academic program are referred to as non-matriculated students. To be formally accepted to a program, students must provide all the documentation required for admission to that program (degree, professional certificate, or certificate) and be officially notified by the Admissions Office of acceptance. Only matriculated students are eligible to graduate from a program and to receive an official completion credential from the college. Students wishing to apply for financial aid must be matriculated. Matriculation may be required for enrollment in discipline-specific courses.

For military education benefits purposes, the VA defines student enrollment status specifically. The VA reviews the start and end date of each enrolled course to determine the enrollment status and calculate the monthly BAH/ stipend.

Student enrollment at NHTI is defined according to the number of credits for which a student is enrolled in a particular semester as follows: Full-time is 12 or more credits per semester; part-time = fewer than 12 credits per semester. For financial aid purposes, NHTI defines student enrollment more specifically: Full time is 12 or more credits per semester; ¾ time is 9-11 credits per semester; and part time is 6-8 credits per semester.

# Grading System

NHTI has a letter grade system that reflects a level of achievement measured against specific course objectives.

**Grade Appeal/Grade Change**

Any appeal of a grade must be initiated by the student with the instructor before the next semester is done. Students should be advised that in most instances a grade may be changed only by the instructor. The VPAWE, the only other individual on campus empowered to change a student's grade, may alter a student's grade only in a case of obvious computational error or blatant abuse of the grading prerogative.[1] Students who believe they have valid ground for a grade appeal should use the following process to resolve the issue:

- Contact the faculty member and schedule a meeting to discuss the grade appeal and attempt to resolve the conflict. The faculty member and student will meet within the next 5 work days.
- If the issue is not resolved, the student has 3 work days from the date of the faculty member's decision to file a written appeal with the faculty member's program or department chair, or with the VPAWE if the faculty member is the department chair. Within 3 work days, the department chair or VPAWE will mediate the dispute either through discussion with the instructor, or with the student in the company of the faculty member.
- If the issue is still not resolved, the student will file a written appeal with the VPAWE within 3 work days. The letter of appeal must include the student's name and contact information, the course name and number, the semester in which the course was taken, the student's grade, the name of the instructor issuing the grade, and evidence of obvious computational error and/or blatant abuse of the grading prerogative. The VPAWE (or designee) will have 10 work days from receipt of the written appeal to render a decision. The decision of the VPAWE (or designee) is final.

**Grade Point Average**

The GPA is indicative of the overall quality of a student's performance. It is used by academic institutions and prospective employers as a means of describing academic achievement. Three factors are used in computing the GPA: credit hours, point value, and letter grade earned. Letters have point values; if a student is enrolled in 5 courses carrying 4, 4, 6, 3, and 5 credits and earns grades of B+, C-, A, D, and C respectively, their GPA for the semester is calculated in the following manner: Multiplying the number of credits times the point value, then dividing the sum of the grade points (57.0 in the example) by the sum of the credits (22). Their GPA is 2.59. The cumulative GPA for all semesters in which the student has been enrolled at NHTI may be calculated by using total credits and total grade points.

**Incomplete Grades**

An Incomplete grade indicates a student has not completed a major course assignment because of extraordinary circumstances. The grade is applied only in those instances where the student has a reasonable chance of passing; it is not used to give an extension of time for a student delinquent in meeting course responsibilities. The work must be completed by the student through formal arrangement with the instructor no later than:

- The end of the third week in the Spring semester for a grade issued in the Fall semester
- The end of the third week in the Fall semester for a grade issued in the Summer term
- Three weeks from the earliest start date of the Summer term for a grade issued in the Spring semester

Should the student fail to complete the work within the designated period, the grade will automatically become an F. Exceptions to the above deadlines may be made by the VPAWE. I grades will not be included in the computation of GPA. An I may affect a student's financial aid. Students should contact the Financial Aid Office for information.

| Grade | Points | Definition |
|---|---|---|
| A | 4.0 | An honor grade representing achievement of understanding and ability that is excellent and distinctive |
| A- | 3.7 | |
| B+ | 3.3 | Represents achievement of a level of understanding and ability of consistently high quality |
| B | 3.0 | |
| B- | 2.7 | |
| C+ | 2.3 | Represents achievement of a level of understanding and ability consistent with those levels required for successful entry into the student's chosen career field |
| C | 2.0 | |
| C- | 1.7 | |
| D+ | 1.3 | Represents some evidence of achievement but substantially below the level required for successful entry into the student's chosen career field |
| D | 1.0 | |
| D- | 0.7 | |
| F | 0.0 | Represents negligible academic achievement. A student who receives an "F" grade in a course that's a prerequisite to other courses must repeat the failed course with a passing grade before being eligible to continue with the course sequence. |
| P | Pass (not calculated into GPA ) | |
| E | Pass grade issued for Credit by Exams (not calculated into GPA) | |
| PP | Provisional pass; warning (not calculated into GPA) | |
| NP | No pass; unsatisfactory (not calculated into GPA) | |
| I | Incomplete grade. Indicates the student has not completed a major course assignment due to extraordinary circumstances. It is not used to give an extension for a student delinquent in meeting course responsibilities. Not calculated into the GPA. All work must be completed by the end of the third week of the subsequent semester or the grade defaults to an F. | |
| AF | Instructor or administrator-initiated withdrawal at any time for reasons other than poor grade performance; e.g., failure to meet attendance requirements, violation of the Student Code of Conduct, disruptive behavior, etc. May be issued if a student registered in a clinic, practicum, internship or lab | |

| | | |
|---|---|---|
| | is deemed unsafe or performing in an unsatisfactory manner as determined by an evaluation in accordance with department criteria and procedure. Calculated in GPA as an "F." | |
| W | Student-initiated withdrawal from a course at any time prior to drop deadline (60%). Does not affect GPA. Can be initiated by the instructor if the student is unable to initiate the process (e.g., catastrophic illness or injury, job transfer). | |
| WP | Student-initiated withdrawal from a course after the drop deadline (60%); student has a passing grade at time of drop, as determined by the instructor. Does not affect GPA. Can be initiated by the instructor if the student, because of extenuating circumstances, is unable to initiate the process (e.g., catastrophic illness or injury, job transfer). | |
| WF | Student-initiated withdrawal from a course after the drop deadline (60%); student has a failing grade at time of drop, as determined by the instructor. Calculates in GPA as an "F." | |
| AU | A course taken as an audit, does not earn credit and cannot be used to meet graduation requirements. Admission by permission of the instructor. Not all courses can be taken for audit. | |

[1] "Blatant abuse of the grading prerogative" refers to situations in which an instructor has willfully ignored published grading and assessment criteria and/ or has exhibited bad faith by acting in violation of published professional/ ethical standards for faculty.

# Graduation

NHTI confers degrees and certificates in accordance with the policies set forth in the current edition of the CCSNH Board of Trustees Manual.

Although degrees and certificates are awarded following each semester (August, December, and May), NHTI only holds one commencement ceremony in May of each year. Potential graduates must file a Petition to Graduate form with the Registrar's Office according to the following schedule:

- April 1st for students completing in the Summer semester
- October 1st for students completing in the Fall semester
- December 1st for students completing in the Spring semester

Summer completers with 2 courses (or fewer) remaining to complete graduation requirements will be invited to participate in the current May commencement. Degrees/certificates will be awarded at the end of August after degree verification. A $20 fee will be charged for replacement of a diploma/certificate. All financial and other obligations to NHTI must be met for diplomas to be released.

**Graduation from an Associate Degree Program**

Students who are matriculated in associate degree programs must complete a Petition to Graduate form to receive their diploma. All forms must be completed and returned to the Registrar's Office. Students must meet the following requirements to earn an associate degree from NHTI:

- Completion of a minimum of 60 credits and all program requirements
- Achievement of a passing grade for all courses required by the specific program
- Achievement of a minimum cumulative GPA of 2.0
- At least 15 credits in NHTI courses, with at least 8 of those in advanced-level major field courses
- Meet all course distribution requirements for an Associate in Science degree or Associate in Arts degree as described below:
    - **Associate in Science:** In addition to meeting the requirements listed in above, a student must meet the following course distribution requirements to earn an Associate in Science Degree:
        - Earn at least 30 credits in program-specific courses in a defined major field
        - Earn at least 20 credits in general education courses, including one course of 3 credits or more in each of the following categories: English Composition; Humanities/Fine Arts/Language; Quantitative

Reasoning/Mathematics; Science; and Social Science. The remaining general education credits to reach the required total of 20 general education credits may be taken in Humanities/Fine Arts/ Language, Quantitative Reasoning, Science, or Social Sciences.
    - The remaining 10 credits to reach the required total of 60 credits may be assigned in any subject area, as deemed by the faculty to be appropriate to the curriculum.
  - **Associate in Science in General Studies:** Students wishing to earn an Associate in Science in General Studies degree must meet all of the requirements listed above, as well as the general education distribution requirements listed above. The 30 credits of major field coursework may be taken in any subject area.
  - **Associate in Arts:** In addition to meeting the requirements listed above, a student must meet the following course distribution requirements to earn an Associate in Arts degree. Each category below must include at least one course worth at least 3 credits:

**Professional Certificate Program Completion**

NHTI awards professional certificates in accordance with the policies set forth in the current edition of the CCSNH Board of Trustees Manual. Students who are matriculated in professional certificate programs must complete a Petition to Graduate form to receive their professional certificate. All forms must be completed and returned to the Registrar's Office. Students must meet the following requirements to earn a professional certificate from NHTI:

- Completion of all program requirements
- Achievement of a passing grade for all courses required by the specific program
- Achievement of a minimum GPA of 2.0 in those courses required for the specific program
- Completion of 8 credits or 25%, whichever is larger, in NHTI-controlled courses

**Certificate Program Completion**

NHTI awards certificates in accordance with the policies set forth in the current edition of the CCSNH Board of Trustees Manual. Students who are matriculated in a certificate program must complete a Petition to Graduate form to receive their certificate of completion. All forms must be completed and returned to the Registrar's Office. Students must meet the following requirements to earn a certificate from NHTI:

- Completion of all program requirements
- Achievement of a passing grade for all courses required by the specific program
- Achievement of a minimum GPA of 2.0 in those courses required for the specific program
- Completion of 6 credits or 25%, whichever is larger, in NHTI-controlled courses

**Additional Associate Degrees**

Students may earn additional associate degrees by concurrent completion of the requirements of several degrees or by subsequent study of the first degree received. The requirements for additional degrees are as follows:

- Complete all requirements of each program of study, including general education requirements.
- Earn a minimum of 15 additional credits, beyond those required for the first and subsequent degrees, excluding Credit by Examination, Credit for Experiential Learning, College Level Examination Program (CLEP), and Transfer Credit.

**Completion/Graduation Rate**

As required by the U.S. Department of Education, 34 CFR Part 668, Student Assistance General Provisions, "An institution shall make readily available to all enrolled students and prospective students, through appropriate publications and mailings, the Institution's completion and graduation rate (or a projected completion or graduation rate) of its full-time degree-seeking undergraduate students who enroll for the first time" at NHTI "and have not previously enrolled at any other institution of higher education."

Of the 547 full-time, first-time degree/certificate-seeking students entering NHTI in Fall 2018, 146 completed their programs within 150% of the normal time, resulting in a graduation rate of 27%.

# Inactive Status

Matriculated Allied Health students in good standing who interrupt their education by not enrolling in the subsequent semester will be declared inactive and no longer considered a student in the program. The student must file a request for readmission through the Admissions Office. Students will be admitted pending available space. In all other programs, students in good standing who interrupt their education by not enrolling for 3 consecutive semesters (including summers) will be declared inactive and no longer considered a student in the program. The student must file a request for readmission through the Admissions Office.

# Independent Study

Opportunities for credit-bearing independent study are available to matriculated students with a cumulative GPA of 2.0 or higher who wish to explore areas of a discipline not covered in the normal curriculum. The intention of independent study is to expand a student's learning experience beyond the normal program curriculum. An independent study cannot be taken in place of any course existing in any of NHTI's catalog. Students wishing to pursue existing NHTI courses on an independent basis should consult the NHTI policy on directed study.

Students wishing to take an independent study opportunity must consult with a supervising faculty member to prepare a proposal detailing the learning outcome to be pursued, the learning activities that will occur, and the assessment and evaluation that will be used to determine the final grade. The proposal should indicate the number of credits requested for the independent study (usually 1-2). Grading of independent study projects will follow the standard NHTI policies and procedures. Requests are made to the Office of Academic and Workforce Education by the students' academic advisor or department chair.

Exceptions to the above policy require approval from the department chair and VPAWE. Financial aid does not cover courses for which a student earns credit through independent study.

# Prerequisite and Corequisite Courses

Many courses at NHTI are dependent on knowledge learned in preceding courses. NHTI requires students to pass all listed prerequisite courses to proceed with courses for which there are prerequisites. Prerequisite courses may be waived only with the prior approval of the department chair in which they are taught. Such a waiver does not suggest these prerequisite courses need not be taken, only that credit for them may be gained at a subsequent time. Corequisite courses are those that must be taken concurrently (at the same time) with another course, as listed in a particular course description. With departmental permission, a corequisite course may sometimes be taken in advance of the course for which it is a corequisite.

# Prior Learning Assessment

NHTI offers avenues for students with prior learning to gain college credit. Students must be matriculated into a program of study and may request that prior credits or experience be evaluated and applied toward graduation requirements within their programs of study. Options for prior learning assessment available to students include the following sections.

**American Council on Education**

College credit will be granted to students with military training, experience, or coursework recognized by the American Council on Education. Students seeking credit for their military experience will need to submit a military transcript to the Admissions Office for the review/evaluation process.

**College-Level Examination Programs®**

CLEP is a nationwide Credit by Exam program that offers students the opportunity to obtain recognition for college-level achievement through a program of exams in undergraduate college courses. NHTI is a CLEP testing center. CLEP is the most widely accepted Credit by Exam program in the U.S., helping students earn credit for what they already know. CLEP exams are available in 34 college-level subjects. With satisfactory exam scores, students may earn credits toward their college degree, depending on the exam subjects and the students' major.

**Credit by Exam**

Credit by Exam allows matriculated students to receive credit by passing a comprehensive exam of course material. Seekers have to be matriculated into an NHTI program and provide evidence that the course content has been mastered. Students should first consult with their academic advisors to determine eligibility.

Application for Credit by Exam

The fee for Credit by Exam is $25 per credit hour. Grades will be either "pass" or "no pass," with full course credit granted for a grade of E (pass). Since a traditional grade (A-F) is not entered, the Credit by Exam is not calculated into the student's GPA. If the student fails to pass the exam, no entry is made on the academic transcript, but a record of the unsuccessful completion will be maintained in the student's file. A student who receives a grade of "no pass" will be ineligible for another Credit by Exam in that course and must successfully complete the course as needed to fulfill program requirements. A student who has previously received a failing grade in a course (or less than C for transfer) may not request Credit by Exam in that course. Financial Aid does not cover course credits earned through Credit by Exam, nor are the credits transferable.

Process for Credit By Exam

- Verify the student is matriculated (accepted into a program).
- Work with department chair/advisor to schedule exam with appropriate faculty.
- If taking the exam in graduating semester, obtain approval from the VPAWE.
- Complete parts I, II, and III of the Application for Credit by Exam.
- Acquire necessary signatures in the order listed.
- Identify on the application the date exam will be administered.
- Identify on the application the minimum passing grade needed.
- Take the form to the Bursar's Office for payment ($25 per course credit).
- Obtain Bursar's Office signature in Part IV.
- Complete exam.
- Have administering faculty complete Part VI including the grade of pass or no pass.
- Have administering faculty submit exam with answer sheet to VPAWE.

**Experiential Learning**

Credit for prior learning offers students the opportunity to demonstrate the knowledge they have gained through life experiences and apply this knowledge towards credit in a degree/professional certificate/certificate program. To prepare for this option, students will develop a portfolio to be assessed by appropriate college personnel. A student must be matriculated in an NHTI program to be eligible to apply for experiential credit. Not all programs provide the experiential credit option; students should consult with their department chairs, advisors, or program coordinators to determine if experiential credit is appropriate.

- Students may be awarded a maximum of 24 credits for experiential learning.
- Students will be assessed a fee based on 50% of the current tuition rate on the total credits awarded.
- Financial aid does not cover courses for which a student earns credit through experiential learning.

**Criminal Justice Program**

Criminal Justice students who have previous training through Police Standards and Training, County Corrections, the state Corrections Academy, or in-service training may receive credit for courses required in the NHTI Criminal Justice program. For more information, contact the Admissions Office or the Criminal Justice department.

**Advanced Standing Credit**

Evaluation of credit received from a college or hospital-based program of study in a health-related field may result in advanced-standing credit toward the General Studies associate degree. Students must have current certification. Eligible credentials include licensed nurse assistant, dental assistant (national certification), and paramedic (New England EMS Institute). For more information, contact the Admissions office.

**Other Forms of Earning College Credit**

- International Baccalaureate
- Advanced placement exams
- Running Start, eStart, and Early College

# Process to Address a Classroom Concern

NHTI is committed to creating and maintaining a positive and productive learning environment for all students. Students who have concerns about any aspect of the classroom experience should first discuss the concern with the course instructor. Discussions may be held in person, via telephone, or through the CCSNH email system. In the event that discussion with the course instructor does not resolve the issue, the concern should then be brought to the appropriate department chair. Only after a student has been unable to resolve the issue through discussion with their course instructor and department chair should a student bring concerns to the VPAWE.

Where the concern about the classroom experience involves discrimination on the basis of unlawful criteria including race, color, religion, national or ethnic origin, age, sex, sexual orientation, marital status, disability, gender identify or expression, genetic information, or veteran status, as defined under applicable law, the student should also report the conduct to the college's Title IX and Equity coordinator and follow the process set for in Student Affairs Policy 730.06. Where the concern involves a grade appeal, the student must follow the process and timeline outlined in the academic policy.

# Program Residency Requirements

To be eligible to receive an NHTI associate degree, a student must satisfactorily complete a minimum of 15 credits of course work in NHTI-controlled courses with at least half of these credits numbered at the 200 level in the student's major. To be eligible to receive an NHTI professional certificate, 9 credits or 25% of the required program credits, whichever is larger, must be taken in NHTI-controlled courses. To be eligible to receive an NHTI certificate, 6 credits or 25% of the required program credits, whichever is larger, must be taken in NHTI controlled courses. Exceptions to this policy require approval of the VPAWE and Academic Standards Committee.

# Class Cancellation

NHTI reserves the right to cancel a class that it deems under-enrolled and/or for other reasons. In the event a class is canceled a 100% refund will be issued.

# Credit Waiver

For extenuating circumstances, students may submit a request for a credit or waiver appeal. Tuition credit(s) or waiver appeals are granted **only in cases of rare and extreme circumstances including medical, death in immediate family, military activation, academic advisement, or a catastrophic life event**. Requests should be made only by the student, not parents or other parties. Requests must be submitted to the Department of Academic and Workforce Education at NHTIAcademicAffairs@ccsnh.edu and received by the end of the semester for which the student is submitting an appeal for. Requests will be reviewed by the Credit/Waiver Committee.

# Credit by Exam

There is no fee for Credit by Exam. Grades will be either "pass" or "no pass," with full course credit granted for a grade of E (pass grade issued for credit-by-exam, not calculated into GPA). Since a traditional grade (A-F) is not entered, the Credit by Exam is not calculated into the student's GPA. If the student fails to pass the exam, no entry is made on the academic transcript, but a record of the unsuccessful completion will be maintained in the student's file. A student who receives a grade of "no pass" will be ineligible for another Credit by Exam in that course and must successfully complete the course as needed to fulfill program requirements. A student who has previously received a failing grade in a course (or less than C for transfer) may not request Credit by Exam in that course. Financial Aid does not cover course credits earned through Credit by Exam, nor are the credits transferable.

**Process for Credit By Exam**

- Academic Affairs verifies the student is matriculated (accepted into a program) and works with department chair/advisor to schedule exam with appropriate faculty.

- If taking the exam in graduating semester, the request must be approved by the Vice President of Academic and Workforce Education[PT3.1] prior to taking the exam.
- The student completes parts I, II, and III of the Application for Credit by Exam.
- Academic Affairs circulates the application for the necessary signatures in the order listed and identifies on the application the date exam will be administered, along with the minimum passing grade needed.
- The student completes the exam.
- The administering faculty will complete Part VI including the grade of pass or no pass and submit exam with answer sheet to Vice President of Academic and Workforce Education.

# Student Affairs

## Campus Safety

The Campus Safety department operates 24/7 and offers a variety of services, such as a walking escorts, unlocking/jumpstarting motor vehicles, parking permits, lost and found, investigations, lockers, event coverage, issuing student IDs, and response to complaints and emergencies. Campus Safety encourages the reporting of potential or actual criminal activity and other emergencies by calling the emergency line at 603-224-3287 or using one of the Code Blue Phones on campus to contact Campus Safety directly.

To meet the requirements of the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act of 1998 the NHTI Annual Security Report has been prepared by the NHTI Campus Safety Department using statistical and other information supplied by NHTI, the Concord Police Department, and the N.H. State Police. View the Annual Security Report.

## Dining

**For Residents**

All students living in a residence hall on campus are required to purchase a meal plan. Resident Life recommends incoming first year students to purchase The Ultimate Plan for their first semester. Students can add additional Flex Dollars to their account at any time in increments of $25.

- 19 Meals per Week and $100 Flex Dollars: This plan offers students the greatest value. Students can enjoy all 19 meals offered in Capital Commons each week. This plan is also supplemented with $100 in Flex Dollars per semester to be used for snacks, beverages, and more in the Capital Commons and The Bistro.
- 15 Meals per Week and $100 Flex Dollars: This plan is designed for students who are not on campus on the weekends. Students can enjoy up to 15 meals per week at Capital Commons. This plan is also supplemented with $100 in Flex Dollars per semester to be used for snacks, beverages, and more at Capital Commons and The Bistro.

**For Commuters**

NHTI commuter meal plan options are specifically designed for students who want to enjoy the same privileges that resident students enjoy but do not want to commit to a meal plan.

**Block Meal Plans**

Block Meal Plans offer students the most flexibility as the amount of meals can be used throughout the semester in any manner. Students can use their block meals at our all-you-care-to-eat dining hall. Unlike the traditional meals per week plans available to resident students, meals on our block plans carry over from week to week. Students do not have to worry about losing their meals each week if they do not use them. With a Block Meal Plan, there are no restrictions and plenty of flexibility. Block Meal Plans come in these  options:

- Block 50: 50 meal visits for Capital Commons Dining Hall and $100.00 in Flex Dollars that can be used either at the Bistro or Capital Commons Dining Hall. $450.00

- Block 25: 25 meal visits to Capital Commons Dining Hall and $75.00 in Flex that can be used either at The Bistro or Capital Commons Dining Hall. $257.00
- Block 10: 10 meal visits to Capital Commons Dining Hall and $50.00 in Flex that can be used either at the Bistro or
- Capital Commons Dining Hall. $125.00

**Flex Dollars**

Flex Dollars are accepted like cash in all our dining locations. Flex Dollars is a “declining balance account” that works like a debit card. Students can use their Flex to purchase beverages or snacks at The Bistro, or a full meal in the Capital Commons Dining Hall. Each time a purchase is made, the purchase amount is subtracted from the Flex Dollars balance. Flex Dollars carry over from semester to semester but not from year to year. Additional Flex Dollars can be added to student accounts at any time in increments of $25. The more money put on the card, the more spending money that is added.

- $500: Receive $550 in Flex Spend
- $400: Receive $435 in Flex Spend
- $300: Receive $320 in Flex Spend
- $200: Receive $210 in Flex Spend

Credit or debit cards are accepted at both campus dining locations.

Unused Flex Dollars

Unused Flex Dollars carry over from Fall to Spring semester; however, unused block meals will not carry over. At the end of the Spring semester, all unused Flex Dollars are nonrefundable and will not carry over to the following school year. Students should select a meal plan according to their expected spending habits. Students can purchase additional meals and Flex Dollars at any time by contacting Aladdin Dining Services in Little Hall.

# Intercollegiate Athletics

NHTI offers an intercollegiate athletic program to eligible students. Athletics teams include esports, men’s and women’s basketball, men’s and women’s soccer, cross country, golf, men’s baseball, women’s softball, and women’s volleyball. NHTI teams compete for New England and national championships as members of the Yankee Small College Conference (YSCC) and the U.S. College Athletic Association (USCAA). NHTI student athletes are consistently named All-Americans, Academic All-Americans, and YSCC League All-Stars for their outstanding athletic and academic accomplishments.

**Intercollegiate Athletics Eligibility**

NHTI students interested in playing intercollegiate athletics must do the following to participate:

- Provide proof of insurance with the NHTI Health Services Office.
- Have documentation of a physical exam and immunizations from their personal physician or with the nurse practitioner in the NHTI Health Services Office in the Student Center.
- Pay the required student activity fee.
- Meet all eligibility requirements of the USCAA.
- Meet NHTI academic standards including status as a full-time student in a matriculated academic program allowing for no more than one academic failure from the preceding semester.
- Maintain the minimum standards of NHTI internal academic progress.

Students lose their eligibility to participate in NHTI athletics if any criteria listed above it not met. Students interested in NHTI athletics should contact 603-230-4041 or visit the Athletics Office in the Wellness Center.

## Intramural Sports and Wellness Center

The NHTI Fitness and Recreation Department provides wellness opportunities through activities, events, classes, and on-campus fitness facilities to get and stay healthy and happy in a friendly, comfortable environment. NHTI's Fitness and Recreation Department strives to enhance mental, physical, and emotional well-being while giving students the opportunity to explore their preferences and activities.

The Dr. Goldie Crocker Wellness Center has a weight room and cardiovascular exercise multi-purpose room in addition to our gymnasium, which has a full-length basketball court with 6 baskets and bleachers. An athletic training area and locker rooms are also available for intercollegiate athletics program, as well as for recreational and special events. The Wellness Center is open to NHTI students, staff, faculty, and employees of CCSNH. Group fitness classes are also available to students at no cost.

## Residence Life

NHTI offers on-campus housing to students in 3 residence halls. Housing is available to registered and eligible NHTI students. Students must be enrolled for a minimum of 9 credit hours to live on campus. Full-time professional staff members, along with student leaders (resident assistants) support students living on campus and provide opportunities for engagement within the residence halls. Residence Life provides students with:

- Experience: Living on campus makes it easier for students to get involved in projects/clubs that influence the community. Students develop new leadership experiences, share ideas, and achieve outcomes that bolster resumes.
- Supportive relationships: Social and academic support fuse together in student housing. Students have ongoing access to study partners and informal peer tutors.
- Amenities: Our residence halls are equipped with TV lounges, vending machines, laundry facilities, and game spaces where residents can play pool, ping pong, or video games.
- Diversity: Our housing hosts a dynamic segment of the campus population. Students live with people from all over the country and overseas, building relationships with students of various cultures, ethnic traditions, and gender identities.
- Convenience: Living in student housing enables students to focus on what's really important: the future.

**12-Month Housing**

We offer students the option of living on campus year-round! South Hall offers a large, open kitchen space that allows residents to cook their own meals during academic breaks when dining services are limited. Students who need to remain on campus during breaks should request 12-month housing when they apply, as only students who select this option will be guaranteed to stay.

**Mixed-Gender Community**

Students may request to live in a mixed-gender community and will only be placed in this community if they specifically request it. Space is limited.

# Student Life

## Student Leadership

NHTI provides leadership development opportunities throughout the year. These opportunities build and develop leadership and valuable life skills through workshops, seminars, and structured retreats. There are many different types of leaders in different roles on campus. This program is open to all NHTI students; participation in portions of the program may have a GPA requirement. Students interested in NHTI leadership programs can contact the Office of Student Life at 603-230-4040 or NHTIstudentlife@ccsnh.edu.

- Lynx to Leadership: Lynx to Leadership is a dynamic two-day leadership program held at NHTI to engage incoming students in positive relationships, servant leadership, and community service. The goal of the Lynx to Leadership program is to strengthen the NHTI community while helping new students make life-long connections. Open to new students, the program is held mid-August every year and fills up quickly.

- Leadership Lecture Series: Throughout the academic year, the Student Leadership Program offers multiple lecture and/or workshops focusing on leadership skills.
- Student Leadership Retreat: Each year, NHTI coordinates a retreat for current students, advisors, and members of the Student Engagement Team to gather for a day of leadership development. Typically, the day is spent at an off-campus location where students can network with one another and learn new skills while mastering existing skills. The retreat focuses on leadership skills including communication, collaboration, and teambuilding.

## Orientation Program

NHTI has a unique orientation program to facilitate a smooth transition to college life. Students and their guests have the opportunity to tour campus; ask questions; meet current students, alumni, faculty, and staff; and become familiar with college organizations, activities, and services.

## Student Activities

NHTI offers a broad range of programs and services to engage students in academic and campus life and enhance their educational experience. The Student Center is the hub for social, cultural, entertainment, and recreational activities. The 16,000 sq. ft. space includes a great room with fireplace, lounge, games area, and conference rooms. It houses a variety of student service offices including campus clubs and organizations, Health and Counseling Services, Campus Activities, Residence Life, and Student Life.

## Student Organizations

The Office of Student Life's mission is to enhance the student experience through the development of, exposure to, and participation in programs and activities. Student Life creates a welcoming physical and social environment as part of the educational setting and is grounded in student development through involvement. The Student Life department offers student organization opportunities for students to build connections and develop lifelong skills. Browse a full list of active and dormant student organizations and clubs.

## Student Senate and Campus Activities Board

NHTI encourages a democratic form of student government to develop individual initiative and a sense of group responsibility. The Student Senate is responsible for representing the student body in campus affairs and the allocation of funding support for student events and programs. The Senate comprises elected representatives and is responsible for the promotion and coordination of student activities. The Student Senate president and other members represent the student body on various college committees.

# Degrees

## Arts, Humanities, Communications, and Design

### Liberal Arts

**Degree Type**
Associate of Arts

Our Liberal Arts degree provides you with broad knowledge and exploration in the arts and sciences. It offers maximum choice and flexibility, a wide array of courses, and clear transfer pathways to other programs and four-year schools. This program allows you to create a pathway for following opportunities:

- Transferring to 4-year colleges and universities to complete a bachelor's degree in a Liberal Arts area
- Acting as a starting point if you haven't selected a major and want to complete general education requirements and an associate degree.
- Accessing prerequisite courses to transfer into NHTI programs such as Engineering Technology, Math, Biology, Health Science, Environmental Science, and Accounting.

This program is available 100% online.

**Do you have questions?** The department chair for this program is Alan Lindsay, who can be reached at alindsay@ccsnh.edu. You can also request more info here!

#### Career Information

Employers rank critical thinking and communication skills as essential components of career readiness. Students with a Liberal Arts degree gain these sought-after skills to pursue a wide range of job opportunities.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

#### Curriculum

**Core Requirements**

All students must complete a minimum of 60 credits of college-level coursework with a minimum cumulative GPA of 2.0.

All students must earn at least 15 credits at NHTI with at least 8 of those credits numbered at the 200 level.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | English elective | 3 | 0.00 | 3 |
| | Liberal Arts/English: Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Liberal Arts/English: Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Science elective | 3 | 0.00 | 3-4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | General elective - Liberal Arts | 3 | 0.00 | 3-4 |
| | General elective - Liberal Arts | 3 | 0.00 | 3-4 |
| | General elective - Liberal Arts | 3 | 0.00 | 3-4 |
| Total Credits | | | 60-68 | |

**Additional Information**

Program Learning Outcomes

- Evaluate strengths and weaknesses as a learner and develop strategies for finding solutions for continued improvement.
- Express oneself clearly and cogently through written and oral communication.
- Evaluate the effect of historical trends, events, institutions, and social systems on society.
- Apply quantitative reasoning/mathematical operations necessary to be competent in both a personal and professional setting.
- Apply the scientific method to gain knowledge and examine the laws, theories, and processes of physical and biological phenomena.
- Demonstrate an understanding of diverse ideas, emotions, and modes of expression, as expressed through literature and the arts.
- Demonstrate the basic applications of computer technology to be competent on both a personal and professional level.
- Complete the necessary course requirements to support transfer to four-year institutions.

# Communications

**Degree Type**
Associate of Arts

NHTI's Communications degree program prepares you to build a successful career in today's complex, information-based, media-driven culture and allows you to transfer into a bachelor's degree program in Communications, Media Studies, Journalism, or other related fields. You will gain opportunities to:

- Study communication in everyday relationships, groups, and organizations; students discover how these systems are created, maintained, and improved.
- Learn critical thinking, problem solving, conflict management, and collaborative strategies; students develop leadership, career development, and understanding skills for different situations.
- Develop skills in writing, editing, social media, and analysis; students learn to create and deliver effective messages through written, oral, digital, and broadcast channels.

**Do you have questions?** The department chair for this program is Alan Lindsay, who can be reached at alindsay@ccsnh.edu.You can also request more info here!

## Career Information

Communications skills are needed across industries and disciplines, such as social media, media, broadcasting, journalism, photography, business, public relations, travel and tourism, sales, advising, law, health, human services, education, and ministry. Graduates can enter into the following professions (not an inclusive list):

- Radio and TV stations broadcaster
- Newspaper and magazine writer/editor
- Student and athlete advising
- Advertising/marketing/social media developer

The communication skills derived from the degree can help students succeed in corporate settings or in organizations involving communications, media, broadcasting, journalism, photography, business, public relations, politics, law, health, human services, education, and ministry.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

## Curriculum

### First Year

Fall Semester

POLS210C may be taken instead of POLS110C below.

COMM120MC can be taken instead of COMM120C below.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| POLS110C | American Government | 3 | 0.00 | 3.00 |
| | Mathematics elective for communications | | | |
| COMM120C | Communication | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **10** | **0** | **10** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| COMM135C | Introduction to Media Studies | 3 | 0.00 | 3.00 |
| | Social science elective for communications | | | |
| DCOM150C | Social Media Strategy | 3 | 0.00 | 3.00 |
| | Humanities elective for communications | | | |
| | Lab science elective for communications | | | |
| | **Subtotal Credits** | **6** | **0** | **6** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| COMM203C | Advanced Public Speaking | 3 | 0.00 | 3.00 |
| | Mathematics elective for communications | | | |
| COMM201C | Interpersonal Communication | 3 | 0.00 | 3.00 |
| | Social science elective for communications | | | |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **9** | **0** | **9** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| COMM 205C | Communications Internship | 3 | | 5.00 |
| | Science elective for communications | | | |
| COMM202C | Intercultural Communication | 3 | 0.00 | 3.00 |
| VRTS197C | Introduction to Graphic Design | 3 | | 3.00 |
| COMM227C | Professional Communication | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **12** | **0** | **14** |
| | Total Credits | | 62-64 | |

**Additional Information**

Program Learning Outcomes

This program seeks to guide and develop students into becoming ethical, hard-working, and thoughtful contributors in their personal lives, careers, and society. Accordingly, the program will develop students' abilities to:

- Exemplify high ethical standards in personal and professional communication.
- Participate in discussions about cultural diversity.
- Communicate through individual and group presentations and speeches and participate in a symposium.
- Effectively employ communications and social media tools.
- Assess the dynamics of interpersonal communication and conflict management involving personal and business relationships.
- Develop a communication plan to enact during a crisis within an organization and then reflect and revise communication strategies used during the crisis.

# Mindful Communication

**Degree Type**
Certificate

NHTI's Mindful Communication certificate program comprises a variety of courses with the “MC” extension that infuse mindful communication and emotional intelligence into the teaching of core course content. When you take these courses as part of your degree program, you can graduate with both an associate degree and a Mindful Communication certificate.

Mindfulness has been linked with an increased ability to focus, improved working memory, improved problem solving, reduced reactivity, reduced stress, and improved health. NHTI’s Mindful Communication courses and certificate program are part of the mindfulness-based approach to the study, application, and teaching of mindfulness as pioneered by leaders in the field at the Center for Mindfulness, Medicine, Health Care, and Society at the University of Massachusetts Medical School.

The certificate is financial aid-eligible only when the MC courses are completed as part of a degree program.

**Do you have questions?** The department chair for this program is Alan Lindsay, who can be reached at alindsay@ccsnh.edu. You can also request more info here!

## Career Information

This certificate makes students more marketable across a broad range of fields, including information technology, healthcare, business, education, and human services. Emotional intelligence (EI) is widely recognized as helping people succeed and move up in their careers. Studies suggest that those with high EI often earn higher salaries than those with low EI.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

## Curriculum

### Full Certificate

Students who have already completed a course listed below without the MC designation (e.g., ENGL 101C) may be eligible to complete the MC portion of the work through a one-credit independent study to allow that course to count toward the Mindful Communication certificate.

For more information, see your department chair.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| | ENGL102MC/PSYC105MC | | | 3 |
| | Additional Mindful Communication requirement | | | 1-2 |
| Total Credits | | | 11-12 | |

### Additional Information

Program Learning Outcomes

- Use writing and reading for inquiry, learning, thinking, and communicating.
- Notice and let go of the impulse to be reactive.
- Reduce tendency to blame others during stressful situations.
- Determine and use effective communication strategies during stressful interactions that build cooperation.
- Demonstrate nonjudgment and patience when communicating.

- Demonstrate increased empathy.

## English

**Degree Type**
Associate of Arts

NHTI's English degree program ensures a sound general education in the Humanities and Sciences while allowing you to pursue interests in literature or creative writing. The associate degree can serve as a stepping stone to a 4-year degree in English or related majors.

This program can be completed entirely online!

**Do you have questions?** The department chair for this program is Alan Lindsay, who can be reached at alindsay@ccsnh.edu. You can also request more info here!

### Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Editing
- Journalism
- Publishing

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

### Curriculum

**General Requirements**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL101C elective | 4 | 0.00 | 4 |
| | ENGL102C elective | 4 | | 4 |
| HIST105C | Western Civilization: 1650 to Present | 3 | 0.00 | 3.00 |
| | Humanities/Fine Arts/Language elective - English | 3 | 0.00 | 3-4 |
| | Humanities/Fine Arts/Language elective - English | 3 | 0.00 | 3-4 |
| | Liberal Arts/English: Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Liberal Arts/English: Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **40-42** | **4** | **42-44** |

**Concentration**

A minimum 60 credits is required for graduation.

A minimum of 16 credits hours must be earned through instruction at NHTI with a minimum of 8 credit hours in courses numbered at the 200 level.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL288C | Shakespeare | 3 | 0.00 | 3.00 |
| | English elective (200-level) | 3 | 0.00 | 3 |
| | English elective (200-level) | 3 | 0.00 | 3 |
| | Introductory ENGL genre course | 3 | 0.00 | 3 |
| | Introductory ENGL genre course | 3 | 0.00 | 3 |
| | Sequential ENGL survey course | 3 | 0.00 | 3 |
| | Sequential ENGL survey course | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **21** | **0** | **21** |
| Total Credits | | | 63-65 | |

**Additional Information**

**Download Program Brochure**

Program Learning Outcomes

Through the study of literature and the practice of writing, the successful English major will be able to identify a diverse range of historically and culturally significant texts; analyze and evaluate those texts; and, with the aid of developed skills in research and writing, apply original ideas and opinions to a wide range of historical and contemporary issues. Upon successful completing of the AA in English, students will be able to identify, analyze, and evaluate a diverse range of historically and culturally significant works of fiction, nonfiction, drama, and poetry. The successful student will also be empowered to develop original ideas and opinions on literary texts and a range of issues related to historical and contemporary Western culture.

## General Studies

**Degree Type**
Associate of Science

NHTI's General Studies degree program is designed to provide you with maximum flexibility, traditional and online options, and strong advising to fulfill the prerequisites you need to apply to any of NHTI's Allied Health programs. This program offers a wide array of courses and opportunities and allows you to create a pathway to:

- Transfer to other NHTI Allied Health programs upon acceptance to those programs.
- Be a starting point, especially if you are interested in Allied Health fields but have not yet selected or been admitted to a specific Allied Health program.
- Complete general education requirements and an associate degree.
- Complete prerequisite courses to transfer into programs ranging from Nursing to Radiologic Technology.
- Apply credits earned in an NHTI certificate program or elsewhere toward an associate degree at NHTI.

This program can be completed entirely online!

**Do you have questions?** The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu. You can also request more info here!

### Career Information

Career pathways for General Studies majors are diverse and depend on the students' interests, the skills they develop, and the goals they set for themselves. General Studies majors are often interested in helping people,

particularly in a medical setting. After completing a degree at NHTI, graduates may find themselves helping to administer medical treatment, providing access to services, or helping to prevent, diagnose, and treat medical conditions. General Studies majors are often interested in ensuring people know how to maintain and improve their health and the health of others. Learning about scientific principles and evidence-based practice are crucial parts of the education when exploring the possibility of a career in these fields.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

**Interested in Pursuing an Allied Health Program?** All newly accepted NHTI students planning to apply for one of NHTI's Allied Health programs are strongly encouraged to attend an Allied Health Advising Hour prior to registering for courses. The Allied Health Advising Hour is designed so you can review program and admission requirements, fulfill application steps, make academic plans, and discuss questions. You'll be invited to a follow-up individual registration session. Sessions are held via Zoom every Tuesday at 3:30 p.m. and Thursday at 12 p.m.

## Curriculum

**Option A: Select a Concentration**

Course

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | English elective | 3 | 0.00 | 3 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **26-28** | **2-4** | **27-29** |

**Electives**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | GST100C or GST102C | 1 | 0.00 | 1-2 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | Liberal Arts and Sciences elective | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **34-46** | **0-22** | **34-46** |

**Option B: Apply Credit/Experience**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | English elective | 3 | 0.00 | 3 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | General elective - General Studies | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **26-28** | **2-4** | **27-29** |

**Electives**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| GST100C | College Success Seminar | 1 | 0.00 | 1.00 |
| | Experiential credit | 1 | 0.00 | 1-16 |
| | Certificate credit | 0 | 15.00 | 0-31 |
| | Coursework credit | 0 | 0.00 | 0-31 |
| | **Subtotal Credits** | **2-79** | **15** | **1-32** |
| | Total Credits | | 60 | |

**Additional Information**

Program Learning Outcomes

- Evaluate strengths and weaknesses as a learner and develop strategies for finding solutions for continued improvement.
- Express oneself clearly and cogently through written and oral communication.
- Evaluate the effect of historical trends, events, institutions, and social systems on society.
- Apply quantitative reasoning/mathematical operations necessary to be competent in both a personal and professional setting.
- Apply the scientific method to gain knowledge and examine the laws, theories, and processes of physical and biological phenomena.
- Demonstrate an understanding of diverse ideas, emotions, and modes of expression as expressed through literature and the arts.
- Demonstrate the basic applications of computer technology to be competent on both a personal and professional level.

# Visual Arts

**Degree Type**
Associate of Arts

NHTI's Visual Arts degree program helps you acquire a thorough knowledge of visual expression and a broad exposure to the history of art in preparation for transfer to four-year colleges and universities and a career in the visual arts. We emphasize visual perception, technical acuity, and artistic philosophy geared toward developing your personal aesthetic. The first-year curriculum provides you with a common foundation in basic artistic techniques; the following year, you focus on advanced studio disciplines and prepare a professional portfolio of your work. The Visual Arts degree program welcomes outside fine arts courses; however, transfers of courses are not automatically accepted without departmental portfolio review and agreement.

To view previous NHTI Senior Capstone work, visit https://www.nhtivarts.com/.

Our Visual Arts professors are professional artists with extensive exhibition records and a wealth of teaching experience. The limited student-to-faculty ratio facilitates a respectful and safe environment to develop inherent abilities. We encourage mentorships, independent study, internships, and exhibition opportunities. You will have the opportunity to exhibit your work at the end of each semester.

**Do you have questions?** Contact Kiera Reese, program coordinator, at kreese@ccsnh.edu. The department chair for this program is Alan Lindsay, who can be reached at alindsay@ccsnh.edu. You can also request more info here!

## Career Information

Graduates can enter into the following professions (not an inclusive list): illustrating, graphic design, set design, photography, film/media production, fabric/paper design, fashion design, product design, art therapy, art instructors, game design, character development, interior design, and fabrication. They may earn income by opening their own studios and selling work to museums, galleries, and private collectors. Many continue study toward BFA degrees to further their abilities and pursue careers in teaching.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| VRTS101C | Introduction to Drawing | 2 | 4.00 | 4.00 |
| VRTS103C | Two-Dimensional Design | 2 | 3.00 | 3.00 |
| VRTS111C | Survey of Western Art History I | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **14** | **7** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | English elective | 3 | 0.00 | 3 |
| | Social Science elective | 3 | 0.00 | 3 |
| VRTS104C | Three-Dimensional Design | 2 | 3.00 | 3.00 |
| VRTS112C | Survey of Western Art History II | 3 | 0.00 | 3.00 |
| VRTS201C | Drawing II | 2 | 4.00 | 4.00 |
| | **Subtotal Credits** | **13** | **7** | **16** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | Lab Science elective | 3 | 2.00 | 4 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Studio I elective | | | 3-4 |
| | Visual Arts elective | 2 | 0.00 | 3-4 |
| | **Subtotal Credits** | **12** | **2** | **17-19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | General elective | 3 | 0.00 | 3-4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Mathematics elective (MATH 124C or higher level) | 4 | 0.00 | 4 |
| | Studio II elective | 2 | 4.00 | 4 |
| VRTS290C | Visual Arts Capstone Practicum | 1 | 0.00 | 1.00 |
| | **Subtotal Credits** | **13-14** | **6** | **16-17** |
| | Total Credits | | 66-69 | |

**Additional Information**

Note: Ceramics and darkroom-based photography are not available at this time.

Program Learning Outcomes

Students who complete the program will demonstrate:

- A comprehension of art history and its relationship to society, an understanding of different modes of expression, and how to articulate that context during individual assessment of studio work
- The ability to create imagery that reflect professional standards in a range of mediums that use components of visual language to communicate personal and group content and critically assess individual work in group settings
- The ability to write concisely and employ mathematics, science, and appropriate terminology as used in the field of visual arts
- The ability to articulate meaning and motive in an artist statement, create an independent body of work, prepare professional-quality displays, and curate and hang exhibitions

# Business

## Accounting

**Degree Type**
Associate of Science

The NHTI Accounting program offers an associate degree, advanced certificate, and basic certificate to prepare you for entry-level positions in accounting and business. Accounting is a critical component of every type and size of business and industry including government, healthcare, education, not-for-profit, and military organizations. Accounting employees provide much of the information used by these organizations to make critical financial decisions.

We offer credit transfer options to 4-year colleges and universities. This program can also be completed entirely online!

**Do you have questions?** Contact Dawn Higgins, academic advisor, at dhiggins@ccsnh.edu or 603-271-6484 x 4208. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

### Career Information

Career potential is excellent with an associate degree in accounting, which is a critical component of every type and size of business and industry. Accounting employees provide much of the information used by organizations to make critical financial decisions. Graduating with an A.S. in Accounting will prepare students for jobs in the following professions (not an inclusive list):

- Accounts payable/receivable clerk
- Tax preparer
- Billing/accounting/auditing clerk
- Bookkeeper

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have taken a high school Algebra I course with a grade of C or higher, or NHTI's MATH092C with a grade of C or higher.

### Curriculum

**First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| BUS101C | Introduction to Business | 3 | 0.00 | 3.00 |
| COMM120MC | Communication: Mindful | 3 | 0.00 | 3.00 |
| IST200C | Spreadsheets | 3 | 0.00 | 3.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **16** | **0** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| | Business elective | 3 | 0.00 | 3 |
| | MATH 125C or MATH 251C | 4 | 0.00 | 4 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **17** | **0** | **17** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT205C | Intermediate Accounting I | 4 | 0.00 | 4.00 |
| ACCT250C | Cost Accounting | 3 | 0.00 | 3.00 |
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| | ECON 101C or ECON 102C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **13** | **0** | **13** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT206C | Intermediate Accounting II | 4 | 0.00 | 4.00 |
| ACCT230C | Taxes | 4 | 0.00 | 4.00 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **14-15** | **2** | **15-16** |

**First Year – Accelerated Online**

Fall Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **6** | **0** | **6** |

Fall Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| IST200C | Spreadsheets | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **6** | **0** | **6** |

Spring Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT205C | Intermediate Accounting I | 4 | 0.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **7-8** | **0** | **7-8** |

Spring Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT206C | Intermediate Accounting II | 4 | 0.00 | 4.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

Summer Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT230C | Taxes | 4 | 0.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **8** | **0** | **8** |

Summer Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT250C | Cost Accounting | 3 | 0.00 | 3.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

**Second Year – Accelerated Online**

Fall Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | **Subtotal Credits** | **6** | **2** | **7** |

Fall Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

Spring Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | English elective | 3 | 0.00 | 3 |
| | ECON 101C or ECON 102C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **6** | **0** | **6** |
| | Total Credits | | 61-62 | |

**Additional Information**
Students who completed a non-Mindfulness Communication version of a course at another institution may be waived from the MC version of the courses at NHTI. NHTI students who wish to opt-out of the Mindfulness Communication coursework may contact the department chair.

Accreditation

Our accounting associate degree is accredited by the Accreditation Council for Business School and Programs.

Program Learning Outcomes

It is the mission of the Accounting department to prepare students for:

- Competitive eligibility for entry-level jobs in the accounting field
- Transfer to baccalaureate programs
- Advancement in their current jobs

At the completion of the program, students will be able to:

- Demonstrate proficiency in accurately observing and organizing financial data.
- Demonstrate analytical and problem-solving skills.
- Demonstrate the use of accounting principles and procedures as they apply to the recording and reporting of financial information.
- Demonstrate proficiency in valuing, recording, and reporting the business entity's assets, liabilities, and equity.
- Demonstrate proficiency in the use of financial data in planning, controlling, and evaluating entity performance.
- Appreciate the importance of deadlines to the profession.
- Understand professional responsibilities in the workplace.
- Communicate clearly, both verbally and in writing.
- Complete tasks in a timely fashion.
- Demonstrate proficiency in basic computer applications, including Excel.

Student Success Data

| | |
|---|---|
| **Retention – A.S. Accounting** | |
| 2023 | 56.5% |
| 2022 | 66.7% |
| 2021 | 56.5% |
| 2020 | 73.9% |
| 2019 | 65.4% |
| **Retention - A.S. Accounting (Online)** | |
| 2023 | 60.0% |
| 2022 | 53.8% |
| 2021 | 66.7% |
| 2020 | 75.0% |
| 2019 | 53.3% |
| **All Graduates - A.S. in Accounting** | |
| 2024 | 7 |
| 2023 | 12 |
| 2022 | 12 |
| 2021 | 14 |
| 2020 | 10 |
| 2019 | 13 |

## Accounting - Advanced

**Degree Type**
Certificate

NHTI's Accounting Advanced certificate program prepares you for entry-level positions in accounting and business and for transfer to four-year colleges and universities. The Basic Accounting certificate is a prerequisite for this Advanced Accounting program. This program is available days, evenings, and online, and is financial aid-eligible.

**Do you have questions?** Contact Dawn Higgins, academic advisor, at dhiggins@ccsnh.edu or 603-271-6484 x 4208. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT205C | Intermediate Accounting I | 4 | 0.00 | 4.00 |
| ACCT206C | Intermediate Accounting II | 4 | 0.00 | 4.00 |
| ACCT230C | Taxes | 4 | 0.00 | 4.00 |
| ACCT250C | Cost Accounting | 3 | 0.00 | 3.00 |
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| Total Credits | | | 18 | |

## Accounting - Basic

**Degree Type**
Certificate

NHTI's Advanced Basic certificate program prepares you for entry-level positions in accounting and business and for transfer to four-year colleges and universities. The Basic Accounting certificate is a prerequisite for this Advanced Accounting program. This program is available days, evenings, and online, and is financial aid-eligible.

**Do you have questions?** Contact Dawn Higgins, academic advisor, at dhiggins@ccsnh.edu or 603-271-6484 x 4208. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| IST200C | Spreadsheets | 3 | 0.00 | 3.00 |
| Total Credits | | | 18 | |

# Business Administration

**Degree Type**
Associate of Science

NHTI's Business Administration degree program helps prepare you to be part of the day-to-day challenges in the dynamic field of business. You will be given a broad background in classes taught by faculty who are or have been successful business professionals. NHTI offer a broad background including courses in accounting, business law, human resources, computer applications, economics, English, and math. Easy transfers are available.

This program can be completed entirely online or accelerated online!

**Do you have questions?** Contact Dawn Higgins, academic advisor, at dhiggins@ccsnh.edu or 603-271-6484 x 4208. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Customer service representative
- Loan officer
- Marketing assistant
- Office manager
- Retail manager

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| BUS101C | Introduction to Business | 3 | 0.00 | 3.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **16** | **0** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| | ENGL101C or ENGL101MC | 4 | | 4-4 |
| | MATH 125C or MATH 251C | 4 | 0.00 | 4 |
| IST200C | Spreadsheets | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **17** | **0** | **17-17** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT110C | Managerial Accounting | 3 | 0.00 | 3.00 |
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| | Business elective | 3 | 0.00 | 3 |
| | ECON 101C or ECON 102C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15** | **0** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS240C | Small Business Management | 3 | 0.00 | 3.00 |
| BUS273C | Human Resource Management | 3 | 0.00 | 3.00 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **12-13** | **2** | **13-14** |

### First Year – Accelerated Online

Fall Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS101C | Introduction to Business | 3 | 0.00 | 3.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **6** | **0** | **6** |

Fall Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | Business elective | 3 | 0.00 | 3 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

Spring Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| IST200C | Spreadsheets | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **9** | **0** | **9** |

Spring Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **6** | **0** | **6** |

Summer Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT110C | Managerial Accounting | 3 | 0.00 | 3.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

Summer Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS273C | Human Resource Management | 3 | 0.00 | 3.00 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

**Second Year – Accelerated Online**

Fall Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | **Subtotal Credits** | **6** | **2** | **7** |

Fall Session II

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| | ECON 101C or ECON 102C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **6** | **0** | **6** |

Spring Session I

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS240C | Small Business Management | 3 | 0.00 | 3.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **6-7** | **0** | **6-7** |
| | Total Credits | | 61-62 | |

**Additional Information**

Accreditation

The Associate in Science in Business Administration program is accredited by the Accreditation Council for Business Schools and Programs.

Articulation Agreements

The Business program has the following articulation agreements in place: Plymouth State University, Southern NH University, UNH-Manchester, Rivier University, and New England College. Several students have also successfully transferred to other colleges such as Bentley University and Bryant University.

Program Learning Outcomes

- Students will demonstrate oral and written communications competencies across the disciplines. Students will practice standard forms of communication such as resumes, letters, and reports.
- Students will practice ethical and effective interpersonal skills in their relations with fellow students and instructors. They will demonstrate those skills in classroom and small group and workplace settings. Work experience supervisors will report satisfaction with students' skills, performance, and judgment during their internships.
- Students will demonstrate familiarity with economic and managerial concepts and quantitative controls in the business environment.
- A majority of the students who begin the program will complete the AS degree requirements within 3 years.

A majority of program graduates report satisfaction with the Business Administration education at NHTI. Of our graduates, 75% will be employed in a related field within six months of completing degree requirements or continue in a four-year degree program.

Student Success Data

| | |
|---|---|
| **Retention – A.S. Business Administration** | |
| 2023 | 51.2% |
| 2022 | 66.2% |
| 2021 | 49.0% |
| 2020 | 56.1% |
| 2019 | 57.0% |
| **Retention – A.S. Business Administration (Online)** | |
| 2023 | 51.4% |
| 2022 | 54.5% |
| 2021 | 38.7% |
| 2020 | 48.0% |
| 2019 | 44.0% |
| **All Graduates - A.S. in Business Administration** | |
| 2024 | 39 |
| 2023 | 31 |
| 2022 | 37 |
| 2021 | 42 |
| 2020 | 44 |
| 2019 | 29 |

# Management

**Degree Type**
Certificate

NHTI's Management certificate program prepares you for the day-to-day challenges in the dynamic field of business. The program offers a broad background for those seeking careers in many areas of business; all courses are directly applicable to the NHTI's associate of science degree programs. This program is financial aid-eligible.

The program is accredited by the Accreditation Council for Business Schools and Programs.

This program can be completed entirely online!

**Do you have questions?** Contact Dawn Higgins, academic advisor, at dhiggins@ccsnh.edu or 603-271-6484 x 4208. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

## Career Information

Employment growth is expected to be driven by the formation of new organizations and expansion of existing ones, which should require more workers to manage these operations. Career titles include:

- Customer service representative
- Loan officer
- Sales representative
- Business analyst
- Human resource assistant
- Marketing assistant office manager
- Retail manager

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| BUS101C | Introduction to Business | 3 | 0.00 | 3.00 |
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **12** | **0** | **12** |

**Choose 2 Electives:**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS152C | Foundations of Leadership | 3 | 0.00 | 3.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| BUS174C | Principles of Sales | 3 | 0.00 | 3.00 |
| BUS221C | Healthcare Management in the U.S. | 3 | 0.00 | 3.00 |
| BUS245C | Organizational Behavior | 3 | 0.00 | 3.00 |
| BUS273C | Human Resource Management | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **18** | **0** | **6** |
| Total Credits | | | 18 | |

**Additional Information**

Program Learning Outcomes

Upon graduation, students will be able to:

- Demonstrate communication and management skills that result in quality hospitality services.
- Participate in community and/or professional organizations that promote the hospitality industry.
- Use critical thinking skills in the performance of job duties.
- Use computer applications such as word processing.
- Display an understanding of principles of management.
- Identify the legal and ethical issues.
- Practice good human relation and interpersonal skills.

# Paralegal Studies

**Degree Type**
Associate of Science

NHTI's Paralegal degree prepares you to perform effectively in today's legal and business communities with a broad-based academic curriculum emphasizing the skills, substantive knowledge, and ethics you'll need to assist lawyers. This degree can be completed on a full- or part-time basis. Most major field courses are offered in the evenings. The general education courses are offered days and evenings.

Paralegal work requires discretion and independent judgment; a paralegal works under the supervision and direction of an attorney. Even though a paralegal can perform many of the tasks that have otherwise been performed by attorneys, they may not provide legal services directly to the public, except as permitted by law.

**Do you have questions?** Contact Stacey Peters, program coordinator, at speters@ccsnh.edu or 603-271-6484 x4274. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Partnership with Nashua Community College (NCC)**

NHTI – Concord's Community College is proud to expand access to its highly respected Paralegal program. Students in the Nashua area can now complete their general education courses at Nashua Community College (NCC) while taking advantage of local internship opportunities as part of the NHTI paralegal program. This flexible pathway allows more students to gain valuable legal training closer to home while still benefiting from the strength and reputation of NHTI's ABA-approved program.

## Career Information

Graduates may either enter the workforce directly after graduation or continue their education at a four-year institution. They are trained for professional status as lawyers' assistants in banks, corporations, government agencies, insurance companies, and law firms.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- Interview with department chair scheduled by the department chair once applications are complete
- Two confidential letters of reference
- 200-word essay with reasons for choosing the Paralegal Studies program (to evaluate writing skills)

## Curriculum

**First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| PLGL106C | Introduction to Legal Studies | 3 | 0.00 | 3.00 |
| PLGL107C | Contracts and Torts | 3 | 0.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| | English elective | 3 | 0.00 | 3 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| PLGL110C | Litigation and Trial Preparation | 3 | 0.00 | 3.00 |
| PLGL225C | Legal Research and Writing | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **16** | **2** | **17** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| PLGL221C | Real Estate | 3 | 0.00 | 3.00 |
| PLGL251C | Probate Estates and Trusts | 3 | 0.00 | 3.00 |
| PLGL262C | Criminal Law and Procedures for the Paralegal | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **15** | **0** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | Language or General Education elective | 3 | 0.00 | 3-4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| PLGL231C | Business Organizations and Bankruptcy | 3 | 0.00 | 3.00 |
| PLGL242C | Domestic Relations Law | 3 | 0.00 | 3.00 |
| PLGL270C | Internship | 0 | 9.00 | 3.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15-16** | **11** | **19-20** |
| Total Credits | | | 67-68 | |

**Additional Information**

Accreditation

This degree program is approved by the American Bar Association and is designed to prepare students to perform effectively in today's legal and business communities.

Character Expectations

Background checks are completed by potential employers prior to obtaining any position with arrest or detention power and typically before being accepted for an internship. Applicants who have been in difficulty with the law may not be employable or eligible for an internship. Because future goals may be compromised, applicants are advised to discuss any concerns with the department chair.

Program Learning Outcomes

NHTI graduates will be exposed to the legal system and the role of paralegals within the profession, the ethical rules governing lawyers and paralegals, and the operation of a law office. Through the course sequence in the degree, NHTI graduates will be:

- Able to assist in most aspects of legal research and in the preparation of clear and concise legal writings on a topic of their choosing
- Introduced to Lexis/Nexis
- Able to assist in virtually all phases of litigation and property transactions
- Able to assist in the formation, daily administration, and dissolution of a corporate entity
- Able to assist in the planning and administration of a decedent's estate
- Prepared to assist in the drafting of pleadings and in the completion of preliminary research in the area of family law
- Exposed to the various elements of N.H.'s criminal practice and procedure

Legal Specialty Credits

Note also that all Paralegal Studies students are required to take at least nine (9) semester credits or equivalent of legal specialty courses through face-to-face or online synchronous instruction. Transfer students must provide proof of such credits if taken elsewhere.

1. The student must comply with NHTI's residency requirements as contained in our Academic Catalog.
2. The program has limits on the number of legal specialty credits that can be earned through transfer:
    i. The A.S. requires a total of 67-68 credit hours; 8 of which must be legal specialty credits classes completed at NHTI; the maximum number of legal specialty classes that can be transferred is 23 credits.

## Paralegal Studies

**Degree Type**
Certificate

NHTI's Paralegal certificate prepares you for professional status as lawyers' assistants with a broad academic curriculum that emphasizes the skills, substantive knowledge, and ethics. You'll learn strong writing skills, an analytical approach to organizing and reviewing material, and a foundation in word processing and computers. Although a paralegal works under the supervision and direction of an attorney, it is important that they be well-motivated and self-starting. This program is available evenings only and is financial aid eligible.

Paralegal work requires discretion and independent judgment; a paralegal works under the supervision and direction of an attorney. Even though a paralegal can perform many of the tasks that have otherwise been performed by attorneys, they may not give legal advice, represent a client in court, or otherwise engage in the practice of law.

**Do you have questions?** Contact Stacey Peters, program coordinator, at speters@ccsnh.edu or 603-271-6484 x4274. The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Partnership with Nashua Community College (NCC)**

NHTI – Concord's Community College is proud to expand access to its highly respected Paralegal program. Students in the Nashua area can now complete their general education courses at Nashua Community College (NCC) while taking advantage of local internship opportunities as part of the NHTI paralegal program. This flexible pathway allows more students to gain valuable legal training closer to home while still benefiting from the strength and reputation of NHTI's ABA-approved program.

Paralegals must work under the supervision of an attorney and may not provide legal services directly to the public, except as permitted by law.

### Career Information

This certificate trains students for professional status as lawyers' assistants in banks, corporations, government agencies, insurance companies, and law firms. Formally trained paralegals with strong computer and database management skills should have the best job prospects.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- 45 college credits in general education courses from an accredited institution; 18 of these credits must meet distribution and content requirements designated by the ABA in at least three disciplines such as English, languages, humanities, mathematics and natural science.
- Interview with department chair scheduled once applications are complete
- Two confidential letters of reference or completed Reference form
- 200-word essay with reasons for choosing the Paralegal Studies program (to evaluate writing skills)

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| PLGL101C | Foundations of Paralegal Studies | 2 | 0.00 | 2.00 |
| PLGL103C | Causes of Action in Contract and Tort | 2 | 0.00 | 2.00 |
| PLGL104C | Legal Research | 3 | 0.00 | 3.00 |
| PLGL110C | Litigation and Trial Preparation | 3 | 0.00 | 3.00 |
| PLGL221C | Real Estate | 3 | 0.00 | 3.00 |
| PLGL231C | Business Organizations and Bankruptcy | 3 | 0.00 | 3.00 |
| PLGL241C | Family Law | 1 | 0.00 | 1.00 |
| PLGL251C | Probate Estates and Trusts | 3 | 0.00 | 3.00 |
| PLGL261C | Criminal Process | 1 | 0.00 | 1.00 |
| PLGL270C | Internship | 0 | 9.00 | 3.00 |
| PLGL271C | Legal Writing | 1 | 0.00 | 1.00 |
| Total Credits | | | 25 | |

**Additional Information**

Accreditation

This degree program is approved by the American Bar Association and is designed to prepare students to perform effectively in today's legal and business communities.

Character Expectations

Background checks are completed by potential employers prior to obtaining any position with arrest or detention power and, typically, before being accepted for an internship. Applicants who have been in difficulty with the law may not be employable or eligible for an internship. Because future goals may be compromised, applicants are advised to discuss any concerns with the department chair.

Program Learning Outcomes

NHTI graduates will be exposed to the legal system and the role of paralegals within the profession, the ethical rules governing lawyers and paralegals, and the operation of a law office. Through the course sequence in the certificate program, NHTI graduates will be:

- Able to assist in most aspects of legal research, and in the preparation of clear and concise legal writings, on a topic of their choosing
- Introduced to Lexis/Nexis
- Able to assist in virtually all phases of litigation and property transactions
- Able to assist in the formation, daily administration, and dissolution of a corporate entity
- Able to assist in the planning and administration of a decedent's estate

- Prepared to assist in the drafting of pleadings and in the completion of preliminary research in the area of family law
- Exposed to the various elements of N.H.'s criminal practice and procedure

Legal Specialty Credits

Note also that all Paralegal Studies students are required to take at least nine (9) semester credits or equivalent of legal specialty courses through face-to-face or online synchronous instruction. Transfer students must provide proof of such credits if taken elsewhere.

1. The student must comply with NHTI's residency requirements as contained in our Academic Catalog.
2. The program has limits on the number of legal specialty credits that can be earned through transfer:
    i. The Certificate program requires a total of 22 credit hours, all of which must be legal specialty credits. No more than six (6) legal specialty credits can be earned through transfer.

## Sports Management

**Degree Type**
Associate of Science

NHTI's Sports Management degree program prepares you for career interests that combine management skills and knowledge of the sports industry. Courses are offered during the day and evening and can be taken 100% online.

One of the major factors contributing to career success in the sports field is experience. You will work with a faculty member to find an internship location based on your desired specialization in sports management. This program has the following articulation agreements in place for easy transfer: Southern NH University, Rivier University, and New England College.

The Sports Management degree program is accredited by the Accreditation Council for Business Schools and Programs.

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

### Career Information

The goal of the program is to develop well-trained business professionals for positions in the administration or management of sports businesses or sports organizations. Some careers include media, retail sports, sports travel, facility, and event management. Understanding the business, legal, and marketing aspects of sports management is an invaluable tool.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DCOM105C | Digital Communications | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| SPTS101C | Introduction to Sports Management | 3 | 0.00 | 3.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **17** | **0** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| | ECON 101C or ECON 102C | 3 | 0.00 | 3 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| | BUS 170C or SPTS 170C | 3 | 0.00 | 3 |
| SPTS180C | Public Relations and Advertising for the Sports Industry | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| SPTS210C | Sports and Fitness Facilities Management | 3 | 0.00 | 3.00 |
| COMM220C | Sports Communications | 3 | 0.00 | 3.00 |
| | Sports/Business/Digital Communications elective | 3 | 0.00 | 3 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Sports/Business/Digital Communications elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **18-19** | **0** | **18-19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | BUS 225C or SPTS 225C | 3 | 0.00 | 3 |
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| SPTS250C | Sports and Society | 4 | 0.00 | 4.00 |
| | Science elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **13-14** | **0-2** | **13-14** |

| Total Credits | 64-66 |
|---|---|

**Additional Information**

Student Success Data

| | |
|---|---|
| **Retention – A.S. Sports Management** | |
| 2023 | 34.5% |
| 2022 | 47.4% |
| 2021 | 38.6% |
| 2020 | 48.7% |
| 2019 | 52.1% |
| **A.S. in Sports Management – All Graduates** | |
| 2024 | 6 |
| 2023 | 2 |
| 2022 | 5 |
| 2021 | 9 |
| 2020 | 9 |
| 2019 | 10 |

## Sports Management

**Degree Type**
Certificate

NHTI's Sports Management certificate program familiarizes you with the world of sports-related businesses and provides an overview of possible careers and future studies in sports management. Courses transfer into NHTI's Sports Management degree program. An internship option is built into the certificate program if you're interested in gaining real-world experience. This program is financial aid-eligible.

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| SPTS101C | Introduction to Sports Management | 3 | 0.00 | 3.00 |
| SPTS170C | Sports and Recreation Marketing | 3 | 0.00 | 3.00 |
| SPTS180C | Public Relations and Advertising for the Sports Industry | 3 | 0.00 | 3.00 |
| SPTS210C | Sports and Fitness Facilities Management | 3 | 0.00 | 3.00 |
| COMM220C | Sports Communications | 3 | 0.00 | 3.00 |
| SPTS250C | Sports and Society | 4 | 0.00 | 4.00 |
| | SPTS290C or Sports/Business/Recreation elective | 3 | 0.00 | 3 |
| | Total Credits | | 25 | |

# Health Sciences and Services

## Dental Hygiene

**Degree Type**
Associate of Science

NHTI's Dental Hygiene degree program provides you opportunity to analyze health information and provide clinical services to improve oral and overall health. Established in 1970, this program graduates effective dental hygienists who enjoy rewarding, successful careers serving patients and populations in N.H. and beyond. NHTI offers the only dental hygiene program in N.H., providing excellence in dental hygiene education. You are prepared with the skills and knowledge required of professional dental hygienists.

NHTI Dental Hygiene students experience high success rates on national written and clinical board exams, positive interactions with community health agencies, and excellent preparation for licensure and clinical practice. Our curricula provides close clinical supervision with individual and small-group instruction, transferability of general education courses, and integration of current technology into education and clinical practice. ADED courses can only be taken by students who have been accepted into the Allied Dental program.

The NHTI Dental Hygiene program:

1. Provides a curriculum that integrates general education, biomedical sciences, dental sciences, and current dental hygiene theory, practice, and provision of dental hygiene care
2. Prepares students to think critically and implement the dental hygiene process of care to promote and maintain oral and systemic health for diverse populations
3. Prepares students to exercise principles of professional, regulatory, and ethical behavior in oral healthcare
4. Prepares students to commit to professional growth and learning to maintain compliance and competence through self assessment and evidence-based decision-making in an evolving healthcare system

Download the Dental Hygiene Mission, Goals, and Competencies PDF.

**Do you have questions?** The department chair for this program is Billie Lunt, who can be reached at blunt@ccsnh.edu.

### Career Information

Dental hygienists work in clinical, corporate, public health, research, and educational settings. They can serve as program administrators, and some have become successful entrepreneurs, starting their own businesses.

Dental hygienists provide a range of preventive and therapeutic dental services, including dental hygiene assessment and care planning. Services include oral dental and periodontal examination, scaling and debridement, pain management, radiography, dental sealants, in-office whitening, and oral hygiene instruction. Dental hygienists are professionals, licensed by the state in which they practice, who complete extensive educational and clinical preparation in oral disease prevention.

The salary of a dental hygienist depends on the responsibilities associated with the specific position, the practice setting, and the geographic location of employment. Full- or part-time employment and benefits are factors. Dental hygienists earn salaries equal to healthcare personnel with similar training and experience such as nurses.

NHTI encourages students to research the dental hygiene career and connect with local association members. Students may join an association at a reduced rate as a student member. The student chapter of the American Dental Hygienists' Association is an active service organization at NHTI.

- American Dental Hygienists' Association
- American Dental Hygienists' Association-New Hampshire Chapter
- American Dental Association

NHTI encourages dental hygiene graduates to pursue a bachelor's degree. Our graduates successfully transfer to colleges and universities around the country. Because of the extensive knowledge and skills of dental hygienists, professional organizations are discussing the bachelor's degree as the entry-level degree for dental hygiene.

See more career information in our Dental brochure!

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

Preference will be given to applicants whose applications are complete and received by the Admissions Office by the deadline. Applications received after the deadline will only be considered if space remains in the program after qualified candidates have been reviewed.

**Application Deadline: February 1, 2026 for the Fall 2026 semester**

Specific Admission Requirements:

1. College preparatory level courses in biology and chemistry, with labs, with grades of "C" or higher;
2. Algebra I with a grade of "C" or higher or NHTI's MATH 092C with a grade of "C" or higher;
3. Observe professional practices in a dental office for a period of not less than twenty (20) hours; please submit the completed Observation Form to the NHTI Admissions Office no later than the application deadline; a form is available here (Dental Hygiene Observation Form pdf). Please note: the observation is only valid for 2 years.
4. Current dental office employees are not required to complete the hours of observation, but are required to complete and submit the observation form.
5. Completion of the Assessment Technologies Institute's: Test of Essential Academic Skills (TEAS) with a minimum Total Score of 66% or higher. Information regarding testing locations and registration is available here (ATI TEAS Exam pdf) or contact the Admissions Office.
6. An informational group zoom interview and Professional interview with the Dental Admissions Committee; qualified candidates will be contacted after the deadline to arrange an interview;

Admission to the Dental Hygiene program is very competitive but strong high school students are encouraged to apply. Selection is determined by a cumulative point system. Points are awarded based on ATI TEAS exam scores and for grades attained for the college science courses, specifically A&P I and II. Points will also be given for students who have completed CTE Health Science/Occupations courses, dental assistants who submit their CDA credential, and dental assistants who have graduated from a CODA Dental Assisting program.

Only courses completed with final grades by the application deadline will be considered as part of the admissions review process.

Already Enrolled at NHTI?
Students currently who wish to enter the Dental Hygiene program must complete and submit the Change of Program form prior to the application deadline and submit it to the Admissions Office at NHTIadmissions@ccsnh.edu.

Readmission
Students who have withdrawn from the program or have been suspended from the program because of a failure in a non-clinical course may be considered for readmission only one time. Readmission is not guaranteed. Students who have been dismissed from the program because of a failure in a clinical course will not be considered but may apply to other NHTI programs. Contact the Allied Dental Education Department for details.

## Curriculum

**3-year Program: First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED101C | Intro to Dental Hygiene Science | 1 | 0.00 | 1.00 |
| BIOL195C | Anatomy and Physiology I | 3 | 2.00 | 4.00 |
| CHEM125C | Introduction to General, Organic, and Biochemistry | 3 | 2.00 | 4.00 |
| | ENGL101C or ENGL101MC | 4 | | 4-4 |
| | **Subtotal Credits** | **11** | **4** | **13-13** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| ADED134C | Oral Anatomy I | 2 | 1.00 | 3.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **12** | **3** | **14** |

**3-year Program: Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED100C | Dental Hygiene I | 2 | 0.00 | 2.00 |
| ADED113C | Clinical Dental Hygiene I | 1 | 8.00 | 3.00 |
| ADED136C | Oral Anatomy II | 2 | 0.00 | 2.00 |
| ADED140C | Dental Radiology for Dental Hygiene | 2 | 3.00 | 3.00 |
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| | **Subtotal Credits** | **10** | **14** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED112C | Introduction to Periodontology | 2 | | 2.00 |
| ADED103C | Dental Hygiene II | 2 | 0.00 | 2.00 |
| ADED114C | Clinical Dental Hygiene II | 1 | 8.00 | 3.00 |
| ADED126C | Nutrition for the Dental Hygienist | 2 | 0.00 | 2.00 |
| ADED162C | Dental Materials for Dental Hygiene | 2 | 3.00 | 3.00 |
| | PSYC105C or PSYC105MC | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **12** | **11** | **15** |

**3-year Program: Third Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED240C | Advanced Periodontology | 1 | | 1.00 |
| ADED212C | Clinical Dental Hygiene III | 1 | 12.00 | 4.00 |
| ADED242C | Community Dental Health I | 2 | 0.00 | 2.00 |
| ADED249C | Pain Management | 2 | 1.00 | 3.00 |
| ADED247C | Dental Hygiene Science - Pharmacology | 2 | 0.00 | 2.00 |
| ADED248C | Dental Hygiene Science - Oral Pathology | 2 | 0.00 | 2.00 |
| | **Subtotal Credits** | **10** | **13** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED221C | Clinical Dental Hygiene IV | 1 | 12.00 | 4.00 |
| ADED225C | Dental Hygiene Community Clinic | 0 | 4.00 | 1.00 |
| ADED227C | Dental Ethics and Jurisprudence | 1 | 0.00 | 1.00 |
| ADED243C | Community Dental Health II | 1 | 0.00 | 1.00 |
| SOCI105C | Introduction to Sociology | 3 | 0.00 | 3.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **9-10** | **16** | **13-14** |
| | Total Credits | | 83 | |

**Additional Information**

Program Outcomes

**National Board Dental Hygiene Exam (first attempt)**

| Year | # Students | NHTI | National |
|---|---|---|---|
| 2017 | 34 | 100% | 94% |
| 2018 | 25 | 96% | 94% |
| 2019 | 30 | 97% | 92% |
| 2020 | 29 | 100% | 90% |
| 2021 | 29 | 97% | 87% |
| 2022 | 21 | 95% | 86% |
| 2023 | 21 | 100% | 87.9% |
| 2024 | 36 | 91% | 82.77% |

**ADEX Patient Treatment Clinical Exam (first attempt)**

| Year | # Students | NHTI |
|---|---|---|
| 2017 | 34 | 100% |
| 2018 | 25 | 96% |
| 2019 | 30 | 97% |
| 2020 | 29 | 100% |
| 2021 | 29 | 93% |
| 2022 | 21 | 86% |
| 2023 | 21 | 100% |
| 2024 | 36 | 100% |
| 2025 | 30 | 96.6% |

### Accreditation

The NHTI Dental Hygiene program is accredited by the Commission on Dental Accreditation and has been granted accreditation status of "approval without reporting requirements." The Commission is a specialized accrediting body recognized by the United States Department of Education and can be contacted at 312-440-4653 or 211 East Chicago Avenue, Chicago, IL 60611.

### Background Check and Drug/Alcohol Testing

As a pre-clinical requirement, students will complete a criminal background check and drug and alcohol screening through agencies chosen by the program. Students are subject to random screenings throughout the program without exception. Students learn procedural and cost information during the admissions process and are responsible for associated testing costs.

### Bloodborne Pathogens and Infectious Diseases

Dental Hygiene students may be exposed to blood-borne pathogens and infectious diseases. Faculty provide students with theory and instruction on infectious diseases, mechanisms of disease transmission, and infection control procedures to reduce the risk of disease transmission. Current instruction includes protocols published by national public health agencies, the Occupational Safety and Health Administration, and the U.S. Centers for Disease Control and Prevention.

### Health Requirements

Once admitted, students must provide documents for clinical clearance to NHTI by the deadline. Failure to do so will prohibit them from entering the program. Students must maintain clinical clearance throughout the program to remain enrolled and progress in the program. For a complete list of immunizations and clinical clearance requirements, refer to the Allied Health Students tab on the NHTI Health Requirements webpage. NHTI arranges professional liability insurance for students, applying fees to student accounts.

### Health, Character, and Technical Standards

Dental Hygiene students must demonstrate the knowledge, skills, and behaviors deemed essential for the practice of dental hygiene. The program adheres to the NHTI Statement of Nondiscrimination. Reasonable accommodations for students with disabilities are made to the extent that there's no fundamental alteration to curriculum, course objectives, or health, character, and technical standards of the program. Students need:

- Intellectual abilities requiring reason, analysis, problem solving, critical thinking, self-evaluation and lifelong learning skills are required. Students must be able to learn, integrate, analyze, and synthesize data. Comprehension of three-dimensional and spatial relationships is necessary. Consistent, accurate, and quick integration of information is required, especially in emergency situations.
- Somatic sensation and functional use of all senses is required. Exteroceptive (i.e., touch) and proprioceptive (i.e., position, pressure, movement) is mandatory. Students must also be able to observe demonstration at a distance and close at hand; performance of procedures in the classroom, lab, and clinic is required. Students must be able to see fine detail, focus at several distances, and discern variations in color, shape, and texture to differentiate normal and abnormal structures. Students must be able to use tactile sense to perceive and interpret vibrations associated with clinical procedures. Visual and intellectual ability is necessary to acquire information from documents such as charts, radiographs, computer images, and other modes of delivery. Students must have sufficient hearing to develop reasonable skills of percussion and auscultation.
- Sufficient fine and gross motor function is required to perform a variety of clinical procedures essential to providing dental hygiene care for patients. Examples of essential motor skills include manipulation of small objects and materials, palpation, percussion, auscultation and other maneuvers. Fine motor ability is a critical necessary skill. Gross motor ability is required in order to perform functions such as basic life support, transfer and position of patients as well as the operator position around the patient and dental chair. Students must be able to operate both foot and hand controls.
- Students must be able to communicate effectively with patients, peers, faculty, and guests. Individuals must have sufficient command of the English language to retrieve information from textbooks, lectures, exams, etc. Students must be able to communicate in verbal, nonverbal, and written form.
- Students must possess the emotional health required for full utilization of their intellectual abilities, exercise of good judgment, and prompt completion of all responsibilities associated with the care of patients. The development of mature, sensitive, professional relationships with patients is essential. Professionalism,

compassion, integrity, empathy, and respect for patients are all personal qualities that are necessary for the dental hygienist. Students must be able to endure physically taxing workloads and function effectively under stress. They must be able to accept constructive criticism and respond appropriately by modifying behavior.

Internship Considerations

NHTI's practicum opportunities foster hands-on learning in community dental health. Students develop awareness of the dental hygienist's role in improving oral health while applying knowledge and skills in the NHTI Dental Clinic and various public health settings. Students must demonstrate sufficient emotional stability to withstand the stresses that characterize the dental professionals' responsibilities with patients and/or agency clients. Students must exercise sound judgment, accept direction and guidance from a supervisor or faculty member, establish effective rapport, and maintain sensitive interpersonal relationships and confidentiality on all levels.

Mission Statement

The mission of the NHTI - Concord's Community College Dental Hygiene program is to advance the mission of the college by providing a learning environment in which each dental hygiene graduate gains the knowledge, skills, and values to provide comprehensive educational, preventive, and therapeutic services reflecting the competencies vital to our community and the profession of dental hygiene.

Program Learning Outcomes

The new dental hygiene graduate must be able to:

- Discern and manage the ethical issues facing dental hygiene practice in a rapidly changing environment.
- Acquire and synthesize information in a critical, scientific, and effective manner.
- Contribute to improving the knowledge, skills, and values of the profession.
- Provide planned educational services using appropriate interpersonal communication skills and educational strategies to promote optimal health.
- Initiate and assume responsibility for health promotion and disease prevention activities for diverse populations in a variety of settings.
- Systematically collect, correlate, critically analyze, and document data on the general, oral, and psychosocial health status for diverse patients using methods consistent with medico-legal-ethical principles.
- Formulate a comprehensive dental hygiene care plan that is evidence-based and patient-centered.
- Provide specialized care that includes educational, preventive, and therapeutic services designed to assist the patient in achieving and maintaining oral health goals.
- Critically evaluate the effectiveness of implemented educational, preventive, and therapeutic services and make modifications as necessary.

Service Learning

Dental Hygiene students apply their skills in the NHTI Dental Clinic, serving more than 7,000 patients. They learn the importance of access to oral healthcare and experience the role of the dental hygienist in community health. The Community Clinic course places students in public health settings where they shadow dental hygienists.

## Dental Assisting

**Degree Type**
Professional Certificate

NHTI's Dental Assisting certificate program is the only accredited Dental Assisting program in New Hampshire. Upon completion of the program, you are eligible to sit for the Dental Assisting National Board (DANB) national certification exam.

Dental assistants greatly increase the efficiency of the dentist in the delivery of quality oral healthcare. In conjunction with the NHTI's mission statement, our Dental Assisting program strives to provide a learning environment in which each dental assisting student is instilled with the knowledge, skills, and values to offer the most comprehensive educational, preventive, and therapeutic services reflecting the competencies vital to the profession of dental assisting. This program's goals include:

1. To prepare students for all aspects of employment in a dental assisting career, including traditional and non-traditional settings, working with diverse multicultural populations.

2. To encourage students in the development of leadership skills to facilitate the advancement of dental assisting in all areas of the dental assisting profession.
3. To promote self-esteem to encourage critical thinking within a quality curriculum and in the field.
4. To entice students to pursue critical continuing education courses, advanced degree, and value lifelong learning.
5. To guide students in the discovery of global perspectives so as to adapt to the changing social needs of self, the
patient population, and society in general.
6. To aid students in the formation of collaborative skills to work within a multi-disciplined health field and an ever-changing profession.
7. To instill in students, the value of community education and community service.

This program is financial aid-eligible.

**Do you have questions?** Contact Lisa Scott, program coordinator, at lscott@ccsnh.edu. The department chair for this program is Billie Lunt, who can be reached at blunt@ccsnh.edu.

## Career Information

Dental assistants are in high demand in N.H., with great part– and full-time job opportunities. This program offers students the opportunity to become involved in a healthcare profession as a member of the dental team in private dental offices, public dental clinics, and institutions. NHTI graduates are qualified to take the Certification for Dental Assistants national exam. Compared to non-accredited programs in the state, our graduates are legal to take x-rays, place sealants, take impressions, remove sutures and place and remove periodontal packs, do coronal polishing, apply fluoride treatments, monitor nitrous oxide, expanded duties orthodontics, make provisional crowns, place and remove rubber dams, and apply desensitizing right after completion of the program. Graduates can also further their career in NHTI's Expanded Functions Dental Auxiliary certificate program.

The salary of a dental assistant depends on the responsibilities associated with the specific position and the geographic location of employment. Dental assistants earn salaries equal to other healthcare personnel with similar training and experience such as medical assistants, physical therapy assistants, occupational therapy assistants, veterinary technicians, and pharmacy assistants.

See more career information in our Dental brochure!

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

The program has both full-time and part-time options that start in the Fall term. Preference will be given to applicants whose applications are complete and received by the Admissions Office by the deadline. Applications received after the deadline will only be considered if space remains in the program after qualified candidates have been reviewed.

**Admissions Deadline: March 1, 2026 through May 1, 2026*, on a space availability basis***

- Proof of High School Diploma or equivalent
- An informational group interview with the Dental Admissions Committee is required; qualified candidates will be contacted after the deadline to arrange an interview.
- Also See Health, Character and Technical Standards for additional requirements.
- A course in high school Biology or Chemistry with a grade of "C" or better not required but is strongly recommended.

Students who wish to enter this program and are currently enrolled in another NHTI program must complete and submit the Change of Program form to the Admissions Office prior to the application deadline.

## Curriculum

### Full Time

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED105C | Dental Radiology for Dental Assisting | 2 | 3.00 | 3.00 |
| ADED110C | Dental Assisting Science I | 3 | 0.00 | 3.00 |
| ADED161C | Dental Materials-DA | 2 | 3.00 | 3.00 |
| ADED175C | Dental Assisting Theory I | 2 | 0.00 | 2.00 |
| ADED191C | Dental Assisting Clinical Experience I | 1 | 4.00 | 2.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **10** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED111C | Dental Assisting Science II | 2 | 0.00 | 2.00 |
| ADED155C | Oral Hygiene Education/Nutrition | 2 | 0.00 | 2.00 |
| ADED182C | Office Procedures and Management with Computer Applications | 2 | 0.00 | 2.00 |
| ADED196C | Dental Assisting Clinical Experience II | 1 | 12.00 | 5.00 |
| ADED239C | Concepts of Risk Management | 2 | 0.00 | 2.00 |
| ADED275C | Dental Assisting Theory II | 1 | 3.00 | 2.00 |
| | **Subtotal Credits** | **10** | **15** | **15** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED298C | Dental Assisting Clinical Experience III | 1 | 9.00 | 4.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **7** | **9** | **10** |

### Part Time

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED110C | Dental Assisting Science I | 3 | 0.00 | 3.00 |
| ADED161C | Dental Materials-DA | 2 | 3.00 | 3.00 |
| | **Subtotal Credits** | **5** | **3** | **6** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED111C | Dental Assisting Science II | 2 | 0.00 | 2.00 |
| ADED155C | Oral Hygiene Education/Nutrition | 2 | 0.00 | 2.00 |
| ADED239C | Concepts of Risk Management | 2 | 0.00 | 2.00 |
| | **Subtotal Credits** | **6** | **0** | **6** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| PSYC105MC | Introduction to Psychology: Mindful | 3 | | 3.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED105C | Dental Radiology for Dental Assisting | 2 | 3.00 | 3.00 |
| ADED175C | Dental Assisting Theory I | 2 | 0.00 | 2.00 |
| ADED191C | Dental Assisting Clinical Experience I | 1 | 4.00 | 2.00 |
| | **Subtotal Credits** | **5** | **7** | **7** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED182C | Office Procedures and Management with Computer Applications | 2 | 0.00 | 2.00 |
| ADED196C | Dental Assisting Clinical Experience II | 1 | 12.00 | 5.00 |
| ADED275C | Dental Assisting Theory II | 1 | 3.00 | 2.00 |
| | **Subtotal Credits** | **4** | **15** | **9** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADED298C | Dental Assisting Clinical Experience III | 1 | 9.00 | 4.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **4** | **9** | **7** |
| | Total Credits | | 42 | |

**Additional Information**

Student Outcomes

| Year | # Students | DANB Radiation Health and Safety Exam (NHTI Results*) | DANB Radiation Health and Safety Exam (National Results*) |
|---|---|---|---|
| 2026 | 14 | 100% | TBA |
| 2025 | 7 | 100% | TBA |
| 2024 | 7 | 100% | 66% |
| 2023 | 11 | 100% | 69% |
| 2022 | 19 | 100% | 69% |

| | | |
|---|---|---|
| 2021 22 | 77% | 63% |
| 2020 18 | 89% | 69% |
| 2019 20 | 85% | 69% |

*First attempt pass rate

### Accreditation

NHTI's Dental Assisting program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of "approval without reporting requirements." The Commission is a specialized accrediting body recognized by the U.S. Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The commission's web address is http://www.ada.org/en/coda.

### Background Check and Drug/Alcohol Testing

As a pre-clinical requirement, students will complete a criminal background check and drug and alcohol screening through agencies chosen by the program. Students are subject to random screenings throughout the program without exception. Students learn procedural and cost information during the admissions process and are responsible for associated testing costs.

### Bloodborne Pathogens and Infectious Diseases

Dental Assisting students may be exposed to blood-borne pathogens and infectious diseases. Faculty provide students with theory and instruction on infectious diseases, mechanisms of disease transmission, and infection control procedures to reduce the risk of disease transmission. Current instruction includes protocols published by national public health agencies, the Occupational Safety and Health Administration, and the U.S. Centers for Disease Control and Prevention.

### Health Requirements

Once admitted, students must provide documents for clinical clearance to NHTI by the deadline. Failure to do so will prohibit them from entering the program. Students must maintain clinical clearance throughout the program to remain enrolled and progress in the program. For a complete list of immunizations and clinical clearance requirements, refer to the Allied Health Students tab on the NHTI Health Requirements webpage. NHTI arranges professional liability insurance for students, applying fees to student accounts.

### Externships

NHTI has developed practicum opportunities to foster hands-on-learning while receiving credit. Requirements are met by assisting in dental offices. Students in internship, externship, practicum, service learning, and clinical experience opportunities must demonstrate sufficient emotional stability to withstand the stresses that characterize the dental professionals' responsibilities with patient/agency clients. They will exercise sound judgment, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships and confidentiality on all levels.

### Health, Character, and Technical Standards

Students must be aware of the abilities and characteristics necessary to complete the Dental Assisting program. The program adheres to the NHTI Statement of Nondiscrimination. Reasonable accommodations for students with disabilities are made to the extent that there is no fundamental alteration to curriculum, course objectives, or health, character, and technical standards of the program. Failure to consistently exhibit the technical standards for a career in dental assisting may result in dismissal from the program. Individuals must be able to satisfactorily accomplish/possess the following:

- Intellectual abilities requiring reason, analysis, problem solving, critical thinking, and self-evaluation skills. Ability to learn, integrate, analyze, and synthesize data. Comprehension of 3D and spatial relationships is necessary. Consistent, accurate, and quick integration of information is required, especially in emergency situations.
- Somatic sensation and functional use of all senses. Students must be able to observe demonstrations, see fine detail, focus at several distances, and be able to discern variations in color, shape, and texture. They must

possess sufficient hearing to assess patient needs and communicate effectively. They must have sufficient eyesight to observe patients, operate dental equipment, and work with small measurements and instruments in preparing and manipulating dental materials.
- Ability to sit for a sustained length of time with frequent reaching and turning.
- Sufficient fine and gross motor function to safely perform intraoral instrumentation and the manipulation of small objects, equipment, tools, and materials. Students must be able to perform functions such as basic life support, transfer and position of patients, and operation around the patient and dental chair. They must be able to operate both foot and hand controls.
- Effective communication with sufficient command of the English language to retrieve information from textbooks, lectures, exams, etc. and communicate in verbal, nonverbal, and written form.
- Emotional health required to exercise good judgment and complete all responsibilities. Professionalism, compassion, integrity, empathy, and respect for patients are all necessary. Students must be able to endure physically taxing workloads and function under stress. They must accept constructive criticism and respond appropriately by modifying behavior.

Mission Statement

In conjunction with the NHTI's mission statement, the Dental Assisting Program strives to provide a learning environment in which each dental assisting student is instilled with the knowledge, skills and values to offer the most comprehensive educational, preventive, and therapeutic services reflecting the competencies vital to the profession of dental assisting.

Program Learning Outcomes

This program strives to provide a learning environment in which each dental assisting student is instilled with the knowledge, skills, and values to offer the most comprehensive educational, preventive, and therapeutic services reflecting the competencies vital to the profession of dental assisting. The program prepares students to provide patient care in a variety of clinical settings and to be active members of a dental healthcare team. Students who complete the Dental Assisting program will be able to:

1. Perform basic chairside procedures in general or specialty practice.
2. Perform basic clinical/laboratory support procedures.
3. Practice universal precautions and safety standards consistent with OSHA and CDC guidelines.
4. Perform emergency procedures.
5. Provide oral health instruction.
6. Perform basic business office procedures.
7. Perform advanced intraoral functions that may be delegated to a dental assistant in the state of N.H.
8. Exhibit professionalism and communicate effectively with patients and coworkers.

Use of Computers in the Allied Dental Education Programs

Students use computers throughout the program. Faculty instructs them in the application of dental software and use of conventional software to generate papers, oral presentations, and spreadsheets. It is strongly recommended students have a good working knowledge of computers before entering the program. Computer literacy courses, such as IST 102C, are available through the college.

## Diagnostic Medical Sonography

**Degree Type**
Certificate

NHTI's 16-month Diagnostic Medical Sonography certificate program provides you with the knowledge and clinical skills to function as a diagnostic medical sonographer. The program is designed for students who have completed an AMA Allied Health associate degree or a bachelor's degree.

Graduates provide exceptional patient care while using sophisticated ultrasound instrumentation to perform medical imaging procedures, which assist physicians in diagnosing medical conditions.

NHTI's intensive program requires four semesters of full-time study of ultrasound specialties such as abdomen, small parts, obstetrics, and gynecology, plus an introduction to vascular sonography. Our small class and lab sizes provide extensive, supervised, hands-on practice. This program is financial aid-eligible.

**Do you have questions?** Contact Michelle Wade, program coordinator, at mwade@ccsnh.edu or 603-271-6484 x4108. The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

## Career Information

Graduates are prepared to take the national certification exam administered by the American Registry of Diagnostic Medical Sonography (ARDMS) and find employment in hospitals and private clinics.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to those whose applications are complete and received by the Admissions Office no later than the Admissions deadline for this program.

**Admissions Deadline: January 9, 2026 for the Fall 2026 start; *candidates may be considered through* May 1, 2026, *on a space availability basis.***

- Applicants must have completed a two-year AMA or AMA-equivalent Allied Health training program that is patient-care related such as Radiologic Technology or Nursing; Medical Assisting and an AS in Health Science are not considered AMA Allied Health programs. In lieu of the AMA Allied Health program, a bachelor's degree would also qualify for admission.
- The following college-level courses are required with a C or higher: Algebra, Statistics or higher-level math course; Anatomy and Physiology I and II with labs; Communications (may be met by courses including English, speech, or composition); general college-level Physics and/or Radiographic Physics
- A course in medical terminology is strongly recommended.
- A personal interview is required; qualified candidates will be contacted to arrange an interview.
- Two letters of recommendation, submitted to the Admissions Office.
- A completed course in BLS CPR from the American Red Cross, American Heart Association, or the National Safety Council. Online-only programs are not approved.

## Curriculum

**First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DGMS201C | Principles of Sonography | 3 | 2.00 | 4.00 |
| DGMS265C | Sonographic Anatomy and Pathology I | 3 | 0.00 | 3.00 |
| DGMS275C | Sonographic Principles of OB/GYN I | 3 | 0.00 | 3.00 |
| DGMS291C | DMS Clinical Procedures I | 0 | 12.00 | 4.00 |
| | **Subtotal Credits** | **9** | **14** | **14** |

**Spring Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DGMS221C | Sonographic Physics | 3 | 0.00 | 3.00 |
| DGMS266C | Sonographic Anatomy and Pathology II | 3 | 0.00 | 3.00 |
| DGMS277C | Sonographic Principles of OB/GYN II | 3 | 0.00 | 3.00 |
| DGMS296C | DMS Clinic II | 0 | 24.00 | 6.00 |
| | **Subtotal Credits** | **9** | **24** | **15** |

**Summer Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DGMS241C | Principles of Vascular Ultrasound | 3 | 2.00 | 4.00 |
| DGMS297C | DMS Clinic III | 0 | 21.00 | 5.00 |
| | **Subtotal Credits** | **3** | **23** | **9** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DGMS233C | Seminars in Sonography | 4 | 0.00 | 4.00 |
| DGMS298C | DMS Clinic IV | 0 | 32.00 | 8.00 |
| | **Subtotal Credits** | **4** | **32** | **12** |
| | Total Credits | | 50 | |

**Additional Information**

Accreditation

The DMS program is accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography.

- Commission on Accreditation of Allied Health Education Programs
  9355 – 113th St. N, #7709
  Seminole, FL 33775
  727-210-2350
  https://www.caahep.org/

Graduates are qualified to take national certification examinations for Abdominal-Extended and Obstetrics and Gynecology with no additional work experience required.

Minimum Expectations: To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the Abdominal Sonography-Extended and Obstetrics and Gynecology Sonography concentrations.

Clinical Clearance

Background Checks

As a pre-clinical requirement, students are required to undergo and successfully meet the Diagnostic Medical Sonography department's criteria for a criminal background check and drug and alcohol screening. No student is exempt. Students are provided with procedural and cost information subsequent to admission to the DMS program and are responsible for all costs associated with these testing procedures. Drug and alcohol screening is required prior to clinical and randomly throughout the program.

Clinical Affiliates

The program affiliates with clinical sites throughout N.H., Maine and Vt. Students rotate through sites throughout the program.

Essential Functions

The student must have sufficient strength and motor coordination to perform the following physical activities:

- Standing for sustained periods of time and walking most of the work day
- Frequent reaching and manual dexterity in handling equipment

- Frequently transporting, moving, lifting, and transferring patients from a wheelchair/stretcher to and from an exam table

In addition, the student must have:

- Sufficient eyesight to observe patients, manipulate equipment, and evaluate image quality
- Visual acuity sufficient to work with analyzing data, figures, and computer terminals involving small defects, small parts, and operation of equipment
- Sufficient hearing to assess patient needs
- Sufficient writing skills to communicate needs promptly and effectively
- Ability to express or exchange ideas to convey detailed or important spoken instructions to patients, physicians, families, and other employees accurately, loudly, and/or quickly
- Ability to work with frequent interruptions and respond appropriately to unexpected situations
- Ability to work with wide variations in workload and stress levels

Applicants who feel they may not be able to meet one or more of the essential functions should contact program officials to discuss individual cases. Program officials will consider all academically qualified candidates providing that the essential functions can be met with reasonable accommodations.

Program Effectiveness Data (pdf)

Program Learning Outcomes

Graduates from this program are able to:

- Obtain, review, and integrate pertinent patient history and clinical data to facilitate diagnostic results.
- Perform appropriate sonographic procedures and record, analyze, and process diagnostic data for presentation to the interpreting physician.
- Demonstrate knowledge and understanding of anatomy, physiology, pathology, and pathophysiology.
- Demonstrate knowledge and understanding of acoustic physics and instrumentation including Doppler principles and emerging technologies.
- Employ ergonomically correct scanning techniques and the principles of ALARA.
- Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services.
- Demonstrate effective and appropriate communication skills with patients and colleagues.
- Provide basic patient care and comfort while acting in a professional and ethical manner.

## Health Science

**Degree Type**
Associate of Science

NHTI's Health Science degree program gives you a solid foundation for a health career and is intended as a transfer program with three defined tracks (each student enrolled in this program must choose a track to follow):

- **Track 1: Nutrition** is for students who wish to pursue advanced degrees in nutrition and dietetics.
- **Track 2: Baccalaureate** provides a strong base to pursue academic interests in health fields such as exercise science, public health, pre-medical, pre-pharmacy, pre-physical therapy, and pre-veterinary.
- **Track 3: Allied Health** is for students who want to transfer into an NHTI Allied Health program. (NOTE: This program does not meet the AMA Allied Health degree requirement for NHTI's Diagnostic Medical Sonography program.)

Students are required to take all of the courses listed in the Core Course Requirements (below), all the courses listed in their chosen track, and 1-2 electives. These electives are chosen only from the list provided in the core.

**Do you have questions?** The department chair for this program is Amy West, who can be reached at awest@ccsnh.edu.

### Career Information

The flexible curriculum can be used as a strong base to further educational pursuits – degrees in physical therapy, health information management, dietetics, public health, pharmacology, and exercise science, among others – or as a distinct, self-contained degree for professionals seeking career advancement.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### Core Course Requirements

Note that for Chemistry, English, and Mathematics electives, some tracks/programs specify which courses are required.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL195C | Anatomy and Physiology I | 3 | 2.00 | 4.00 |
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| BIOL222C | Pathophysiology | 3 | 0.00 | 3.00 |
| BIOL259C | Normal and Therapeutic Nutrition | 4 | 0.00 | 4.00 |
| | Chemistry elective | 4 | 0.00 | 4 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | English elective | 3 | 0.00 | 3 |
| INDL120C | Global Public Health Issues | 3 | 0.00 | 3.00 |
| | Mathematics elective (Calculus track) | 4 | 0.00 | 4 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **40** | **4** | **42** |

### Nutrition

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| BIOL229C | Nutrition in Exercise and Sports | 3 | 0.00 | 3.00 |
| BIOL279C | Life Cycle Nutrition | 3 | 0.00 | 3.00 |
| CHEM103C | General Chemistry I | 3 | 2.00 | 4.00 |
| CHEM104C | General Chemistry II | 3 | 2.00 | 4.00 |
| | Health Science elective | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **19** | **7** | **22** |

**Baccalaureate**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL111C | General Biology I | 3 | 2.00 | 4.00 |
| BIOL112C | General Biology II | 3 | 2.00 | 4.00 |
| CHEM103C | General Chemistry I | 3 | 2.00 | 4.00 |
| CHEM104C | General Chemistry II | 3 | 2.00 | 4.00 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| | Health Science elective | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **20** | **8** | **24** |

**Allied Health**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| HLTH101C | Medical Terminology | 3 | 0.00 | 3.00 |
| SOCI105C | Introduction to Sociology | 3 | 0.00 | 3.00 |
| | Health Science elective | 4 | 0.00 | 4 |
| | Health Science elective | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **20** | **3** | **21** |
| Total Credits | | | 60-62 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to health science.
  - Students will complete research and use peer-reviewed sources of literature.
- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will assess public health and nutrition trends and identify appropriate intervention strategies.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab safety procedures.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate knowledge of human anatomy and physiology.
  - Students will compare human health and disease states.

Click here for the full PDF of learning outcomes.

## Health and Wellness

**Degree Type**

Associate of Science

NHTI's Health and Wellness degree program offers you a sound academic foundation to pursue an entry-level position in health and fitness, community health, and health education, and/or transfer to a 4-year program in any of those fields. This program prepares you for the competitive and ever-expanding field of healthcare and personal wellness services. Students in the Medical Coding and Coaching certificates can seamlessly apply those credits towards this program.

There are three tracks for this program: Medical Coding, Coaching, and Health and Wellness.

**Do you have questions?** The department chair for this program is Amy West, who can be reached at awest@ccsnh.edu.

## Career Information

This program provides a sound academic foundation for the student who wants to pursue an entry-level position in nutrition, health and fitness, public health, and health education, and/or transfer to a 4-year program in any of those fields.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### General Education Core

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL120C | Human Biology | 3 | 2.00 | 4.00 |
| BIOL122C | Basic Pathophysiology | 3 | 0.00 | 3.00 |
| BIOL125C | Human Genetics and Society | 3 | 2.00 | 4.00 |
| | BIOL 129C or BIOL 159C | 3 | 0.00 | 3-4 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| HLTH101C | Medical Terminology | 3 | 0.00 | 3.00 |
| HLTH150C | Introduction to Personal Wellness | 1 | 1.00 | 1.00 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| INDL120C | Global Public Health Issues | 3 | 0.00 | 3.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| SOCI105C | Introduction to Sociology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **45-46** | **5-7** | **47-48** |

**Track: Medical Coding**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| HLTH104C | Healthcare Data Content and Delivery Systems | 3 | 0.00 | 3.00 |
| MCOD118C | Introduction to Hospital Diagnosis Coding | 4 | 0.00 | 4.00 |
| MCOD119C | Introduction to Hospital Procedure Coding | 3 | 0.00 | 3.00 |
| MCOD218C | Advanced Hospital Coding | 3 | 0.00 | 3.00 |
| MCOD219C | Ambulatory Coding | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **17** | **0** | **17** |

**Track: Coaching**

Includes 6-7 credits in electives (see below). One elective course must be at the 200 level.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL129C | Introduction to Sports Nutrition | 3 | 0.00 | 3.00 |
| HLTH120C | Care and Prevention of Athletic Injuries | 3 | 2.00 | 4.00 |
| HLTH125C | Coaching Principles I | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **9** | **2** | **10** |

**Track: Health and Wellness**

Includes 12-13 credits in electives (see below). One elective course must be at the 200 level.

**Electives**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL239C | Public Health Nutrition | 3 | 0.00 | 3.00 |
| BIOL279C | Life Cycle Nutrition | 3 | 0.00 | 3.00 |
| | Chemistry elective | 4 | 0.00 | 4 |
| HLTH104C | Healthcare Data Content and Delivery Systems | 3 | 0.00 | 3.00 |
| HLTH152C | Personal Trainer Course | 3 | 2.00 | 4.00 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| PSYC210C | Psychological Disorders and Mental Health | 3 | 0.00 | 3.00 |
| PSYC205C | Crisis Intervention | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **26** | **2** | **12-13** |
| Total Credits | | | 60-65 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to health science.
  - Students will complete research and use peer-reviewed sources of literature.

- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will evaluate personal wellness concepts and improve self-selected areas of wellness.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab safety procedures.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate knowledge of human anatomy and physiology.
  - Students will design nutrition and wellness education and training programs for individuals and groups.

Click here for the full PDF of learning outcomes.

# Coaching

**Degree Type**

Certificate

## This program is not currently accepting new students.

NHTI's Coaching certificate program focuses on enhancing the leadership skills of coach and athlete. Courses emphasize topics that foster successful coaching strategies at any level. This specialization offers you professional development opportunities through an exploration of relevant topics. The curriculum develops a working knowledge of the skills needed to coach successfully and facilitate a transfer to a four-year college or university program. This program is financial aid-eligible.

**Do you have questions?** Contact Amy West, department chair, at awest@ccsnh.edu or 603-271-6484 x4243.

## Career Information

Graduates can enter into the following professions (not an inclusive list):

- Fitness specialist with coaching skills
- College coach
- Recreational team coach
- Youth sports coach

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

**Fall Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120C/COMM120C or ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| HLTH150C | Introduction to Personal Wellness | 1 | 1.00 | 1.00 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **7** | **1** | **7** |

**Spring Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL129C | Introduction to Sports Nutrition | 3 | 0.00 | 3.00 |
| HLTH120C | Care and Prevention of Athletic Injuries | 3 | 2.00 | 4.00 |
| HLTH125C | Coaching Principles I | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **9** | **2** | **10** |
| | Total Credits | | 17 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to health science.
  - Students will complete research and analyze popular ergogenic aids.
- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will evaluate dietary intakes and physical activity throughout the human lifespan.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab safety procedures.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate knowledge of human anatomy and physiology.
  - Students will compare human health and disease states.

Click here for the full PDF of learning outcomes.

## Legal Nurse Consultant

**Degree Type**

Certificate

### This program is not currently accepting new students.

NHTI's Legal Nurse Consultant certificate program is for experienced RNs interested in serving as consultants and liaisons to the legal and healthcare profession. It combines business and legal theory and analysis with practical field experience. It is available evenings and weekends only and can be completed in one calendar year. This program is financial aid-eligible.

**Do you have questions?** Contact Stacey Peters, department chair, at speters@ccsnh.edu or 603-271-6484 x4274.

### Career Information

LNCs serve in healthcare facilities, insurance companies, law firms, and medical malpractice and workers' compensation organizations. Legal work performed by an LNC must be done under the supervision and direction of an attorney. An LNC cannot give legal advice, represent a client, or engage in the unauthorized practice of law.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- 45 college credits in general education courses from an accredited institution; 18 of these credits must meet distribution and content requirements designated by the ABA in at least three disciplines such as English, languages, humanities, mathematics and natural science.

- Proof of active RN license
- Work verification form demonstrating 6,000 hours of practice
- Two confidential letters of reference or completed Reference form
- Two hundred-word essay regarding reasons for choosing the NHTI LNC program
- Official high school and college transcripts

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| LGNC101C | Legal Nurse Consulting | 1 | 0.00 | 1.00 |
| LGNC102C | Risk Management | 1 | 0.00 | 1.00 |
| LGNC103C | Administrative Law | 1 | 0.00 | 1.00 |
| LGNC104C | Healthcare Law | 2 | 0.00 | 2.00 |
| LGNC105C | Legal and Healthcare Ethics | 1 | 0.00 | 1.00 |
| LGNC106C | LNC Internship | 0 | 9.00 | 3.00 |
| PLGL101C | Foundations of Paralegal Studies | 2 | 0.00 | 2.00 |
| PLGL103C | Causes of Action in Contract and Tort | 2 | 0.00 | 2.00 |
| PLGL104C | Legal Research | 3 | 0.00 | 3.00 |
| PLGL110C | Litigation and Trial Preparation | 3 | 0.00 | 3.00 |
| Total Credits | | | 19 | |

**Additional Information**

Accreditation

The LNC certificate program is approved by the American Bar Association (ABA) and is designed to prepare students to perform effectively in today's legal and healthcare communities.

Program Learning Outcomes

Students will be exposed to the legal system and the role of the LNC/paralegal within the profession; the ethical rules governing lawyers, paralegals, nurses, and doctors; and the operation of a law office and a health care facility. Through the course sequence in the certificate program, NHTI LNC graduates will:

- Demonstrate an understanding of the legal system and master the litigation process.
- Use legal research skills to analyze issues related to damages, causation, liability within the legal process, and guidelines and regulatory issues related to the health care industry.
- Examine the insurance and health care industries as they relate to medical-legal issues.
- Review, summarize, and analyze medical records and other pertinent health care and legal documents for use in litigation or other medical-legal matters.
- Draft legal documents under supervision of an attorney and prepare opinions.
- Identify the role of the LNC and the ethical responsibilities associated with performing legal services.

# Medical Coding

**Degree Type**
Certificate

NHTIs Medical Coding certificate provides you with a solid foundation for a career in the dynamic and growing field of health information management. Coding professionals are trained specialists in classifying medical data and transforming diagnoses, conditions, diagnostic and therapeutic procedures into coded data that serve as the basis for local, regional, state-wide, national, and world-wide comparison.

As a graduate, you will work with the most current codes, medical information and reimbursement systems; these codes change on a yearly basis and ongoing training is required. Payment for medical care is contingent on the coded data provided by medical coding specialists.

This program is only available online and is financial aid-eligible and can be completed entirely online!

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

## Career Information

Employment opportunities include positions in hospitals, clinics, physician offices, nursing homes, insurance companies, and mental health facilities. The program provides students with the tools to sit for the CCA exam.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- Proof of high school completion or the equivalent

## Curriculum

**First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| HLTH101C | Medical Terminology | 3 | 0.00 | 3.00 |
| BIOL120C | Human Biology | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **6** | **2** | **7** |

**Spring Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL122C | Basic Pathophysiology | 3 | 0.00 | 3.00 |
| HLTH104C | Healthcare Data Content and Delivery Systems | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **6** | **0** | **6** |

**Summer Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **3** | **0** | **3** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MCOD118C | Introduction to Hospital Diagnosis Coding | 4 | 0.00 | 4.00 |
| MCOD119C | Introduction to Hospital Procedure Coding | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |

**Spring Semester**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MCOD218C | Advanced Hospital Coding | 3 | 0.00 | 3.00 |
| MCOD219C | Ambulatory Coding | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **7** | **0** | **7** |
| Total Credits | | | 30 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to medical coding.
  - Students will evaluate science periodicals and use peer-reviewed sources of literature.
- Students will use critical thinking.
  - Students will apply the Official Guidelines for Coding and Reporting.
  - Students will assess health records content and compare regulatory agency requirements.
- Students will demonstrate the application of scientific technology.
  - Students will use health information management software to select codes and calculate payments.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate knowledge of human anatomy and physiology.
  - Students will compare human health and disease states.

Click here for the full PDF of learning outcomes.

## Nursing

**Degree Type**
Associate of Science

NHTI's highly respected Nursing degree program prepares you for a career as a registered nurse (RN), to provide direct patient care in a variety of healthcare settings. Our faculty members create learning experiences that foster innovative teaching and learning, support and enhance student development, promote the use of college resources, and encourage civic engagement.

The mission of the Nursing program is to prepare students to qualify as collaborative members of the interdisciplinary healthcare team as an entry-level registered nurse, to meet the needs of a diverse community in an evolving world, and to pursue higher education.

**Do you have questions?** The department chair for this program is Jennifer Brace, who can be reached at jbrace@ccsnh.edu.

*The associate nursing program at NHTI-Concord's Community College, located in Concord, NH is accredited by the: Accreditation Commission for Education in Nursing (ACEN).*

*3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326*
*(404) 975-5000*

*The most recent accreditation decision made by the ACEN Board of Commissioners for the associate nursing program is continuing accreditation.*

### Career Information

There's a strong demand for nurses. Our graduates have been offered jobs immediately after graduation and passing the National Council Licensing Examination for Registered Nurses (NCLEX-RN®) licensing exam. They work in intensive care units, emergency rooms, maternity, pediatrics, home care, long-term care, and other healthcare settings. Upon graduation, students are eligible to sit for the NCLEX-RN®. Our graduates' first-time pass rates on the NCLEX licensing exam exceed the national average.

Once a student passes the exam and becomes an RN, they can work full-time and continue their education online to earn a bachelor's/master's degree in nursing through one of our transfer opportunities; many of our partners offer tuition discounts. Matriculated students may be eligible to apply to the N.H. Board of Nursing (NHBON) for licensure prior to completing program requirements.

After successful completion of the following nursing courses with a C or higher, they may apply for licensure by comparable education:

- NURS 115C: Nursing I – Licensed Nursing Assistant (LNA)
- NURS 115C: Nursing I; NURS 116C: Nursing IIA; and NURS 117C: Nursing IIB – Licensed Practical Nurse (LPN)

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadlines for the Fall 2026 semester:**

- **Early Action:** November 30, 2025
- **Priority:** February 1, 2026; *candidates may be considered through May 1, 2026 on a space availability basis*

Applicants are required to have:

- High school or college biology with lab with a C or higher
- High school or college chemistry with lab with a C or higher
- College preparatory Algebra I with a C or higher, or NHTI's MATH 092C with a C or higher
- A course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council, prior to course registration. Online-only programs are not approved. See more information on CPR requirements.
- Complete the ATI Test of Essential Academic Skills (TEAS) exam with a minimum Total Score of 66% or higher. Information regarding testing locations and registration is available here (ATI TEAS Exam pdf) or contact the Admissions Office.
- Submit, on NHTI nursing reference forms, two references from professionals, supervisors, or teachers. The form is available here as a PDF, or contact the Admissions Office.

Courses with virtual/online labs are not accepted, except for labs completed online in the 2020-21 academic year due to COVID-19. Transfer credit will depend on course content, applicability to the program, grade earned, and length of time since completion. Students who have satisfactorily completed college-level Anatomy & Physiology w/ lab with a grade of C or better may have their high school-level science prerequisites waived.

- **Current NHTI Students:** Students who wish to enter the Nursing program and are currently enrolled in General Studies or another NHTI program must complete and submit the Change of Program form, along with the other Specific Admission Requirements, to the Admissions Office prior to the application deadline.
- **Previously Enrolled in Another Nursing Program:** Candidates who previously attended and did not complete a Nursing RN or LPN program at another institution within the last five years must also submit a "Letter of Good Standing" from their prior program's Department Head to the Admissions Office and complete a Success Plan by the application deadline; qualified candidates will be contacted for an interview with the Nursing Student Affairs Committee.
- **Advanced Standing Transfer into Nursing:** Candidates seeking transfer and credit for prior nursing coursework may review the policy for Nursing Advanced Standing Transfer and the registration form for the required Advanced Standing Transfer Testing.

**Selection Criteria**

Admission is determined by a cumulative point system based on high school-level prerequisite courses and grades, applicable college courses and grades, and admission exam scores. References are considered critical to the admission process and are evaluated. Qualified candidates not accepted may be assigned to a prioritized waiting list based on the above criteria. They may be admitted if an opening becomes available prior to the beginning of the first course. The waiting list will be discarded six to eight weeks prior to classes beginning; students must reapply.

**Upon Acceptance**

Acceptance is conditional based on the submission the following documents no later than four weeks prior to the beginning of the semester:

- **Submit health requirements for Allied Health clinical clearance.** Learn more.
- Professional liability malpractice insurance is arranged by the college and will automatically be charged to the student's account. Students' health insurance plans must meet N.H. requirements. Yearly Marketplace health insurance open enrollment is November-mid December and is effective January 1. This is the only time to sign up unless a qualifying life-changing event occurs.
- **Complete criminal background check** as directed through NHTI's approved vendor. Background checks from previous employers or other vendors are not accepted. Students are required to undergo and meet the Nursing Department's criteria for a criminal background check. No student is exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Students will repeat the criminal background check prior to their second year.
- **Complete drug and alcohol testing** as directed through NHTI's approved vendor. Drug testing from previous employers or other vendors are not accepted. Students are required to undergo and successfully meet the Nursing department's criteria for drug and alcohol screening. No student will be exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Drug and alcohol screenings are required prior to clinical, prior to the second year, and randomly throughout the program.

Matriculated nursing students who have withdrawn, have been suspended for not achieving the minimum grade in a nursing, science or math course, and are not able to continue in the Nursing program may be considered for readmission only once. Readmission is not guaranteed, and students must reapply to the semester they left. Returning students must satisfy the admission criteria. Readmission will depend on space and clinical/faculty availability. Students who have failed a Nursing course due to unsafe clinical performance may not be eligible for readmission and should consult with the Nursing department chair to determine readmission eligibility.

**Readmission Procedure**

The Nursing department chair will notify students of the specific readmission procedure after course failure or withdrawal. Students must submit a new application to the Admissions Office and complete a Success Plan to be considered for readmission to the program. These must be submitted by the application deadline (Oct. 1 for Spring readmission and March 1 for Fall readmission); after the deadline, qualified candidates will be contacted for an interview with the Nursing Student Affairs Committee.

**Additional Requirements**

Nursing Department computer requirements

## Curriculum

The following program reflects a full-time, four-semester curriculum that students enrolled in the Nursing program are required to complete for graduation. Many students decide to enroll at NHTI as a General Studies student and complete the corequisite general education courses prior to applying to the Nursing Program. Non-nursing courses must be taken in the semester indicated or may be taken earlier. Nursing courses must be taken in the sequence below. Nursing theory classroom, simulation lab, and clinical instruction must be completed concurrently.

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL195C | Anatomy and Physiology I | 3 | 2.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| NURS115C | Nursing I | 5 | 9.00 | 8.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **15** | **11** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| | NURS 116C or NURS 117C | 6 | 15.00 | 11 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **12** | **17** | **18** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| | NURS 116C or NURS 117C | 6 | 15.00 | 11 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **13** | **18** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | English elective | 3 | 0.00 | 3 |
| NURS215C | Nursing III | 4 | 15.00 | 9.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **10-11** | **15** | **15-16** |
| | Total Credits | | 71-72 | |

**Additional Information**

Accreditation

The Nursing program is approved by the New Hampshire Board of Nursing (NHBON) and accredited by the Accreditation Commission for Education in Nursing (ACEN). Upon satisfactory completion of the program, graduates are eligible to take the NCLEX-RN®. Graduates should contact the Board of Nursing in the state in which they intend

to practice regarding licensure requirements. NHTI's NCLEX-RN® pass rates can be viewed at https://www.oplc.nh.gov/new-hampshire-board-nursing. NHBON licensing regulations may restrict candidates who have been involved in civil or criminal legal proceedings. Questions should be addressed to NHBON or individual states' Board of Nursing.

**New Hampshire Board of Nursing**
7 Eagle Square
Concord, NH 03301
603-271-2152

The Associate Nursing Program at NHTI - Concord's Community College in Concord, N.H., is accredited by the:

**Accreditation Commission for Education in Nursing (ACEN)**
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
404-975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Nursing Program is Continuing Accreditation. View the public information disclosed by the ACEN regarding this program at http://www.acenursing.us/accreditedprograms/programSearch.htm

Clinical Experiences

Students must satisfactorily meet the health requirements for Allied Health Clinical Clearance, criminal background check, and drug and alcohol testing prior to participating in clinical. All students may be required to do a day, evening and/or weekend clinical rotation depending on clinical agency/faculty availability. Transportation to and from the clinical agency is the student's responsibility.

NHTI has developed practicum opportunities for students to foster hands-on learning while simultaneously receiving credit. The college's first priority must be to ensure that patient safety is not compromised by students during learning experiences. Students must demonstrate sufficient emotional stability to withstand the stresses, uncertainties and changing circumstances that characterize patient responsibilities. Students are expected to exercise sound judgment, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships and confidentiality with peers, staff, and/or patients. Technical standards have been established to provide guidance to students as to skills and abilities requisite to participate in the nursing program. Clinical sites are in hospitals and community-based settings:

- Catholic Medical Center, Manchester, N.H.
- Concord Hospital, Concord, N.H.
- New Hampshire Hospital, Concord, N.H.
- Community agencies throughout N.H.

Health, Character, and Technical Standards

Standards have been established to provide guidance to students as to skills and abilities requisite to participate in the nursing program.

- **General abilities:** The student must possess functional use of the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner. A student must also possess the ability to perceive pain, pressure, temperature, position, vibration, and movement that are important to the student's ability to gather significant information needed to effectively evaluate patients. A student must be able to respond promptly to urgent situations that may occur during clinical training activities and must not hinder the ability of other members of the healthcare team to provide prompt treatment and care to patients.
- **Observational ability:** The student must have sufficient capacity to make accurate visual observations and interpret them in the context of laboratory studies, medication administration, and patient care activities. In addition, the student must be able to document these observations and maintain accurate records.
- **Communication ability:** The student must be able to communicate effectively both verbally and non-verbally to elicit information and to translate that information to others. Each student must have the ability to read, write, comprehend, and clearly speak the English language to facilitate communication with patients, their family members, and other professionals in healthcare settings. In addition, the student must be able to maintain

accurate patient records, present information in a professional, logical manner, and provide patient counseling and instruction to effectively care for patients and their families. The student must also be able to clearly communicate effectively verbally and in writing with instructors and other students in the classroom setting.

- **Motor Ability:** The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations using the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must be able to develop the psychomotor skills reasonably needed to perform or assist with procedures, treatments, administration of medication, management and operation of diagnostic and therapeutic medical equipment, and such maneuvers to assist with patient care activities such as lifting, wheel chair guidance, and mobility. The student must have sufficient levels of neuromuscular control and eye-to-hand coordination as well as possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings including performing CPR if necessary. The student must possess the ability of manual and visual dexterity such as to draw up solutions in a syringe.
- **Intellectual, conceptual, and quantitative abilities:** The student must be able to develop and refine problem-solving skills crucial to practice as a nurse. Problem-solving involves the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective data, and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment. Each student must demonstrate mastery of these skills and possess the ability to incorporate new information from peers, teachers, and the nursing and medical literature to formulate sound judgment in patient assessment, intervention, evaluation, teaching, and setting short- and long-term goals. Students must demonstrate arithmetic competence that would allow the student to read and understand columns and/or writing, tell time, use measuring tools, and add, subtract, multiply, and divide.
- **Behavioral and social attributes:** Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the Nursing programs. Personal comfort and acceptance of the role of a nurse functioning under supervision of a clinical instructor or preceptor is essential for a nursing student. The student must possess the skills required for full usage of the student's intellectual abilities; the exercise of good judgment; the prompt completion of all responsibilities in the classroom and clinical settings; and the development of mature, sensitive, and effective relationships with patients and other members of the healthcare team. Each student must be able to exercise stable, sound judgment and to complete assessment and interventional activities in a timely manner to assure patient safety and well being. The ability to establish rapport and maintain sensitive, interpersonal relationships with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds is critical for practice as a nurse. The student must be able to adapt to changing environments; display flexibility; accept and integrate constructive criticism given in the classroom and clinical settings; effectively interact in the clinical setting with other members of the healthcare team; and learn to function cooperatively and efficiently in the face of uncertainties inherent in clinical practice.
- **Examinations:** Certain courses in the Nursing programs require students to take timed and/or online examinations. Students may be required to take timed, online, and/or other types of examinations in a proctored, secure setting that is acceptable to the program.
- **Ability to manage stressful situations:** The student must be able to adapt to and function effectively to stressful situations in both the classroom and clinical settings, including emergency situations. Students will encounter multiple stressors while in the Nursing program. These stressors may be (but are not limited to) personal, patient care/family, faculty/peer, and or program-related.

The healthcare environment contains substantial amounts of latex. Applicants with latex allergies place themselves at risk of reaction. The Nursing Department does not recommend that individuals with a latex allergy pursue a career in healthcare.

### Length of Time to Complete the Nursing Program

All required Nursing courses must be completed within four years from when the student begins the first Nursing course regardless of whether that first course was taken at NHTI or in another Nursing program. Eligible students will be readmitted to the Nursing program per specifications of the Readmission Policy. Students may be readmitted only once during the four years. Readmission will depend on space and clinical/faculty availability. Students who do not complete the program within the required timeframe must reapply for admission into NURS 115.

## Nursing Grade and Progression

All Nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing courses must be passed with a C or higher before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C and BIOL 202C and Math elective to enter or progress in the Nursing courses.

## Performance on Licensure Exam: NCLEX-RN Pass Rates (first-time test takers)

| Pass Rates | Class of 2020 | Class of 2021 | Class of 2022 | Class of 2023 | Class of 2024 |
|---|---|---|---|---|---|
| NHTI Pass Rate | 98.25% | 94.92% | 87.72% | 100% | 100% |
| New Hampshire Pass Rate | 96.20% | 93.35% | 88.94% | 95.91% | 95.57% |
| National Pass Rate | 86.57% | 82.48% | 79.90% | 87.74% | 91.6% |

Job Placement Rates (employed within 9 months after graduation, aggregated data), based on survey responses

| Graduating Class | Employment Rates |
|---|---|
| 2023 | 100% |
| 2022 | 100% |
| 2021 | 100% |
| 2020 | 93% |
| 2019 | 100% |

Program completion rates (within 100% of program-stated length time, aggregated data)

| Time Frame (Fall to Spring) | Completion Rates |
|---|---|
| 2022-2024 | 58.43% |
| 2020-2022 | 74.63% |
| 2019-2021 | 73.91% |
| 2018-2020 | 61.53% |

## Program Competencies

1.Utilize the nursing process, clinical reasoning, and evidence-based practice to design, implement, and evaluate care focusing on the self-care requirements for the patient with commonly occurring illnesses.

2.Incorporate principles and concepts from nursing knowledge and liberal arts education utilizing critical thinking, clinical reasoning, clinical judgment and humanistic values.

3.Design and implement a plan of care in collaboration with the patient and health care team with a focus on the wholly compensatory nursing system.

4.Evaluate effective therapeutic and collegial communication needed to enhance health outcomes.

5.Manage nursing care directly and/or through delegation for the patient with a range of self-care deficits throughout the life cycle.

6.Create an optimal environment for the patient utilizing microsystem resources, evidence-based practice, quality improvement processes, and patient safety standards.

7.Establish a caring relationship with the patient to provide holistic and culturally-sensitive nursing care throughout the life cycle.

8.Demonstrate accountability for standard-based nursing care given by self and delegated to others adhering to professional, ethical and legal standards within nursing.

## RN to BSN Pathways

The Nursing program maintains articulation agreements with colleges so students can continue their education to earn a bachelor's or master's degree in Nursing.

Our articulation agreements include but are not limited to Aspen University, Chamberlain University, Colby-Sawyer College, Franklin Pierce University, Granite State College, Purdue University Global, Rivier University, Salve Regina University, and Southern New Hampshire University.

These programs accept our Nursing program credits, and most will transfer in up to 90 credits. This allows students to take additional general education credits at NHTI. Some also offer NHTI graduates who have successfully passed their NCLEX-RN exam a discounted tuition rate. Transfer policies vary. The receiving college or university has sole discretion in determining the amount of credit to be awarded.

Students should not make assumptions about which credits are transferable even if an articulation agreement exists. It is the student's responsibility to contact the appropriate person at the receiving institution to discuss policy, learn what documentation is required, and determine and confirm transferable credit

## Nursing – LPN to RN Completion Option

**Degree Type**
Associate of Science

NHTI's Nursing – LPN to RN Completion Option degree program (which is 4 semesters, as our accreditor counts prerequisites as a semester) is for the LPN who wishes to advance to a registered nurse (RN) and provide direct patient care in a variety of settings. Our faculty members create learning experiences that foster innovative teaching and learning, support and enhance student development, promote the use of college resources, and encourage civic engagement.

The mission of the Nursing program is to prepare students to qualify as collaborative members of the interdisciplinary healthcare team as an entry-level registered nurse, to meet the needs of a diverse community in an evolving world, and to pursue higher education.

**Do you have questions?** The department chair for this program is Jennifer Brace, who can be reached at jbrace@ccsnh.edu.

### Career Information

There's a strong demand for nurses. Our graduates have been offered jobs immediately after graduation and passing the National Council Licensing Examination for Registered Nurses (NCLEX-RN®) licensing exam. They work in intensive care units, emergency rooms, maternity, pediatrics, home care, long-term care, and other healthcare settings. Upon graduation, students are eligible to sit for the NCLEX-RN®. Our graduates' first-time pass rates on the NCLEX licensing exam exceed the national average. Once a student passes the exam and becomes an RN, they can work full-time and continue their education online to earn a bachelor's/master's degree in nursing through one of our transfer opportunities; many of our partners offer tuition discounts.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to applicants whose applications are complete and received by the Admissions Office by the deadline.

**Admissions Deadline: January 9, 2026 for the Summer 2026 semester**

Applicants must have:

- High school or college biology with lab and chemistry with lab, both with grades of C or higher
- College preparatory Algebra I with a C or higher or NHTI's MATH 092C with a C or higher
- A completed course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council. Online-only programs are not approved. See more information on CPR requirements.
- Preference will be given to students who hold an active, unrestricted New Hampshire Practical Nursing license and are in good standing with the NH Board of Nursing; all applicants must submit a copy of their current LPN license with their application for admission
- Submit, on NHTI nursing reference forms, two references from professionals, supervisors or teachers. The form is available here as a PDF, or contact the Admissions Office.
- Complete the NLN Nursing Accelerated Challenge Exam I: Foundations of Nursing and receive a minimum score of 74 or higher. NLN NACE registration information is available here as a PDF: NLN NACE Testing 2025-26 or contact the Admissions Office.

- Completion of NHTI courses ENGL 101C, PSYC 105C, PSYC 220C, BIOL 195C, and BIOL 196C with grades of a C or higher (or the equivalent from another institution).

Courses with virtual/online labs are not accepted, except for labs completed online in the 2020-21 academic year due to COVID-19. Transfer credit will depend on course content, applicability to the program, grade earned, and length of time since completion. Students who have satisfactorily completed college-level Anatomy & Physiology w/ lab with a grade of C or better may have their high school-level science prerequisites waived.

- **Current NHTI Students:** Students who wish to enter the Nursing program and are currently enrolled in General Studies or another NHTI program must complete and submit the Change of Program form, along with the other Specific Admission Requirements, to the Admissions Office prior to the application deadline.
- **Previously Enrolled in Another Nursing Program:** Candidates who previously attended and did not complete a Nursing RN or LPN program at another institution within the last five years must also submit a "Letter of Good Standing" from their prior program's Department Head to the Admissions Office and complete a Success Plan by the application deadline; qualified candidates will be contacted for an interview with the Nursing Student Affairs Committee.

**Selection Criteria**

Admission is determined by a cumulative point system based on high school-level prerequisite courses and grades, applicable college courses and grades, and admission exam scores. References are considered critical to the admission process and are evaluated. Qualified candidates not accepted may be assigned to a prioritized waiting list based on the above criteria. They may be admitted if an opening becomes available prior to the beginning of the first course. The waiting list will be discarded six to eight weeks prior to classes beginning; students must reapply.

**Upon Acceptance**

Acceptance is conditional based on the submission the following documents no later than four weeks prior to the beginning of the semester:

- **Submit health requirements for Allied Health clinical clearance.** Learn more. Professional liability malpractice insurance is arranged by the college and will automatically be charged to the student's account. Students' health insurance plans must meet N.H. requirements. Yearly Marketplace health insurance open enrollment is November-mid December and is effective January 1. This is the only time to sign up unless a qualifying life-changing event occurs.
- **Complete criminal background check** as directed through NHTI's approved vendor. Background checks from previous employers or other vendors are not accepted. Students are required to undergo and meet the Nursing Department's criteria for a criminal background check. No student is exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Students will repeat the criminal background check prior to their second year.
- **Complete drug and alcohol testing** as directed through NHTI's approved vendor. Drug testing from previous employers or other vendors are not accepted. Students are required to undergo and successfully meet the Nursing department's criteria for drug and alcohol screening. No student will be exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Drug and alcohol screenings are required prior to clinical, prior to the second year, and randomly throughout the program.

**Readmission Procedure**

Matriculated nursing students who have withdrawn, have been suspended for not achieving the minimum grade in a nursing, science or math course, and are not able to continue in the Nursing program may be considered for readmission only once. Readmission is not guaranteed, and students must reapply to the semester they left. Returning students must satisfy the admission criteria. Readmission will depend on space and clinical/faculty availability. Students who have failed a Nursing course due to unsafe clinical performance may not be eligible for readmission and should consult with the Nursing department chair to determine readmission eligibility.

The Nursing department chair will notify students of the specific readmission procedure after course failure or withdrawal. Students must submit a new application to the Admissions Office and complete a Success Plan to be

considered for readmission to the program. These must be submitted by the application deadline (Oct. 1 for Spring readmission and March 1 for Fall readmission); after the deadline, qualified candidates will be contacted for an interview with the Nursing Student Affairs Committee.

**Additional Requirements**

Nursing Department computer requirements

## Curriculum

The following program of study, which begins each May, reflects a three-semester curriculum plan that students enrolled in the Nursing program are required to complete for graduation. Eleven credits are awarded from the NLN Nursing Acceleration Challenge Exam I: Foundations of Nursing score. Transfer credit for the five prerequisite college courses will be evaluated on an individual basis and may result in an additional 18 credits awarded. Non-nursing courses must be taken in the semester indicated in the plan of study below or may be taken earlier. Nursing courses must be taken in the sequence listed below. Nursing theory classroom, simulation lab and clinical instruction must be completed concurrently.

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| NURS178C | Transitions in Nursing | 4 | 10.00 | 7.00 |
| | **Subtotal Credits** | **4** | **10** | **7** |

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| NURS116C | Nursing IIA | 6 | 15.00 | 11.00 |
| | **Subtotal Credits** | **13** | **18** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | English elective | 3 | 0.00 | 3 |
| NURS215C | Nursing III | 4 | 15.00 | 9.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **10-11** | **15** | **15-16** |
| | Total Credits | | 70 | |

**Additional Information**

Accreditation

The Nursing program is approved by the New Hampshire Board of Nursing (NHBON) and accredited by the Accreditation Commission for Education in Nursing (ACEN). Upon satisfactory completion of the program, graduates are eligible to take the NCLEX-RN®. Graduates should contact the Board of Nursing in the state in which they intend to practice regarding licensure requirements. NHTI's NCLEX-RN® pass rates can be viewed at https://www.oplc.nh.gov/new-hampshire-board-nursing. NHBON licensing regulations may restrict candidates who have been involved in civil or criminal legal proceedings. Questions should be addressed to NHBON or individual states' Board of Nursing.

**New Hampshire Board of Nursing**
7 Eagle Square
Concord, NH 03301
603-271-2152

The Associate Nursing Program at NHTI - Concord's Community College in Concord, N.H., is accredited by the:

**Accreditation Commission for Education in Nursing (ACEN)**
3390 Peachtree Road NE, Suite 1400
Atlanta, GA 30326
404-975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Nursing Program is Continuing Accreditation. View the public information disclosed by the ACEN regarding this program at http://www.acenursing.us/accreditedprograms/programSearch.htm

Clinical Experiences

Students must satisfactorily meet the health requirements for Allied Health Clinical Clearance, criminal background check, and drug and alcohol testing prior to participating in clinical. All students may be required to do a day, evening and/or weekend clinical rotation depending on clinical agency/faculty availability. Transportation to and from the clinical agency is the student's responsibility.

NHTI has developed practicum opportunities for students to foster hands-on learning while simultaneously receiving credit. The college's first priority must be to ensure that patient safety is not compromised by students during learning experiences. Students must demonstrate sufficient emotional stability to withstand the stresses, uncertainties and changing circumstances that characterize patient responsibilities. Students are expected to exercise sound judgment, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships and confidentiality with peers, staff, and/or patients. Technical standards have been established to provide guidance to students as to skills and abilities requisite to participate in the nursing program. Clinical sites are in hospitals and community-based settings:

- Catholic Medical Center, Manchester, N.H.
- Concord Hospital, Concord, N.H.
- New Hampshire Hospital, Concord, N.H.
- Community agencies throughout N.H.

Health, Character, and Technical Standards

Standards have been established to provide guidance to students as to skills and abilities requisite to participate in the nursing program.

- **General abilities:** The student must possess functional use of the senses of vision, touch, hearing, and smell so that data received by the senses may be integrated, analyzed, and synthesized in a consistent and accurate manner. A student must also possess the ability to perceive pain, pressure, temperature, position, vibration, and movement that are important to the student's ability to gather significant information needed to effectively evaluate patients. A student must be able to respond promptly to urgent situations that may occur during clinical training activities and must not hinder the ability of other members of the healthcare team to provide prompt treatment and care to patients.
- **Observational ability:** The student must have sufficient capacity to make accurate visual observations and interpret them in the context of laboratory studies, medication administration, and patient care activities. In addition, the student must be able to document these observations and maintain accurate records.
- **Communication ability:** The student must be able to communicate effectively both verbally and non-verbally to elicit information and to translate that information to others. Each student must have the ability to read, write, comprehend, and clearly speak the English language to facilitate communication with patients, their family members, and other professionals in healthcare settings. In addition, the student must be able to maintain accurate patient records, present information in a professional, logical manner, and provide patient counseling and instruction to effectively care for patients and their families. The student must also be able to clearly communicate effectively verbally and in writing with instructors and other students in the classroom setting.
- **Motor Ability:** The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations using the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must be able to develop the psychomotor

skills reasonably needed to perform or assist with procedures, treatments, administration of medication, management and operation of diagnostic and therapeutic medical equipment, and such maneuvers to assist with patient care activities such as lifting, wheel chair guidance, and mobility. The student must have sufficient levels of neuromuscular control and eye-to-hand coordination as well as possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings including performing CPR if necessary. The student must possess the ability of manual and visual dexterity such as to draw up solutions in a syringe.

- **Intellectual, conceptual, and quantitative abilities:** The student must be able to develop and refine problem-solving skills crucial to practice as a nurse. Problem-solving involves the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective data, and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment. Each student must demonstrate mastery of these skills and possess the ability to incorporate new information from peers, teachers, and the nursing and medical literature to formulate sound judgment in patient assessment, intervention, evaluation, teaching, and setting short- and long-term goals. Students must demonstrate arithmetic competence that would allow the student to read and understand columns and/or writing, tell time, use measuring tools, and add, subtract, multiply, and divide.
- **Behavioral and social attributes:** Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the Nursing programs. Personal comfort and acceptance of the role of a nurse functioning under supervision of a clinical instructor or preceptor is essential for a nursing student. The student must possess the skills required for full usage of the student's intellectual abilities; the exercise of good judgment; the prompt completion of all responsibilities in the classroom and clinical settings; and the development of mature, sensitive, and effective relationships with patients and other members of the healthcare team. Each student must be able to exercise stable, sound judgment and to complete assessment and interventional activities in a timely manner to assure patient safety and well being. The ability to establish rapport and maintain sensitive, interpersonal relationships with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds is critical for practice as a nurse. The student must be able to adapt to changing environments; display flexibility; accept and integrate constructive criticism given in the classroom and clinical settings; effectively interact in the clinical setting with other members of the healthcare team; and learn to function cooperatively and efficiently in the face of uncertainties inherent in clinical practice.
- **Examinations:** Certain courses in the Nursing programs require students to take timed and/or online examinations. Students may be required to take timed, online, and/or other types of examinations in a proctored, secure setting that is acceptable to the program.
- **Ability to manage stressful situations:** The student must be able to adapt to and function effectively to stressful situations in both the classroom and clinical settings, including emergency situations. Students will encounter multiple stressors while in the Nursing program. These stressors may be (but are not limited to) personal, patient care/family, faculty/peer, and or program-related.

The healthcare environment contains substantial amounts of latex. Applicants with latex allergies place themselves at risk of reaction. The Nursing Department does not recommend that individuals with a latex allergy pursue a career in healthcare.

### Length of Time to Complete the Nursing Program

All required Nursing courses must be completed within two years from when the student begins the first Nursing course in the LPN-RN Completion Program (NURS 178C). Eligible students will be readmitted to the Nursing program per specifications of the Readmission Policy. Students may be readmitted only once during the four two years. Readmission will depend on, among other factors, space and clinical/faculty availability. Students who do not complete the program within the required timeframe must reapply for admission into NURS 178C.

### Nursing Grade and Progression

All Nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing courses must be passed with a C or higher before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C and BIOL 202C and Math elective to enter or progress in the Nursing courses.

### Performance on Licensure Exam: NCLEX-RN Pass Rates (first-time test takers)

| Pass Rates | Class of 2020 | Class of 2021 | Class of 2022 | Class of 2023 |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| NHTI Pass Rate | 98.25% | 94.92% | 87.72% | 100% |
| New Hampshire Pass Rate | 96.20% | 93.35% | 88.94% | 95.91% |
| National Pass Rate | 86.57% | 82.48% | 79.90% | 87.74% |

Job Placement Rates (employed within 9 months after graduation, aggregated data), based on survey responses

| Graduating Class | Employment Rates |
|---|---|
| 2023 | 100% |
| 2022 | 100% |
| 2021 | 100% |
| 2020 | 93% |
| 2019 | 100% |

Program completion rates (within 100% of program-stated length time, aggregated data)

| Time Frame (Fall to Spring) | Completion Rates |
|---|---|
| 2022-2024 | 58.43% |
| 2020-2022 | 74.63% |
| 2019-2021 | 73.91% |
| 2018-2020 | 61.53% |

## Program Competencies

1.Utilize the nursing process, clinical reasoning, and evidence-based practice to design, implement, and evaluate care focusing on the self-care requirements for the patient with commonly occurring illnesses.

2.Incorporate principles and concepts from nursing knowledge and liberal arts education utilizing critical thinking, clinical reasoning, clinical judgment and humanistic values.

3.Design and implement a plan of care in collaboration with the patient and health care team with a focus on the wholly compensatory nursing system.

4.Evaluate effective therapeutic and collegial communication needed to enhance health outcomes.

5.Manage nursing care directly and/or through delegation for the patient with a range of self-care deficits throughout the life cycle.

6.Create an optimal environment for the patient utilizing microsystem resources, evidence-based practice, quality improvement processes, and patient safety standards.

7.Establish a caring relationship with the patient to provide holistic and culturally-sensitive nursing care throughout the life cycle.

8.Demonstrate accountability for standard-based nursing care given by self and delegated to others adhering to professional, ethical and legal standards within nursing.

## RN to BSN Pathways

The Nursing program maintains articulation agreements with colleges so students can continue their education to earn a bachelor's or master's degree in Nursing.

Our articulation agreements include but are not limited to Aspen University, Chamberlain University, Colby-Sawyer College, Franklin Pierce University, Granite State College, Purdue University Global, Rivier University, Salve Regina University, and Southern New Hampshire University.

These programs accept our Nursing program credits, and most will transfer in up to 90 credits. This allows students to take additional general education credits at NHTI. Some also offer NHTI graduates who have successfully passed their NCLEX-RN exam a discounted tuition rate. Transfer policies vary. The receiving college or university has sole discretion in determining the amount of credit to be awarded.

Students should not make assumptions about which credits are transferable even if an articulation agreement exists. It is the student's responsibility to contact the appropriate person at the receiving institution to discuss policy, learn what documentation is required, and determine and confirm transferable credit.

# Nursing – Paramedic to RN Completion

**Degree Type**
Associate of Science

NHTI's Nursing – Paramedic to RN Completion degree program (which is 5 semesters, as our accreditor counts prerequisites as a semester) is designed for the paramedic who wishes to advance to a registered nurse (RN) to provide direct patient care in a variety of settings. Our faculty members create learning experiences that foster innovative teaching and learning, support and enhance student development, promote the use of college resources, and encourage civic engagement.

The mission of the Nursing program is to prepare students to qualify as collaborative members of the interdisciplinary healthcare team as an entry-level registered nurse, to meet the needs of a diverse community in an evolving world, and to pursue higher education.

**Do you have questions?** The department chair for this program is Jennifer Brace, who can be reached at jbrace@ccsnh.edu.

## Career Information

There's a strong demand for nurses. Our graduates have been offered jobs immediately after graduation and passing the National Council Licensing Examination for Registered Nurses (NCLEX-RN®) licensing exam. They work in intensive care units, emergency rooms, maternity, pediatrics, home care, long-term care, and other healthcare settings. Upon graduation, students are eligible to sit for the NCLEX-RN®. Our graduates' first-time pass rates on the NCLEX licensing exam exceed the national average. Once a student passes the exam and becomes an RN, they can work full time and continue their education online to earn a bachelor's/master's degree in nursing through one of our transfer opportunities; many of our partners offer tuition discounts.

After successful completion of the following nursing courses with a C or higher, students may apply for licensure by comparable education:

- NURS 175C: Paramedic to RN Bridge – Licensed Nursing Assistant (LNA)
- NURS 175C: Paramedic to RN Bridge; NURS 116C: Nursing IIA; and NURS 178C: Transitions in Nursing–Licensed Practical Nurse (LPN)

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

Preference will be given to applicants whose applications are complete and received by the Admissions Office by the deadline.

**Admissions Deadline: November 1, 2025 for the Spring 2026 semester**

Applicants are required to have:

- High school or college biology with lab and chemistry with lab, both with grades of C or higher.
- College preparatory Algebra I with a C or higher or NHTI's MATH 092C with a grade of C or higher
- A completed course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council, prior to course registration. Online-only programs are not approved. See more information on CPR requirements.
- Preference will be given to students who hold active, unrestricted National Registered Emergency Medical Technicians-Paramedic (NREMT-P) certification and are in good standing; all applicants must submit a copy of their current NREMT-P certificate with their application for admission.
- Submit, on NHTI nursing reference forms, two references from professionals, supervisors or teachers. The form is available here as a PDF, or contact the Admissions Office.
- Complete the ATI Test of Essential Academic Skills (TEAS) exam with a minimum Total Score of 66% or higher. Information regarding testing locations and registration is available here (ATI TEAS Exam pdf) or contact the Admissions Office.

- Completion of NHTI courses ENGL 101C, PSYC 105C, and BIOL 195C, with grades of a C or higher (or the equivalent from another institution).

Courses with virtual/online labs are not accepted, except for labs completed online in the 2020-21 academic year due to COVID-19. Transfer credit will depend on course content, applicability to the program, grade earned, and length of time since completion. Students who have satisfactorily completed college-level Anatomy & Physiology w/ lab with a grade of C or better may have their high school-level science prerequisites waived.

- **Current NHTI Students:** Students who wish to enter the Nursing program and are currently enrolled in General Studies or another NHTI program must complete and submit the Change of Program form prior to the application deadline and return them to the Admissions Office at NHTIadmissions@ccsnh.edu.
- **Previously Enrolled in Another Nursing Program:** Candidates who previously attended a nursing RN or LPN program at another institution within the last five years must also submit a "Letter of Good Standing" from their prior program's Department Head and complete a Success Plan and submit it to the Admissions Office at NHTIadmissions@ccsnh.edu by the application deadline; qualified candidates will be contacted for an interview with the Nursing Student Affairs Committee.

**Selection Criteria**

Admission is determined by a cumulative point system based on high school-level prerequisite courses and grades, applicable college courses and grades, and admission exam scores. References are considered critical to the admission process and are evaluated. Qualified candidates not accepted may be assigned to a prioritized waiting list based on the above criteria. They may be admitted if an opening becomes available prior to the beginning of the first course. The waiting list will be discarded six to eight weeks prior to classes beginning; students must reapply.

**Upon Acceptance**

Acceptance is conditional based on the submission the following documents no later than four weeks prior to the beginning of the semester:

- **Submit health requirements for Allied Health clinical clearance.** Learn more. Professional liability malpractice insurance is arranged by the college and will automatically be charged to the student's account. Students' health insurance plans must meet N.H. requirements. Yearly Marketplace health insurance open enrollment is November-mid December and is effective January 1. This is the only time to sign up unless a qualifying life-changing event occurs.
- **Complete criminal background check** as directed through NHTI's approved vendor. Background checks from previous employers or other vendors are not accepted. Students are required to undergo and meet the Nursing Department's criteria for a criminal background check. No student is exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Students will repeat the criminal background check prior to their second year.
- **Complete drug and alcohol testing** as directed through NHTI's approved vendor. Drug testing from previous employers or other vendors are not accepted. Students are required to undergo and successfully meet the Nursing department's criteria for drug and alcohol screening. No student will be exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Drug and alcohol screenings are required prior to clinical, prior to the second year, and randomly throughout the program.

**Readmission Procedure**

Matriculated nursing students who have withdrawn, have been suspended for not achieving the minimum grade in a nursing, science or math course, and are not able to continue in the Nursing program may be considered for readmission only once. Readmission is not guaranteed, and students must reapply to the semester they left. Returning students must satisfy the admission criteria. Readmission will depend on space and clinical/faculty availability. Students who have failed a Nursing course due to unsafe clinical performance may not be eligible for readmission and should consult with the Nursing department chair to determine readmission eligibility.

The Nursing department chair will notify students of the specific readmission procedure after course failure or withdrawal. Students must submit a new application to the Admissions Office and complete a Success Plan to be

considered for readmission to the program. These must be submitted by the application deadline (Oct. 1 for Spring readmission and March 1 for Fall readmission); after the deadline, qualified candidates will be contacted for an interview with the Nursing Student Affairs Committee.

**Additional Requirements**

Nursing Department computer requirements

## Curriculum

The following program of study, which begins each January, reflects a 4-semester curriculum plan that students enrolled in the Nursing program are required to complete for graduation. Six credits are awarded from current NREMT-P certification. Transfer credit for the 3 prerequisite college courses will be evaluated on an individual basis and may result in an additional 11 credits awarded. Non-nursing courses must be taken in the semester indicated in the plan of study below or may be taken earlier. Nursing courses must be taken in the sequence listed below. Nursing theory classroom, simulation lab and clinical instruction must be completed concurrently.

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| NURS175C | Paramedic to RN Bridge | 3 | 3.00 | 4.00 |
| | **Subtotal Credits** | **9** | **5** | **11** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| NURS178C | Transitions in Nursing | 4 | 10.00 | 7.00 |
| | **Subtotal Credits** | **4** | **10** | **7** |

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| NURS116C | Nursing IIA | 6 | 15.00 | 11.00 |
| | **Subtotal Credits** | **13** | **18** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | English elective | 3 | 0.00 | 3 |
| NURS215C | Nursing III | 4 | 15.00 | 9.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **10-11** | **15** | **15-16** |
| | Total Credits | | 69 | |

**Additional Information**

Accreditation

The Nursing program is approved by the New Hampshire Board of Nursing (NHBON) and accredited by the Accreditation Commission for Education in Nursing (ACEN). Upon satisfactory completion of the program, graduates are eligible to take the NCLEX-RN®. Graduates should contact the Board of Nursing in the state in which they intend to practice regarding licensure requirements. NHTI's NCLEX-RN® pass rates can be viewed at https://www.oplc.nh.gov/new-hampshire-board-nursing. NHBON licensing regulations may restrict candidates who have been involved in civil or criminal legal proceedings. Questions should be addressed to NHBON or individual states' Board of Nursing.

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Clinical Experiences

Students must satisfactorily meet the health requirements for Allied Health Clinical Clearance, criminal background check, and drug and alcohol testing prior to participating in clinical. All students may be required to do a day, evening and/or weekend clinical rotation depending on clinical agency/faculty availability. Transportation to and from the clinical agency is the student's responsibility.

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- **Motor Ability:** The student must be able to perform gross and fine motor movements with sufficient coordination needed to perform complete physical examinations using the techniques of inspection, palpation, percussion, auscultation, and other diagnostic maneuvers. A student must be able to develop the psychomotor skills reasonably needed to perform or assist with procedures, treatments, administration of medication, management and operation of diagnostic and therapeutic medical equipment, and such maneuvers to assist with patient care activities such as lifting, wheel chair guidance, and mobility. The student must have sufficient levels of neuromuscular control and eye-to-hand coordination as well as possess the physical and mental stamina to meet the demands associated with extended periods of sitting, standing, moving, and physical exertion required for satisfactory and safe performance in the clinical and classroom settings including performing CPR if necessary. The student must possess the ability of manual and visual dexterity such as to draw up solutions in a syringe.
- **Intellectual, conceptual, and quantitative abilities:** The student must be able to develop and refine problem-solving skills crucial to practice as a nurse. Problem-solving involves the abilities to measure, calculate, reason, analyze, and synthesize objective and subjective data, and to make decisions, often in a time-urgent environment, that reflect consistent and thoughtful deliberation and sound clinical judgment. Each student must demonstrate mastery of these skills and possess the ability to incorporate new information from peers, teachers, and the nursing and medical literature to formulate sound judgment in patient assessment, intervention, evaluation, teaching, and setting short- and long-term goals. Students must demonstrate arithmetic competence that would allow the student to read and understand columns and/or writing, tell time, use measuring tools, and add, subtract, multiply, and divide.
- **Behavioral and social attributes:** Compassion, integrity, motivation, effective interpersonal skills, and concern for others are personal attributes required of those in the Nursing programs. Personal comfort and acceptance of the role of a nurse functioning under supervision of a clinical instructor or preceptor is essential for a nursing student. The student must possess the skills required for full usage of the student's intellectual abilities; the exercise of good judgment; the prompt completion of all responsibilities in the classroom and clinical settings; and the development of mature, sensitive, and effective relationships with patients and other members of the healthcare team. Each student must be able to exercise stable, sound judgment and to complete assessment and interventional activities in a timely manner to assure patient safety and well being. The ability to establish rapport and maintain sensitive, interpersonal relationships with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds is critical for practice as a nurse. The student must be able to adapt to changing environments; display flexibility; accept and integrate constructive criticism given in the classroom and clinical settings; effectively interact in the clinical setting with other members of the healthcare team; and learn to function cooperatively and efficiently in the face of uncertainties inherent in clinical practice.
- **Examinations:** Certain courses in the Nursing programs require students to take timed and/or online examinations. Students may be required to take timed, online, and/or other types of examinations in a proctored, secure setting that is acceptable to the program.
- **Ability to manage stressful situations:** The student must be able to adapt to and function effectively to stressful situations in both the classroom and clinical settings, including emergency situations. Students will encounter multiple stressors while in the Nursing program. These stressors may be (but are not limited to) personal, patient care/family, faculty/peer, and or program-related.

The healthcare environment contains substantial amounts of latex. Applicants with latex allergies place themselves at risk of reaction. The Nursing Department does not recommend that individuals with a latex allergy pursue a career in healthcare.

Length of Time to Complete the Nursing Program

All required Nursing courses must be completed within four years from when the student begins the first Nursing course regardless of whether that first course was taken at NHTI or in another Nursing program. Eligible students will be readmitted to the Nursing program per specifications of the Readmission Policy. Students may be readmitted only once during the four years. Readmission will depend on space and clinical/faculty availability. Students who do not complete the program within the required timeframe must reapply for admission into NURS 115.

## Nursing Grade and Progression

All Nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing courses must be passed with a C or higher before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C and BIOL 202C and Math elective to enter or progress in the Nursing courses.

## Performance on Licensure Exam: NCLEX-RN Pass Rates (first-time test takers)

| Pass Rates | Class of 2020 | Class of 2021 | Class of 2022 | Class of 2023 |
|---|---|---|---|---|
| NHTI Pass Rate | 98.25% | 94.92% | 87.72% | 100% |
| New Hampshire Pass Rate | 96.20% | 93.35% | 88.94% | 95.91% |
| National Pass Rate | 86.57% | 82.48% | 79.90% | 87.74% |

Job Placement Rates (employed within 9 months after graduation, aggregated data), based on survey responses

| Graduating Class | Employment Rates |
|---|---|
| 2023 | 100% |
| 2022 | 100% |
| 2021 | 100% |
| 2020 | 93% |
| 2019 | 100% |

Program completion rates (within 100% of program-stated length time, aggregated data)

| Time Frame (Fall to Spring) | Completion Rates |
|---|---|
| 2022-2024 | 58.43% |
| 2020-2022 | 74.63% |
| 2019-2021 | 73.91% |
| 2018-2020 | 61.53% |

## Program Competencies

1.Utilize the nursing process, clinical reasoning, and evidence-based practice to design, implement, and evaluate care focusing on the self-care requirements for the patient with commonly occurring illnesses.

2.Incorporate principles and concepts from nursing knowledge and liberal arts education utilizing critical thinking, clinical reasoning, clinical judgment and humanistic values.

3.Design and implement a plan of care in collaboration with the patient and health care team with a focus on the wholly compensatory nursing system.

4.Evaluate effective therapeutic and collegial communication needed to enhance health outcomes.

5.Manage nursing care directly and/or through delegation for the patient with a range of self-care deficits throughout the life cycle.

6.Create an optimal environment for the patient utilizing microsystem resources, evidence-based practice, quality improvement processes, and patient safety standards.

7.Establish a caring relationship with the patient to provide holistic and culturally-sensitive nursing care throughout the life cycle.

8.Demonstrate accountability for standard-based nursing care given by self and delegated to others adhering to professional, ethical and legal standards within nursing.

## RN to BSN Pathways

The Nursing program maintains articulation agreements with colleges so students can continue their education to earn a bachelor's or master's degree in Nursing.

Our articulation agreements include but are not limited to Aspen University, Chamberlain University, Colby-Sawyer College, Franklin Pierce University, Granite State College, Purdue University Global, Rivier University, Salve Regina University, and Southern New Hampshire University.

These programs accept our Nursing program credits, and most will transfer in up to 90 credits. This allows students to take additional general education credits at NHTI. Some also offer NHTI graduates who have successfully passed their NCLEX-RN exam a discounted tuition rate. Transfer policies vary. The receiving college or university has sole discretion in determining the amount of credit to be awarded.

Students should not make assumptions about which credits are transferable even if an articulation agreement exists. It is the student's responsibility to contact the appropriate person at the receiving institution to discuss policy, learn what documentation is required, and determine and confirm transferable credit.

## Orthopaedic Technology

**Degree Type**
Associate of Science

Orthopaedic technology is the art of casting and splinting broken bones and muscular injuries. NHTI's Orthopaedic Technology degree program is one of only seven in the country and the only one in New England. You'll train in casting, splinting, and anatomy and physiology of the body and patient care specific to the field. You'll complete hands-on training in the on-campus lab and in externships throughout N.H. and in the U.S. All courses and clinical externships are taught by industry professionals and leaders. Students in this program are active on campus with the Orthoblast Club. This program is financial aid-eligible.

**Do you have questions?** Contact Heather Smith, program coordinator, at hsmith@ccsnh.edu. The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

### Career Information

Job placement for graduates is excellent. Students who complete this program have opportunities to work in private practice, hospitals, clinics, and athletics. Our students complete externships through clinical facilities such as Concord Orthopedic, the Children's Hospital in Washington, D.C., and Massachusetts General Hospital. Upon completion of the program students are eligible to take the national registry exam. Graduates are eligible to take the national certification exam.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadline: March 1, 2026 through July 31, 2026 *on a space availability basis***

- High school diploma or proof of high school equivalency
- Personal interview
- A completed course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council. Online-only programs are not approved. For more information on CPR requirements, see NHTI Health Requirements webpage.
- Applicants must write an essay on their desire to enter the Orthopaedic Technology program; instructions on how to complete this requirement can be downloaded at this link: Orthopaedic Technology Admission Essay Requirements and are available from the Admissions Office at NHTIadmissions@ccsnh.edu.
- Complete a course in CPR and Airway Obstruction Management for healthcare providers/professional rescuers prior to program registration; this may be completed after acceptance.

Students who wish to enter this degree program and are enrolled in another NHTI program must complete and submit the Change of Program form and submit it to the Admissions office at NHTIadmissions@ccsnh.edu.

### Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL120C | Human Biology | 3 | 2.00 | 4.00 |
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| HLTH101C | Medical Terminology | 3 | 0.00 | 3.00 |
| PSYC105MC | Introduction to Psychology: Mindful | 3 | | 3.00 |
| | **Subtotal Credits** | **13** | **2** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **13** | **0** | **13** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ORTH101C | Orthopaedic Anatomy and Physiology I | 3 | 0.00 | 3.00 |
| ORTH103C | Basic Radiology Interpretation | 3 | 0.00 | 3.00 |
| ORTH108C | Casting and Splinting I | 2 | 6.00 | 5.00 |
| ORTH109MC | Introduction to Orthopaedics | 2 | 1.00 | 2.00 |
| ORTH113C | Orthopaedic Patient Care | 2 | 2.00 | 3.00 |
| | **Subtotal Credits** | **12** | **9** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ORTH102C | Orthopaedic Anatomy and Physiology II | 3 | 0.00 | 3.00 |
| ORTH104C | Physical Assessment of the Orthopaedic Patient | 3 | 2.00 | 4.00 |
| ORTH150C | Spring Externship | 0 | 16.00 | 3.00 |
| ORTH208C | Casting and Splinting II | 2 | 6.00 | 5.00 |
| | **Subtotal Credits** | **8** | **24** | **15** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ORTH219C | Traction | 1 | 2.00 | 2.00 |
| ORTH220C | Senior Externship and Capstone Experience | 1 | 16.00 | 6.00 |
| | **Subtotal Credits** | **2** | **18** | **8** |
| | Total Credits | | 66 | |

**Additional Information**

Students must achieve grades of C or higher in all general education courses including HLTH 101C to be eligible to register for ORTH 101C and other major field courses.

Accreditation

This program is recognized by the National Board for Certification of Orthopaedic Technologists (NBCOT).

Mindful Communication Option

Students who completed a non-Mindful Communication version of a course at another institution may be waived from the MC version of the courses at NHTI. Students who wish to opt-out of the Mindful Communication coursework may contact the department chair.

# Orthopaedic Technology

**Degree Type**
Certificate

NHTI's Orthopaedic Technology certificate program trains you in casting and splinting. You'll complete hands-on training in the on-campus lab and externships. All courses and clinical externships are taught by industry professionals and leaders. The students in the Orthopaedic Program are very active on campus with the Orthoblast Club. This program is financial aid eligible.

**Do you have questions?** Contact Heather Smith, program coordinator, at hsmith@ccsnh.edu. The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

## Career Information

Graduates from this program are eligible to take the National Registry Exam and can work anywhere in the country.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadline: March 1, 2025, for Fall 2025; *candidates will be considered through July 31, 2025, on a space availability basis.***

Applicants are required to have:

- High school diploma or proof of high school equivalency
- Personal interview
- A completed course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council. Online-only programs are not approved. For more information on CPR requirements, see NHTI Health Requirements webpage.

- Applicants must write an essay on their desire to enter the Orthopaedic Technology program; instructions on how to complete this requirement can be downloaded at this link: Orthopaedic Technology Admission Essay Requirements and are available from the Admissions Office at NHTIadmissions@ccsnh.edu.
- Complete a course in CPR and Airway Obstruction Management for healthcare providers/professional rescuers prior to program registration; this may be completed after acceptance.

Students who wish to enter this degree program and are enrolled in another NHTI program must complete and submit the Change of Program form and submit it to the Admissions office at NHTIadmissions@ccsnh.edu.

## Curriculum

### Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| HLTH101C | Medical Terminology | 3 | 0.00 | 3.00 |
| ORTH101C | Orthopaedic Anatomy and Physiology I | 3 | 0.00 | 3.00 |
| ORTH103C | Basic Radiology Interpretation | 3 | 0.00 | 3.00 |
| ORTH108C | Casting and Splinting I | 2 | 6.00 | 5.00 |
| ORTH109MC | Introduction to Orthopaedics | 2 | 1.00 | 2.00 |
| ORTH113C | Orthopaedic Patient Care | 2 | 2.00 | 3.00 |
| | **Subtotal Credits** | **15** | **9** | **19** |

### Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ORTH102C | Orthopaedic Anatomy and Physiology II | 3 | 0.00 | 3.00 |
| ORTH104C | Physical Assessment of the Orthopaedic Patient | 3 | 2.00 | 4.00 |
| ORTH150C | Spring Externship | 0 | 16.00 | 3.00 |
| ORTH208C | Casting and Splinting II | 2 | 6.00 | 5.00 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **11** | **24** | **18** |

### Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ORTH219C | Traction | 1 | 2.00 | 2.00 |
| ORTH220C | Senior Externship and Capstone Experience | 1 | 16.00 | 6.00 |
| | **Subtotal Credits** | **2** | **18** | **8** |
| | Total Credits | | 45 | |

### Additional Information

Health, Character, and Technical Requirements

Standards have been established as to the skills and abilities required to function successfully in the program and profession.

- Sufficient hearing to assess patient needs and to understand instructions, emergency signals and telephone conversation
- Sufficient visual acuity to observe patients, manipulate equipment, and interpret data
- Visual acuity sufficient to ensure a safe environment, identify color changes, read fine print/writing, and calculate fine calibrations
- Sufficient verbal ability to express and exchange information and ideas and to interact with patients, family members, physicians, peers, and other ancillary medical personnel
- Sufficient writing skills to record medical data and communicate with other medical professionals
- The ability to express ideas to educate the client and exchange information with other health professionals, including typing on a computer
- Ability to work with frequent interruptions, to respond appropriately in emergencies or unexpected situations, and to cope with extreme variations in workload and stress levels
- Sufficient strength and motor coordination to perform the following physical activities: manual dexterity in handling and lifting equipment; frequent moving and lifting of patients; stooping and bending for sustained periods of time; and performing CPR
- Standing for sustained periods of time and walking most of the work day
- Frequent reaching and manual dexterity in handling durable medical equipment
- Ability to secure transportation to practicum sites and classes

Applicants will be exposed to latex during clinical settings. Those who think they may not be able to meet one or more of the technical standards should contact the department chair or faculty to discuss individual cases.

## Paramedic Emergency Medicine

**Degree Type**
Associate of Science

NHTI's Paramedic Emergency Medicine degree program is the only one of its kind in NH. and has been educating paramedic students since 1977. The program has small classes taught by degreed-instructors, current equipment, and a full-sized ambulance simulator. It combines paramedic courses, general education requirements, specialty certifications, and diverse hospital and pre-hospital experiences. You'll have opportunities to work with some of New England's finest hospital and prehospital affiliates. This degree program offers:

- Rigorous curriculum that exceeds the national standards
- Paired lectures and labs to allow for hands-on practice of the weekly topics
- Comprehensive courses in anatomy and physiology and pathophysiology
- In-depth cardiology education, which includes BLS, ACLS, and PALS certifications
- Progressive clinical track for hospital and field experience
- Updated Gaumard and Laerdal simulation mannequins (adult and pediatric)
- Physio-Control LIFEPAK 15 and iSimulateALSi monitors and Glide Scope Go video laryngoscopes

Upon successful completion of all freshmen courses and their hospital clinic, students may test for the AEMT; the NHTI program pass rate is 100%.

**Do you have questions?** Contact Keith Wilding, program coordinator, at kwilding@ccsnh.edu or 603-271-6484 x4213. The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

### Career Information

Those considering paramedic education should take the associate degree. For many, it provides competitive entry into the job market, a stronger advantage for career advancement, and the potential for academic advancement with the ability to transfer course credits to a four-year college. Our graduates have a 100% pass rate for NREMT written and practical exams as well as 100% job placement after graduation.

Clinical rotations include high-volume, fire-based, hospital-based, and private ambulance services. Students who complete this program can enter into the following professions (not an inclusive list):

- Ambulance-based paramedicine (private, public, and/or volunteer services)
- Hospital-based paramedicine (typically in the emergency department setting) and urgent care facilities
- Mobile integrated healthcare/community paramedicine

- Cruise ships, oil rigs, entertainment venues (sports, movie/TV sets, concerts)

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadline: March 31, 2026 through July 31, 2026 *on a space availability basis***

Applicants are required to have:

- A valid driver's license and be at least 18 years old
- High school (or college) courses in lab-based Biology and Chemistry, completed with minimum grades of "C" or college-level Anatomy & Physiology I and II with minimum grades of "C"
- High school (or college) Algebra I completed with a minimum grade of "C"
- Current National Registry or State EMT/AEMT certification
- Current BLS CPR certification from the American Heart Association, American Red Cross, or the National Safety Council. Online-only programs are not approved.
- Letter of recommendation from an EMS supervisor
- Documentation/verification at least 100 patient contacts and 25 team-leads while working as an ambulance-based EMT/AEMT; download the Field Experience Verification form.
- Interview with the Department Chair of Paramedic Emergency Medicine

Students who wish to enter this degree program and are enrolled in another NHTI program must complete and submit the Change of Program form and submit it to the Admissions office at NHTIadmissions@ccsnh.edu.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL195C | Anatomy and Physiology I | 3 | 2.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| PEM117C | Physical Assessment | 2 | 0.00 | 2.00 |
| PEM142C | Cardiology I | 2 | 0.00 | 2.00 |
| PEM150C | Advanced Trauma | 2 | 0.00 | 2.00 |
| PEM161C | Integration Lab I | 0 | 4.00 | 2.00 |
| | **Subtotal Credits** | **13** | **6** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| PEM111C | Paramedic Procedures | 1 | 3.00 | 2.00 |
| PEM126C | Pharmacology | 3 | 0.00 | 3.00 |
| PEM135C | Medical Emergencies | 2 | 0.00 | 2.00 |
| PEM162C | Integration Lab II | 0 | 4.00 | 2.00 |
| PEM244C | Advanced Cardiology | 2 | 0.00 | 2.00 |
| | **Subtotal Credits** | **15** | **9** | **19** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| PEM190C | Introduction to the Clinical Environment | 1 | 0.00 | 1.00 |
| PEM194C | Hospital Clinical | 0 | 18.00 | 5.00 |
| PEM290C | Field Clinic Primer | 0 | 6.00 | 2.00 |
| | **Subtotal Credits** | **1** | **24** | **8** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | BIOL 202C or BIOL 222C | | | 3-4 |
| PEM163C | Integration Lab III | 0 | 4.00 | 2.00 |
| PEM201C | Special Populations | 2 | 0.00 | 2.00 |
| PEM292C | 12 Lead EKG Interpretation/Difficult Airway Seminar | 2 | 0.00 | 2.00 |
| PEM296C | Field Clinical I | 0 | 9.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **7** | **13** | **15-16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120C/COMM120C or ENGL120MC/ COMM120MC | 3 | 0.00 | 3 |
| PEM164C | Integration Lab IV | 0 | 4.00 | 2.00 |
| PEM210C | Field Operations | 2 | 0.00 | 2.00 |
| PEM278C | Advanced Paramedic Practice | 2 | 0.00 | 2.00 |
| PEM297C | Field Clinical II | 0 | 7.00 | 3.00 |
| PEM298C | Field Clinical III | 0 | 2.00 | 1.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **10-11** | **13** | **16-17** |
| | Total Credits | | 72-73 | |

**Additional Information**

Accreditation

The NHTI Paramedic Emergency Medical Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). Most recent accreditation was March 15, 2024.

**Commission on Accreditation of Allied Health Education Programs (CAAHEP)**
1361 Park Street
Clearwater, FL 33756
727-210-2350
www.caahep.org

**Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP):**
8301 Lakeview Parkway, Suite 111-312
Rowlett, TX 75088
Phone: 214-703-8445
Fax: 214-703-8992
www.coaemsp.org

| | Cohort Graduation Year | | | | | | | | | 3 Year Total | 5 Year Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2025 | | 2024 | 2023 | | 2022 | | 2021 | | | |
| Enrollment (after 10% of total clock hours) | 12 | 1 | 13 | 13 | 1 | 14 | 1 | 9 | 5 | 40 | 69 |
| Graduates | 10 | 1 | 11 | 8 | 0 | 10 | 0 | 8 | 2 | 30 | 50 |
| Attrtion (cohort) | 17% | 0% | 15% | 38% | 100% | 29% | 100% | 11% | 60% | 34% | 41% |
| Attrition (year) | 15% | | 15% | 43% | | 33% | | 29% | | 25% | 27% |
| Retention (year) | 85% | | 85% | 57% | | 67% | | 71% | | 75% | 73% |
| National Registry - Cognitive (% attempting) | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| National Registry - Cognitive (% pass rate) | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| National Registry - Psychomotor (% attempting) | N/A | | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| National Registry - Psychomotor (% pass rate) | N/A | | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Job Placement | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

Clinical Affiliations

**Hospital Clinic Sites:** During the freshmen-year clinic, students spend at least 224 hours working in multiple settings within the hospital. Each clinical site is provided with program-faculty supervision and advocacy.

- Concord Hospital, Concord, NH
- Dartmouth-Hitchcock Medical Center, Lebanon, NH
- Southern New Hampshire Medical Center, Nashua, NH

**ALS Field Clinic Sites:** During senior-year field clinics, students spend 320 hours working with an Advanced Life Support ambulance service. Each student is assigned a paramedic preceptor for the duration of the experience.

- American Medical Response (AMR), Manchester/Nashua, NH
- Cataldo Ambulance Service, Somerville, MA
- Coastal EMS, Brookline/Dedham/Newton, MA
- Concord Fire Department, Concord, NH
- Derry Fire Department, Derry, NH
- Dover Fire Department, Dover, NH
- Exeter Fire Department, Exeter, NH
- Frisbie Memorial Hospital EMS, Rochester, NH
- Greater Lowell EMS, Lowell, MA
- Lawrence General Hospital ALS, Lawrence, MA
- Salem Fire Department, Salem, NH
- Tilton-Northfield Fire & EMS, Tilton, NH

FAQs

Click this link to access a PDF of FAQs for the Paramedic program.

Health and Additional Requirements

- Annual TB testing; Hepatitis B vaccine; personal health insurance; completed health physical; drug screening; and NHTI liability insurance
- Never been convicted of a felony (may interfere with National Registry eligibility)
- Sufficient eyesight to observe patients, manipulate equipment, and interpret data
- Visual acuity sufficient to work with data, figures, and computer terminals and make equipment inspections
- Sufficient hearing to assess patient needs and to understand instructions
- Sufficient written and oral skills to communicate needs promptly and effectively and to interact with patients, physicians, peers, and medical and other public service emergency personnel
- Ability to work with frequent interruptions and respond appropriately to unexpected situations
- Ability to work with wide variations in workload and stress levels
- Mental health to cope with personal stresses in a way that does not adversely affect performance

Students that do not meet entrance requirements may need an alternate plan for the scheduling of their courses.

Students enrolled at NHTI often take non-major courses, easing the class load when admitted to the Paramedic Emergency Medicine Program. The core classes for this degree program are only offered during the day. Because of the sequential nature of the course work, these core classes are only available to those who have been accepted into the program.

## Program Costs

| Course | Course Name | Credits | Class-Hours per Week | Classroom Hours per Semeseter | Tuition* | Comp Fee | Academic Instruction Fee | Clinical Surcharge | Liability Insurance | Online Portfolio & Testing | Background Check & Drug Screening | Books[1] | Uniform[1] | Total Cost[2] | LEO, FF, & EMT Career Development, Recruitment, & Retention Program[5] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BIOL 195C | Anatomy & Physiology I | 4 | 3.3 | 50 | $920 | $100 | $110 | | | | | | | $1,130 | $1,130 |
| ENGL 101C | Intro to English (or higher) | 4 | 3.3 | 50 | $920 | $100 | | | | | | | | $1,020 | $1,020 |
| PEM 117C | Physical Assessment | 2 | 1.7 | 25 | $460 | $50 | | | | | | $400 | | $910 | $510 |
| PEM 142C | Cardiology I | 2 | 1.7 | 25 | $460 | $50 | | | | | | $150 | | $660 | |
| PEM 150C | Advanced Trauma | 2 | 1.7 | 25 | $460 | $50 | | | | | | | | $510 | |
| PEM 161C | Integration Lab I | 2 | 1.7 | 25 | $460 | $50 | $110 | | | $180 | | | | $800 | |
| BIOL 196C | Anatomy & Physiology II | 4 | 3.3 | 50 | $920 | $100 | $110 | | | | | | | $1,130 | $1,130 |
| MATH 120C | Quantitative Reasoning (or higher) | 4 | 3.3 | 50 | $920 | $100 | | | | | | | | $1,020 | $1,020 |
| PEM 111C | Paramedic Procedures | 2 | 1.7 | 25 | $460 | $50 | $110 | | | | | | | $620 | |
| PEM 126C | Pharmacology | 3 | 2.5 | 37.5 | $690 | $75 | | | | | | | | $765 | $765 |
| PEM 135C | Medical Emergencies | 2 | 1.7 | 25 | $460 | $50 | | | | | | | | $510 | |
| PEM 162C | Integration Lab II | 2 | 1.7 | 25 | $460 | $50 | $110 | | | | | | | $620 | |
| PEM 244C | Advanced Cardiology | 2 | 1.7 | 25 | $460 | $50 | | | | | | $60 | | $570 | |
| PEM 190C | Intro to Hosp Clinic | 1 | 24.0 | 24 | $230 | $25 | | | | | $125 | | | $380 | $380 |
| PEM 194C | Hospital Clinic | 5 | 34.5 | 224 | $1,150 | $125 | $550 | $500 | $65 | | | | $200 | $2,590 | $2,390 |
| PEM 290C | Intro to Field Clinic[3] | 2 | 15.4 | 100 | $460 | $50 | $220 | | | | | | | $730 | |
| BIOL 222C | Pathophysiology[4] | 3 | 2.5 | 37.5 | $690 | $75 | | | | | | | | $765 | $765 |
| PEM 163C | Integration Lab III | 2 | 1.7 | 25 | $460 | $50 | $110 | | | | | | | $620 | |
| PEM 201C | Special Populations | 2 | 1.7 | 25 | $460 | $50 | | | | | | $60 | | $570 | |
| PEM 292C | 12-Lead/Diff Airway | 2 | 1.7 | 25 | $460 | $50 | | | | | | | | $510 | |
| PEM 296C | Field Clinic I | 3 | 2.5 | 37.5 | $690 | $75 | $330 | $500 | $65 | | | | | $1,660 | $1,660 |
| PSYC 105C | Intro Psych (or higher) | 3 | 2.5 | 37.5 | $690 | $75 | | | | | | | | $765 | $765 |
| ENGL 120C | Communications | 3 | 2.5 | 37.5 | $690 | $75 | | | | | | | | $765 | $765 |
| HM XXXC | Humanities/Language/Fine Arts | 3 | 2.5 | 37.5 | $690 | $75 | | | | | | | | $765 | $765 |
| PEM 164C | Integration Lab IV | 2 | 1.7 | 25 | $460 | $50 | $110 | | | | | | | $620 | |
| PEM 210C | Field Operations | 2 | 1.7 | 25 | $460 | $50 | | | | | | | | $510 | |
| PEM 278C | Adv Paramedic Practice | 2 | 1.7 | 25 | $460 | $50 | | | | | | | | $510 | |
| PEM 297C | Field Clinic II | 3 | 2.5 | 37.5 | $690 | $75 | $220 | $500 | | | | | | $1,485 | $1,485 |
| PEM 298C | Field Clinic III | 1 | 0.8 | 12.5 | $230 | $25 | $110 | | | | | | | $365 | |
| | | | | | | | | | | | | | | | $14,550 <-- Maximum benefit |
| TOTAL COST OF PROGRAM (*based on In-State rate of | | | $230 | per credit) | | | | | | | | | | $23,875 | $9,325 |
| COST OF PEM COURSES (*based on In-State rate of | | | $230 | per credit) | | | | | | | | | | $15,785 | |

[1]These are estimated costs, and may change from year to year. Cost of books in non-major courses is dependent upon which courses are taken and if "open resource" texts are avaialble.
[2]The total cost of the program will depend upon the quantity of non-major credits transferred to NHTI. All paramedic courses must be taken.
[3]Optional/assigned formative field experience, not included in total cost of program or cost of paramedic courses.
[4]Microbiology (4 credts) may be substituted for Pathophysiology.
[5]Reimbursement of 3 courses (up to 12 credits) upon successful completion of the course with a grade of "C" or better.

View a pdf of the program costs.

## Program Learning Outcomes

The program's emphasis is on the development of paramedic knowledge and theory, practical skills application, and the development of professional behaviors required of the entry level paramedic. The development of leadership skills, individual professional growth, and academic excellence are integral parts of the program.

## Technical/Physical Standards

Students in this program must have sufficient strength and motor coordination required to perform the following physical activities: standing and walking for sustained periods of time; driving an ambulance and/or rescue unit under emergency conditions; frequent reaching and manual dexterity in handling equipment often in confined spaces; and frequently transporting, moving, lifting, and transferring patients of various sizes to and from a stretcher and other patient transport devices.

# Radiation Therapy

**Degree Type**
Associate of Science

NHTI's Radiation Therapy degree program uses didactic, laboratory, and clinical education to train you to work as a radiation therapist in cancer treatment centers. Radiation therapists work under the direction of an oncologist to treat patients with malignant diseases using ionizing radiation. A certificate option is available for students with prior degrees in radiological sciences. The radiation therapist uses creativity in a patient care environment with new technology. NHTI offers the only Radiation Therapy program in N.H. We offer students in northern New England the opportunity to enter radiation therapy with state-of-the-art clinical facilities.

**Do you have questions?** The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

## Career Information

This program boasts excellent job opportunities with high employer satisfaction. Graduates are eligible to take the national certification exam administered by the American Registry of Radiologic Technologists and find employment in hospitals and private clinics.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadline: March 1, 2026**

Applicants are required to have:

- High school or college Biology with lab and Chemistry with lab, both with C or higher
- College prep Algebra I with a C or higher, or NHTI's MATH092C with a C or higher
- High school- or college-level Physics recommended, such NHTI's PHYS133C
- An essay on desire to enter the field of Radiation Therapy. Essay directions: Radiation Therapy Essay requirement
- A completed course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council. Online-only programs are not approved. For more information on CPR requirements, see NHTI Health Requirements webpage.
- A personal interview with qualified applicants will be arranged by the department after the application deadline
- Must be at least 18 years of age prior to start of clinical rotations

Students who wish to enter this program and are currently enrolled in another NHTI program must complete and submit the Change of Program form to the Admissions Office prior to the application deadline. Download the Admissions Score Sheet here.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL195C | Anatomy and Physiology I | 3 | 2.00 | 4.00 |
| RDTH101C | Introduction to Radiation Therapy | 3 | 0.00 | 3.00 |
| RDTH110C | Principles and Practice of Radiation Therapy I | 3 | 2.00 | 4.00 |
| RDTH115MC | Patient Care | 1 | 0.00 | 1.00 |
| | **Subtotal Credits** | **10** | **4** | **12** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| RDTH190C | Clinical Practice I | 0 | 16.00 | 4.00 |
| RDTH215C | Sectional Anatomy and Pathology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **10** | **18** | **15** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| RDTH150C | Medical Imaging and Processing | 2 | 0.00 | 2.00 |
| RDTH180C | Radiation Physics for the Radiation Therapist | 2 | 0.00 | 2.00 |
| RDTH195C | Clinical Practice II | 0 | 18.00 | 4.00 |
| | **Subtotal Credits** | **8** | **18** | **12** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| RDTH200C | Radiation Protection and Biology | 3 | 0.00 | 3.00 |
| RDTH210C | Principles and Practice of Radiation Therapy II | 3 | 2.00 | 4.00 |
| RDTH290C | Clinical Practice III | 0 | 24.00 | 5.00 |
| | **Subtotal Credits** | **9** | **26** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| RDTH205C | Treatment Planning | 3 | 0.00 | 3.00 |
| RDTH220C | Radiation Therapy Physics | 3 | 0.00 | 3.00 |
| RDTH293C | Clinical Practice IV | 0 | 24.00 | 5.00 |
| | **Subtotal Credits** | **9** | **24** | **14** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| PSYC105MC | Introduction to Psychology: Mindful | 3 | | 3.00 |
| RDTH280C | Registry Review | 1 | 0.00 | 1.00 |
| RDTH295C | Clinical Practice V | 0 | 23.00 | 5.00 |
| | **Subtotal Credits** | **4** | **23** | **9** |
| | Total Credits | | 77 | |

**Additional Information**

- Prior to the start of clinical Radiation Therapy courses, students are required to have documentation of: current medical insurance; a complete physical examination; current immunizations; current CPR certification in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council (online-only programs are not approved; for more information on CPR requirements, see NHTI Health Requirements webpage). Professional liability malpractice insurance is arranged by the college and will be charged to the student's account.

- College-level science and technical courses (i.e., Anatomy and Physiology I and II) taken more than five years prior to desired entry into the Radiation Therapy program must be repeated. Courses with virtual/online labs are not accepted, except for labs completed online in 2020-21 due to COVID-19.
- The program integrates all theory coursework with clinical experience. All Radiation Therapy major field courses must be passed with a C- or higher before proceeding to the next level. Grades of C or higher in BIOL 195C and BIOL 196C are required to enter or progress in the Radiation Therapy courses.

Accreditation

The NHTI – Concords Community College Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology.

20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312-704-5300
Email: mail@jrcert.org

The program's current award is 8 years. General program accreditation information and the current accreditation award letter can be found **here**.

Clinical Rotations and Obligations

We offer clinical rotations at eight oncology sites in N.H., six in Maine, and two in Mass. and Vt., offering students broad experience in procedures, equipment, and patients. Students can rotate to a different radiation oncology clinic each semester, enabling versatility.

The student must complete all of the following to receive a clinical pass (P) for the semester:

1. Passing grade on all mandatory competencies for that semester (within 2 attempts)
2. Passing grade (>75%) on end of semester clinical exam
3. >70% average on clinical affective evaluations
4. Completion of required clinical hours for that semester
5. **Complete criminal background check** as directed through NHTI's approved vendor. Background checks from previous employers or other vendors are not accepted. Students are required to undergo and meet the Diagnostic Medical Imaging Department's criteria for a criminal background check. No student is exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Students will repeat the criminal background check prior to their second year.
6. **Complete drug and alcohol testing** as directed through NHTI's approved vendor. Drug testing from previous employers or other vendors are not accepted. Students are required to undergo and successfully meet the Diagnostic Medical Imaging department's criteria for drug and alcohol screening. No student will be exempt. Students are provided with procedural and cost information and are responsible for all costs associated with these testing procedures. Drug and alcohol screenings are required prior to clinical, prior to the second year, and randomly throughout the program.

If a student does not complete any of the above requirements, they will be issued a no pass (NP).

If a student is dismissed from the clinical semester due to performance or behavioral issues, they will be issued an AF. Any student receiving a failing grade in a clinical course will be dismissed from the program and is not eligible to reapply. Clinical practice is the essence of the profession and a failure in the clinical environment indicates that the student is not competent to continue in the program.

Download Student Program Manual

Essential Student Functions and Requirements

Students must have sufficient strength and motor coordination to perform the following physical activities:

- Standing and walking for up to eight hours during the work day
- Frequent reaching and manual dexterity in handling accessory equipment for radiation therapy purposes
- Frequently transporting, moving, lifting items up to 40 lbs unassisted
- Sufficient strength to assist patients including transfer of patients from a wheelchair/stretcher to and from a treatment/simulation table

In addition, the student must have:

- No medical restrictions concerning operation of radiation producing equipment
- Sufficient hearing to distinguish audio signals from equipment and assess patient needs
- Sufficient eyesight to observe patients, manipulate equipment, and evaluate radiographic quality; sufficient visual acuity to analyze data, figures, and small print; work with computer terminals; and inspect small defects, small parts, and operation of machines. Vision must be maintained within dim lighting.
- Sufficient writing skills to communicate needs promptly and effectively.
- Ability to express or exchange ideas includes conveying detailed or important spoken instructions to patients, physicians, families, and other employees, accurately, loudly or quickly
- Ability to work with frequent interruptions and respond appropriately to unexpected situations
- Ability to work with wide variations in workload and stress levels
- Approval of the clinical facility if there is any question of meeting essential functions

Mindful Communication Options

Students who completed a non-Mindful Communication version of a course at another institution may be waived from the MC version of the courses at NHTI. Students who wish to opt-out of the Mindful Communication coursework may contact the department chair.

Program Effectiveness Data

The following is the most current program effectiveness data. Our programmatic accreditation agency, the Joint Review Committee on Education in Radiologic Technology (JRCERT), defines and publishes this information. Click here to go directly to the JRCERT webpage.

**Credentialing Examination:** The number of students who pass, on the first attempt, the American Registry of Radiologic Technologists (ARRT) certification examination, or an unrestricted state licensing examination, compared with the number of graduates who take the examination within six months of graduation. The five-year average benchmark established by the JRCERT is 75%.

| **Credentialing Examination Rate** | **Number passed on first attempt divided by number of attempted within 6 months of graduation** |
|---|---|
| **Year** | **Results** |
| Year 1: 2024 | 8 of 9 - 89% |
| Year 2: 2023 | 7 of 9 - 78% |
| Year 3: 2022 | 3 of 3 - 100% |
| Year 4: 2021 | 7 of 8 - 87.5% |
| Year 5: 2020 | 6 of 6 - 100% |
| **Program 5-Year Average** | **31 of 35 - 89%** |

**Job Placement:** The number of graduates employed in the radiologic sciences compared to the number of graduates actively seeking employment in the radiologic sciences within twelve months of graduating. The five-year average benchmark established by the JRCERT is 75%.

| **Job Placement Rate** | **Number employed divided by number actively seeking employment within 12 months of graduation** |
|---|---|
| **Year** | **Results** |
| Year 1: 2024 | 9 of 9 - 100% |
| Year 2: 2023 | 9 of 9 - 100% |
| Year 3: 2022 | 3 of 3 - 100% |
| Year 4: 2021 | 8 of 8 - 100% |
| Year 5: 2020 | 6 of 6—100% |
| **Program 5-Year Average** | **35 of 35 - 100%** |

**Program Completion:** The number of students who complete the program within the stated program length. The annual benchmark established by the program is 75%.

| **Program Completion Rate** | **Number graduated by number started the program** |
|---|---|
| **Year** | **Results** |
| Year 1: 2024 | 9 of 9–100% |
| **Annual Completion Rate** | **100%** |

Click here to download a PDF of this data.

Program Learning Outcomes

The mission of the Radiation Therapy Program is to educate and produce highly qualified radiation therapists through an objective-based didactic education and competency-based clinical education. Student growth and professional development will be instilled through the community college system and atmosphere in conjunction with NHTI's Mission Statement.

Students/graduates will be clinically competent.

- Students will demonstrate and recognize appropriate treatment setup factors.
- Students will practice radiation protection.
- Students will be exposed to a variety of alternate treatment setups.

Students/graduates will communicate effectively.

- Students will articulate the treatment setup procedure with the patient.
- Students will practice effective oral skills with the radiation therapy community.

Students/graduates will use critical thinking.

- Students will create a reproducible patient position in simulation.
- Students will demonstrate competence when setting up an IMRT treatment.

Students will demonstrate professionalism.

- Students will examine the importance of continued professional development.
- Students will demonstrate ethics/professional behavior when interacting with both patients and the healthcare team.

# Radiation Therapy

**Degree Type**
Certificate

NHTI's Radiation Therapy certificate program is an advanced placement option for students with prior degrees in the Radiologic Sciences. This program teaches you how to work in patient care using "high touch, high technology" with advancement opportunities. You'll learn to use creativity in a patient care environment with ever-changing technology. NHTI offers the only Radiation Therapy program in N.H.

**Do you have questions?** The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

## Career Information

Our program boasts excellent job opportunities to the graduate with high-employer satisfaction.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadline: March 1, 2025, for Fall 2025**

Applicants are required to have:

- High school or college Biology with lab and Chemistry with lab, both with C or higher
- College prep Algebra I with a C or higher, or NHTI's MATH092C with a C or higher
- High school-level physics recommended

- An essay on desire to enter the field of Radiation Therapy. Essay directions: Radiation Therapy Essay requirement
- A completed course in **BLS CPR** from the American Red Cross, American Heart Association, or the National Safety Council. Online-only programs are not approved. For more information on CPR requirements, see NHTI Health Requirements webpage.
- A personal interview with qualified applicants will be arranged by the department after the application deadline
- Must be at least 18 years of age prior to start of clinical rotations

Students who wish to enter this program and are currently enrolled in another NHTI program must complete and submit the Change of Program form to the Admissions Office prior to the application deadline.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| RDTH101C | Introduction to Radiation Therapy | 3 | 0.00 | 3.00 |
| RDTH110C | Principles and Practice of Radiation Therapy I | 3 | 2.00 | 4.00 |
| RDTH200C | Radiation Protection and Biology | 3 | 0.00 | 3.00 |
| RDTH210C | Principles and Practice of Radiation Therapy II | 3 | 2.00 | 4.00 |
| RDTH290C | Clinical Practice III | 0 | 24.00 | 5.00 |
| | **Subtotal Credits** | **12** | **28** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| RDTH205C | Treatment Planning | 3 | 0.00 | 3.00 |
| RDTH215C | Sectional Anatomy and Pathology | 3 | 0.00 | 3.00 |
| RDTH220C | Radiation Therapy Physics | 3 | 0.00 | 3.00 |
| RDTH293C | Clinical Practice IV | 0 | 24.00 | 5.00 |
| | **Subtotal Credits** | **9** | **24** | **14** |

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| RDTH295C | Clinical Practice V | 0 | 23.00 | 5.00 |
| | **Subtotal Credits** | **0** | **23** | **5** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| RDTH280C | Registry Review | 1 | 0.00 | 1.00 |
| RDTH296C | Clinical Practice VI | 0 | 32.00 | 7.00 |
| | **Subtotal Credits** | **1** | **32** | **8** |
| | Total Credits | | 46 | |

**Additional Information**

Accreditation

The NHTI – Concords Community College Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology.

20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312-704-5300
Email: mail@jrcert.org

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| Year 4: 2021 | 8 of 8 -100% |
| Year 5: 2020 | 6 of 6 -100% |
| **Program 5-Year Average** | **35 of 35 - 100%** |

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| **Program Completion Rate** | **Number graduated by number started the program** |
|---|---|
| **Year** | **Results** |
| Year 1: 2024 | 9 of 9–100% |
| **Annual Completion Rate** | **100%** |

Click here to download a PDF of this data.

## Program Learning Outcomes

The mission of the Radiation Therapy Program is to educate and produce highly qualified radiation therapists through an objective-based didactic education and competency-based clinical education. Student growth and professional development will be instilled through the community college system and atmosphere in conjunction with NHTI's Mission Statement.

Students/graduates will be clinically competent.

- Students will demonstrate and recognize appropriate treatment setup factors.

- Students will practice radiation protection.
- Students will be exposed to a variety of alternate treatment setups.

Students/graduates will communicate effectively.

- Students will articulate the treatment setup procedure with the patient.
- Students will practice effective oral skills with the radiation therapy community.

Students/graduates will use critical thinking.

- Students will create a reproducible patient position in simulation.
- Students will demonstrate competence when setting up an IMRT treatment.

Students will demonstrate professionalism.

- Students will examine the importance of continued professional development.
- Students will demonstrate ethics/professional behavior when interacting with both patients and the healthcare team.

# Radiologic Technology

**Degree Type**
Associate of Science

NHTI's Radiologic Technology degree program provides you with the knowledge and clinical skills to function as a radiographer using ionizing radiation to produce diagnostic images, which are interpreted by specialized physicians to detect disease or injury. You are placed in a variety of clinical settings to develop your clinical skills and knowledge. You gain competence in properly using x-ray equipment, positioning the patient, selecting technical factors, and practicing safely, providing optimal patient care in various settings such as hospitals, clinics, ERs, and ORs. You're taught to use prudent judgement and effective communication to care for patients and collaborate with patients and all members of the healthcare team.

Students who take courses designated as MC as part of their degree program can graduate with both an associate degree and a Mindful Communication certificate.

**Do you have questions?** Contact Kate Marcouillier, program coordinator, at kmarcouillier@ccsnh.edu. The department chair for this program is Amy VonKadich, who can be reached at avonkadich@ccsnh.edu.

## Career Information

Graduates are eligible to take the national certification exam administered by the American Registry of Radiologic Technologists (ARRT) and find employment in hospitals and private clinics.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

Preference will be given to applicants whose applications are complete (with the exception of the interview) and received by the Admissions Office by the deadline.

**Admissions Deadline: December 15, 2025 for the Summer 2026 semester**

- High school or college Biology with lab and Chemistry with lab, both with C or higher
- College prep Algebra I with a C or higher, or NHTI's MATH092C with a C or higher
- Personal interview, arranged by the Admissions Office once file is complete
- Must be at least 18 years of age prior to start of clinical rotations

Admission to the Radiologic Technology program is competitive. Selection is determined by a cumulative point system based on the high school prerequisite courses and grades, and college courses and grades, in addition to the interview. The best qualified candidates will be invited to interview; interviews are limited to approximately double program capacity.

Students who wish to enter this program and are currently enrolled in General Studies or another NHTI program must complete the Change of Program form prior to the application deadline and submit it to the Admissions Office at NHTIadmissions@ccsnh.edu.

## Curriculum

### First Year

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| RADT103C | Radiographic Positioning I | 1 | 2.00 | 2.00 |
| RADT109C | Introduction to Healthcare in Radiologic Technology | 1 | 0.00 | 1.00 |
| RADT180C | Radiographic Physics | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **9** | **2** | **10** |

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL195C | Anatomy and Physiology I | 3 | 2.00 | 4.00 |
| RADT116C | Radiographic Imaging Technology I | 2 | 2.00 | 3.00 |
| RADT151MC | Patient Care | 2 | 0.00 | 2.00 |
| RADT159C | Radiographic Positioning II and Clinical Procedures I | 3 | 26.00 | 9.00 |
| | **Subtotal Credits** | **10** | **30** | **18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL196C | Anatomy and Physiology II | 3 | 2.00 | 4.00 |
| RADT164C | Radiographic Positioning III and Clinical Procedures II | 3 | 26.00 | 9.00 |
| RADT220C | Digital Processing and Computerized Tomography | 2 | 2.00 | 3.00 |
| | **Subtotal Credits** | **8** | **30** | **16** |

**Second Year**

Summer Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| RADT165C | Radiographic Clinical Procedures III | 0 | 23.00 | 5.00 |
| RADT203C | Advanced Radiographic Procedures | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **7** | **23** | **12** |

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| PSYC105MC | Introduction to Psychology: Mindful | 3 | | 3.00 |
| RADT123C | Radiation Protection | 3 | 0.00 | 3.00 |
| RADT294C | Radiographic Clinical Procedures IV | 0 | 16.00 | 4.00 |
| | **Subtotal Credits** | **9** | **16** | **13** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| RADT209C | Pathology and Cross-Sectional Anatomy | 3 | 0.00 | 3.00 |
| RADT295C | Radiographic Clinical Procedures V | 0 | 16.00 | 4.00 |
| | **Subtotal Credits** | **6** | **16** | **10** |
| Total Credits | | | 79 | |

**Additional Information**

Accreditation

The NHTI – Concords Community College Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology.

20 North Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312-704-5300
Email: mail@jrcert.org

The program's current award is 5 years. General program accreditation information and the current accreditation award letter can be found **here**.

View our Policies and Procedures Manual.

Clinical Rotations and Obligations

The clinical coordinator will assign students two clinical sites: one for the first-year for Fall, Spring, and first half of senior Summer semester; and a second for the remainder of their education. Clinical hours are day time only and do not include nights/weekends.

Each student is required to provide their own transportation to and from the clinic. Students may be required to drive long distances to accommodate their clinic scheduling. Students must complete all orientation processes as assigned by their respective hospitals and are responsible for all costs. This includes health requirements for allied health clinical clearance, criminal background check, and drug and alcohol testing.

- **Criminal background checks are required prior to attending clinical placement and again prior to the second year. Checks are completed** through NHTI's approved vendor. Background checks from previous employers or other vendors are not accepted. No student is exempt. Students will be instructed as to when these checks are to be completed.
- **Complete drug and alcohol testing** may be required by the clinical site. These tests are completed through NHTI's approved vendor. Students will be instructed as to when these tests are to be completed

NHTI maintains a list of hospitals that have, through formal affiliation agreements, agreed to act as the clinical agencies through which NHTI students in this program complete the required clinical education. These agencies must also be approved by JRCERT. It is for this reason that only these hospitals may be used in conjunction with the Radiologic Technology program. Click here for a list of approved clinical sites.

The semester clinical grade comprises multiple assessment tools as listed in the course syllabus. A student must receive a 80 or greater for the clinical component to pass the course. If a student does not complete the requirements, they will be issued a no pass (NP). If a student is dismissed from the clinical semester because of performance or behavioral issues, they will be issued an AF. Any student receiving a failing grade in a clinical course will be dismissed from the program and is not eligible to reapply. Clinical practice is the essence of the profession and a failure in the clinical environment indicates that the student is not competent to continue in the program.

Essential Student Functions and Requirements

Essential functions have been established as a guidance tool for use in realistically informing the student of the minimum standards needed to satisfactorily function in the program and, ultimately, the profession. Applicants who feel they may not meet one or more of the essential functions listed below should contact program officials to discuss. If any of the below essential functions pose an issue, both a licensed physician directly caring for the student and NHTI Health Services clearance are necessary for participation in the clinic.

The student must have sufficient strength and motor coordination required to perform the following physical activities:

- Standing and walking constantly during the clinical day to accomplish tasks. Days can be up to 10 hours.
- Frequent reaching and manual dexterity in handling accessory equipment for diagnostic imaging purposes including typing on computer terminals
- Frequent bending and twisting
- Frequent overhead reaching, above shoulder level, to utilize radiologic equipment
- Ability to lift up to 50 pounds with frequent lifting/and or carrying objects up to 25 pounds
- Sufficient upper and lower body strength to assist patients; including transfer of patients from a wheelchair or stretcher to and from a chair or examination table. Patient transfer requires the ability to push/pull up to 200 (equipment and or patient).
- Manual dexterity to manipulate diagnostic imaging equipment, patient care equipment and computers frequently.

In addition, the student must have:

- No medical restrictions concerning the operation of diagnostic imaging equipment
- Sufficient hearing to distinguish different audio signals from equipment as well as assess patient needs
- Sufficient eyesight to observe patients, manipulate equipment and evaluate radiographic quality. Visual acuity sufficient to work with analyzing data and figures, small print, working with computer terminals, extensive reading, visual inspection involving small defects, small parts, and operation of machines. Vision must be maintained within dim lighting.
- Sufficient writing skills to communicate needs promptly and effectively. Ability to express or exchange ideas by means of the spoken word. Primary function includes activities in which the student must convey detailed or important spoken instructions to patients, physicians, families, and other employees, accurately, loudly or quickly.
- Ability to work with frequent interruptions and respond appropriately to unexpected situations
- Ability to work with wide variations in workload and stress levels
- Approval of the clinical facility if there is any question of meeting essential functions

### Mindful Communication Options

Students who completed a non-Mindful Communication version of a course at another institution may be waived from the MC version of the courses at NHTI. Students who wish to opt-out of the Mindful Communication coursework may contact the department chair.

### Program Learning Outcomes

The Radiologic Technology Program provides the highest standards of theoretical and clinical experiences for our students.

Students will be clinically competent.

- Students will obtain diagnostic quality images.
- Students will practice effective patient care including radiation safety.

Students will communicate effectively.

- Students will practice effective oral communication skills.
- Students will use clear and concise written communication.

Students will demonstrate critical thinking.

- Students will make corrections for positioning and/or technique.
- Students will adapt to new procedures and situations.

Students will demonstrate professionalism.

- Students will be respectful and tactful in all interactions
- Students will display ethical behavior when interacting with patients and all members of the healthcare team.

# Hospitality and Tourism Management

**Degree Type**
Associate of Science

NHTI's Hospitality and Tourism Management degree program offers you the opportunity to specialize in digital communications, event/conference management, hotel administration, travel and tourism, and wedding planning management. The hospitality and tourism industry is seeing significant growth N.H. Courses are offered during the day and evening. This program can be completed entirely online!

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

## Career Information

Students who complete this program can enter careers in hotels, conference centers, wedding planning, sales and marketing, guest services, tourism associations, travel agencies, airlines, and attractions.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- College preparatory course (or equivalent) in English and/or Communications
- Good verbal abilities and writing skills
- Computer keyboarding skills

All degree programs at NHTI require successful completion of at least one semester of college-level math. We recommend all applicants complete high school Algebra I with a C or higher prior to admission.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| HSTM101C | Introduction to the Hospitality and Tourism Industry | 3 | 0.00 | 3.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| DCOM105C | Digital Communications | 3 | 0.00 | 3.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **17** | **0** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| GEOG110C | Introduction to Cultural Geography | 3 | 0.00 | 3.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| HSTM205C | Quality Service Management | 3 | 0.00 | 3.00 |
| | Hospitality and Tourism Management/ Digital Communications elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15-16** | **0** | **15-16** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| HSTM245C | Event, Meeting, and Convention Planning | 3 | 0.00 | 3.00 |
| ACCT102C | Accounting and Financial Reporting II | 3 | 0.00 | 3.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | Hospitality and Tourism Management/ Digital Communications elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15** | **0** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS270C | Principles of Management | 3 | 0.00 | 3.00 |
| HSTM280C | Senior Travel Seminar | 3 | 0.00 | 3.00 |
| BUS273C | Human Resource Management | 3 | 0.00 | 3.00 |
| | Science elective | 3 | 0.00 | 3-4 |
| | Hospitality and Tourism Management/ Digital Communications elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15-16** | **0-2** | **15-16** |
| | Total Credits | | 62-64 | |

**Additional Information**

Accreditation

The A.S. in Hospitality and Tourism Management degree program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Health, Character, and Technical Standards

Technical standards provide guidance as to skills and abilities required to function successfully in this program and profession. Students must demonstrate:

- The ability to act in a professional manner on field trips or at internship locations
- Sufficient vision, hearing, and verbal abilities to express, interpret, and exchange information and ideas

- The ability to work with frequent interruptions, respond appropriately to unexpected situations, and cope with variations in workload and stress levels

Although not a technical standard for entry, some positions require the physical ability to stand for long periods and lift up to 70 pounds.

### Internship

Students can earn course credit while building industry experience by working with a faculty member to find an internship based on their desired specialization. While working at the internship site, they learn necessary skills to become a successful member of the N.H. hospitality industry. Here are some example internships:

- American Automobile Association (AAA)
- Comfort Inn
- Courtyard by Marriot
- Lakes Region Association
- Omni Mount Washington
- State of N.H. Department of Tourism
- Yellowstone National Park
- Walt Disney World

### Program Learning Outcomes

Upon completion of the program, graduates are able to:

- Apply logical, critical, ethical, and creative processes and information to identify problems, evaluate alternative solutions, and make decisions.
- Apply mathematical concepts and skills to interpret, understand, and communicate quantitative data.
- Effectively search for and obtain appropriate information through both traditional and electronic media, evaluate alternative solutions, and make decisions.
- Demonstrate an understanding and appropriate application of computer technology.
- Demonstrate effective use of individual and team workplace skills.
- Appropriately integrate and apply the fundamental principles and methods of scientific inquiry, social sciences, and arts and humanities.
- Identify and evaluate ethical issues and conflicts, and recognize the responsibility of the individual.
- Understand the individual business disciplines and their relationship to the world of business, and realize the importance of and understand the U.S. economic and legal system.

### Student Success Data

| | |
|---|---|
| **Retention – A.S. Hospitality & Tourism Management** | |
| 2023 | 44.4% |
| 2022 | 66.7% |
| 2021 | 54.5% |
| 2020 | 62.5% |
| 2019 | 53.3% |
| **Retention – A.S. Hospitality & Tourism Management (Online)** | |
| 2023 | 28.6% |
| 2022 | 66.7% |
| 2021 | 83.3% |
| 2020 | 66.7% |
| 2019 | 50.0% |
| **All Graduates - A.S. Hospitality & Tourism Management** | |
| 2024 | 3 |
| 2023 | 2 |
| 2022 | 5 |
| 2021 | 5 |
| 2020 | 6 |
| 2019 | 4 |

## Event/Conference Management

**Degree Type**

Certificate

This program is not currently accepting new students.

NHTI's Event and Conference Management certificate program gives you an understanding of the hospitality industry and instructs you how to plan and organize conferences and events. You'll gain skills in meeting software, web applications, and social media. Courses transfer into NHTI's Associate in Science in Hospitality and Tourism Management. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

## Career Information

Students in this program acquire the skills needed to work at a hotel, conference center, sports arena, or corporate organization as their program or events coordinator.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

Students are expected to possess a working knowledge of software applications including word processing, spreadsheets, and presentation software, or to have successfully completed NHTI's IST 102C (PC Applications) or comparable course. Students must maintain Internet access, including a professional working email address, throughout their participation in this program.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| BUS225C | Business Law I | 3 | 0.00 | 3.00 |
| DCOM105C | Digital Communications | 3 | 0.00 | 3.00 |
| HSTM101C | Introduction to the Hospitality and Tourism Industry | 3 | 0.00 | 3.00 |
| HSTM205C | Quality Service Management | 3 | 0.00 | 3.00 |
| HSTM245C | Event, Meeting, and Convention Planning | 3 | 0.00 | 3.00 |
| HSTM269C | Food and Beverage Management | 3 | 0.00 | 3.00 |
| Total Credits | | | 21 | |

### Additional Information

Health, Character, and Technical Standards

Technical standards provide guidance as to skills and abilities required to function successfully in this program and profession. Students must demonstrate:

- The ability to act in a professional manner on field trips or at internship locations
- Sufficient vision, hearing, and verbal abilities to express, interpret, and exchange information and ideas
- The ability to work with frequent interruptions, respond appropriately to unexpected situations, and cope with variations in workload and stress levels

Although not a technical standard for entry, some positions require the physical ability to stand for long periods and lift up to 70 pounds.

Program Learning Outcomes

Upon completion of the program, graduates will be able to:

- Design an event from conception to implementation.
- Create measurable event objectives that include timelines, budgets, and program design.
- Review event venues including convention centers, hotels, meeting facilities, and/or civic centers.

- Design program schedule.
- Create an event catering food and beverage plan.
- Complete a risk management plan: parking, security, safety, ADA, etc.
- Design a marketing plan including social media options.

## Hotel Administration

**Degree Type**
Certificate

### This program is not currently accepting new students.

NHTI's Hotel Administration certificate program prepares you for an entry-level position in the hotel industry. You'll explore positions and responsibilities as they relate to the size and needs of hotels, inns, lodges, and resorts. Courses transfer into NHTI's Associate in Science in Hospitality and Tourism Management degree program. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| HSTM101C | Introduction to the Hospitality and Tourism Industry | 3 | 0.00 | 3.00 |
| HSTM110C | Introduction to Hotel Operations | 3 | 0.00 | 3.00 |
| HSTM205C | Quality Service Management | 3 | 0.00 | 3.00 |
| HSTM225C | Front Office Operations | 3 | 0.00 | 3.00 |
| HSTM245C | Event, Meeting, and Convention Planning | 3 | 0.00 | 3.00 |
| HSTM269C | Food and Beverage Management | 3 | 0.00 | 3.00 |
| BUS273C | Human Resource Management | 3 | 0.00 | 3.00 |
| Total Credits | | | 21 | |

**Additional Information**

Health, Character, and Technical Standards

Technical standards provide guidance as to skills and abilities required to function successfully in this program and profession. Students must demonstrate:

- The ability to act in a professional manner on field trips or at internship locations
- Sufficient vision, hearing, and verbal abilities to express, interpret, and exchange information and ideas
- The ability to work with frequent interruptions, respond appropriately to unexpected situations, and cope with variations in workload and stress levels

Although not a technical standard for entry, some positions require the physical ability to stand for long periods and lift up to 70 pounds.

## Travel and Tourism

**Degree Type**
Certificate

## This program is not currently accepting new students.

NHTI's Travel and Tourism certificate program has a travel counselor/agent focus. Emphasis is placed on geography, cruise and tour, ecotourism, digital marketing, and sales. Courses transfer into NHTI's Associate in Science in Hospitality and Tourism Management Program. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DCOM105C | Digital Communications | 3 | 0.00 | 3.00 |
| GEOG110C | Introduction to Cultural Geography | 3 | 0.00 | 3.00 |
| HSTM101C | Introduction to the Hospitality and Tourism Industry | 3 | 0.00 | 3.00 |
| HSTM205C | Quality Service Management | 3 | 0.00 | 3.00 |
| HSTM230AC | Writing for the Travel Professional | 3 | 0.00 | 3.00 |
| HSTM260C | Hospitality Sales and Marketing | 3 | 0.00 | 3.00 |
| HSTM263C | Tour Planning and Cruise Sales | 3 | 0.00 | 3.00 |
| Total Credits | | | 21 | |

**Additional Information**

Health, Character, and Technical Standards

Technical standards provide guidance as to skills and abilities required to function successfully in this program and profession. Students must demonstrate:

- The ability to act in a professional manner on field trips or at internship locations
- Sufficient vision, hearing, and verbal abilities to express, interpret, and exchange information and ideas
- The ability to work with frequent interruptions, respond appropriately to unexpected situations, and cope with variations in workload and stress levels

Although not a technical standard for entry, some positions require the physical ability to stand for long periods and lift up to 70 pounds.

## Wedding Planning

**Degree Type**
Certificate

## This program is not currently accepting new students.

NHTI's Wedding Planning certificate program instructs you on the fundamentals of wedding planning and develop the ability to create and organize exceptional weddings and parties. You'll learn the essential role of the wedding planner, the elements of a successful wedding event, and the critical skills needed for a successful career as a wedding planner. Courses in this program will transfer into the Associate in Science in Hospitality and Tourism Management degree program. This program is financial-aid eligible. This program is available 100% online.

**Do you have questions?** The department chair for this program is Deborah Remillard who can be reached at dremillard@ccsnh.edu.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

Students matriculating into this certificate program are expected to possess a working knowledge of software applications including word processing, spreadsheet, and presentation software, or to have successfully completed NHTI's IST 102C (PC Applications) or comparable course. Students must maintain Internet access, including a professional working email address, throughout their participation in this program.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| DCOM105C | Digital Communications | 3 | 0.00 | 3.00 |
| HSTM101C | Introduction to the Hospitality and Tourism Industry | 3 | 0.00 | 3.00 |
| HSTM110C | Introduction to Hotel Operations | 3 | 0.00 | 3.00 |
| HSTM205C | Quality Service Management | 3 | 0.00 | 3.00 |
| HSTM247C | Principles of Wedding Planner Management | 3 | 0.00 | 3.00 |
| HSTM260C | Hospitality Sales and Marketing | 3 | 0.00 | 3.00 |
| HSTM270C | Catering Operations | 3 | 0.00 | 3.00 |
| Total Credits | | | 21 | |

**Additional Information**

Health, Character, and Technical Standards

Technical standards have been established to provide guidance to students regarding skills and abilities required to function successfully in the Hospitality and Tourism Management program and ultimately in the hospitality/tourism profession. Students must demonstrate:

- The ability to act in a professional manner on field trips or at internship locations
- Sufficient vision, hearing, and verbal abilities to express and exchange information and ideas, as well as to interpret important instructions in the classroom or at internship locations
- The ability to work with frequent interruptions, respond appropriately to unexpected situations, and cope with extreme variations in workload and stress levels

Although not a technical standard for admission, applicants should be aware that some positions may require the physical ability to stand for long periods and to lift up to 70 lbs.

Program Learning Outcomes

Upon completion of this certificate program, students will be able to:

- Describe the role of the wedding planner in organizing and coordinating a wedding and describe the elements of professionalism, creativity, and expertise required to achieve success as a wedding planner.
- Describe the origins of the most common customs, rituals, and traditions used in wedding ceremonies and explain the factors that engaged couples typically consider when determining the style and size of their wedding.
- Identify the events associated with weddings, including parties, showers, and the wedding reception and the processes that must be followed to successfully schedule and manage these events.
- Explain the responsibilities associated with planning and organizing a wedding including vendor selection and contracting and the identification and selection of appropriate wedding attire for all members of the wedding party.
- Describe the critical business considerations of running a wedding planning business such as financial planning and management, legal concerns, record keeping, marketing, and technical aspects and outline typical fee structures used by wedding planning businesses.

# Social, Educational, and Behavioral Sciences

## Addiction Counseling

**Degree Type**
Associate of Science

NHTI's Addiction Counseling degree provides you with the education and training required for a career in the substance use disorder treatment (SUD Tx) profession and to become licensed in alcohol and drug counseling in N.H.

You'll acquire a broad understanding of SUD Tx to include an interdisciplinary knowledge base and the skills required to be an addiction counselor: critical thinking, complex reasoning, communication, being a team member, engaging in human interaction, applying content knowledge, lifelong learning, ongoing professional development, and personal growth. You'll be prepared to assist individuals and families coping with the effects of substance use. Graduates are trained to support prevention, addiction treatment, and recovery efforts in a variety of settings. Program-specific courses are taught by instructors with practical experience.

We offer three options that can lead to employment on the way to degree completion and employer demands:

- **SUD Tx Certificate:**The 6-course, 19-credit SUD Tx certificate includes five courses embedded in the Addiction Counseling degree.
- **Certified Recovery Support Worker (CRSW) course:** The ADCL 230C course provides the education required in N.H. for eventual credentialing as a CRSW.
- **Mindful Communications Certificate:** This includes four courses that teach skills to improve focus, attention, and mood, and reduce stress. They are embedded in the Addiction Counseling degree.

This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** The department chair for this program is Kelly Luedtke, who can be reached at kluedtke@ccsnh.edu or 603-271-6484 x4174. You can also request more info here!

### Career Information

Substance use disorder treatment and specifically addiction counseling are professions seeking qualified workers now. NHTI provides the education and training employers need and want. Students who complete this program can enter the following professions (not an inclusive list):

- Addiction counseling
- SUD Tx
- Recovery support
- Residential/intake worker
- Case management

The AS in Addiction Counseling degree may serve as a stepping stone to a career in the SUD Tx profession and/or to a 4-year degree in addiction counseling, psychology, mental health, social work, or related majors.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants may be required to have a personal interview with a department faculty member.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL120C | Survey of Addictive Behaviors and Treatment | 3 | 0.00 | 3.00 |
| ADCL230C | The Four Domains of the Certified Recovery Support Worker | 3 | 0.00 | 3.00 |
| HSV111C | Introduction to Human Service | 3 | 0.00 | 3.00 |
| MHTH187C | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0.00 | 4.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL205C | Fundamentals of Dependency Counseling Skills | 3 | 0.00 | 3.00 |
| ADCL235C | Physiology and Pharmacology of Addiction | 3 | 0.00 | 3.00 |
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| HSV242C | Ethics and the Professional Helper | 3 | 0.00 | 3.00 |
| PSYC283C | Group Counseling | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL296C | Addiction Practicum I | 2 | 8.00 | 4.00 |
| BIOL120C | Human Biology | 3 | 2.00 | 4.00 |
| ENGL120MC | Communication: Mindful | 3 | 0.00 | 3.00 |
| PSYC280C | Individual Counseling: Theory and Practice | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **11** | **10** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL297C | Addiction Practicum II | 2 | 8.00 | 4.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| ENGL102MC | Introduction to Literature: Mindful | 3 | 0.00 | 3.00 |
| COMM294MC | Communicating Mindfully Capstone | 1 | 0.00 | 1.00 |
| | **Subtotal Credits** | **13** | **8** | **15** |
| Total Credits | | | 61 | |

**Additional Information**

Health, Technical, and Character Standards

The college must ensure patients/clients are not placed in jeopardy by students during learning experiences. Therefore, students in practica, service learning, and clinical experiences must demonstrate sufficient emotional stability to withstand the stresses, uncertainties, and changing circumstances that characterize patient/client care responsibilities. The student is expected to have the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships with employees, customers, and/or patients/clients and their families.

Health Considerations

All Human Service majors will receive NHTI health forms, which must be completed with requested health physical exams, and TB testing prior to the start of classes. Each student is required to obtain NHTI liability insurance starting in each academic year. Students will be billed directly. Students are also eligible to purchase health insurance through NHTI for their own health needs.

Character Expectations

- Human Service and Addiction Counseling students work closely with individuals of all ages. Many of the practicum sites and potential employers will perform a background check through the N.H. Department of Safety, police, and potentially the FBI. A student's driving record will be examined and considered prior to acceptance into some practicum and employment opportunities. The student may be called on to pay for the background checks.
- Applicants who have been in difficulty with the law, depending upon the nature of the problem, may not be employable or even eligible for practica. Applicants need to discuss these issues in an interview or meeting so future goals will not be compromised.

Technical Standards

These have been established as guidance tools to inform program applicants of skills and standards necessary for successful completion of the Human Service programs. Any applicant who has concerns or questions regarding the technical standards is encouraged to contact the department chair. Students must be able to demonstrate the ability to:

- Communicate verbally in classes and as a professional in counseling situations
- Use sufficient verbal skills and language to collaborate with a variety of helping professionals in clinical, societal, and professional areas; deliver accurate and required information; and search for information
- Use sufficient writing ability to formulate written assessment, charting notes, reports, etc.
- Sustain cognitive integrity in areas of short- and long-term memory, written documentation, and follow-through of responsibilities
- Concentrate on the execution of treatment plans, assigned skills and tasks, and integration and communication for short and long periods of time
- Work in settings that may lend themselves to frequent interruptions, immediate crisis response, and role responsibility exchange
- Cope with a variety of stressors, including people-place occurrences, and demonstrate safe and required care for individuals and the workplace as a whole

- Secure transportation to practicum sites and classes
- Consistently attend and participate in classes
- Demonstrate and maintain organizational skills, time management, and professional respect and conduct, either at a practicum site or in the community
- Adhere to and practice the Human Service department's ethical guidelines

Sobriety Statement

The Human Service department abides by the accepted national standard that recommends a minimum of two years of sobriety for any prospective trainee in the field of alcohol and other drug-use counseling.

Internships/Practica

Our program provides supervised, hands-on training in the form of two 15-week practica, each 125 hours (~8 hours/week). Site options include SUD Tx facilities in N.H. (residential, IOP, OP, MAT) in a variety of settings and populations (adolescent, adult, families, correctional).

Students will practically apply classroom knowledge and theory while gaining confidence. They will build a solid foundation and a competitive advantage for future success and employment. This foundation also includes the development of soft skills. The practicum experience often leads to full-time entry-level positions.

Program Learning Outcomes

- Practice and engage in the competent, respectful, non-judgmental, supportive, and professional relationships in interactions with individuals in various situations, e.g., academically, one-on-one, groups, therapeutically, as treatment team members, and at a practicum site with clients and staff.
- Understand the facts, concepts, theories, and principles taught in core curriculum courses and how each informs and is related to the knowledge, skills, attitudes, capabilities, interest in life-long learning, professional development, self-care, and socially conscious behavior required of the competent, ethical, and multi-culturally aware substance use disorder professional.
- Identify, analyze, evaluate, and select the appropriate strategies, methods, and tools required for effective communication (verbally, non-verbally, in writing, and on computers and electronic devices) with individuals in a variety of substance use disorder professional contexts and settings.
- Actively listen, process information, ask questions, seek answers, integrate knowledge, search for meaning, and develop ideas and concepts that result in relevant and consequential therapeutic action.
- Understand the importance of developing healthy practices of self-care, self-reflection, increased self-awareness, and personal responsibility, all of which are critical to being a best practices substance use disorder professional and a productive member of society.
- In addition to the above, Addiction Counseling graduates will be able to:
    - Interact with counselors, other professionals, community resources, and a client's collaterals as part of an interdisciplinary treatment team with regard to ongoing client treatment and provision of services.
    - Meet the educational and training requirements required by the state of N.H. for eventual licensure as a licensed alcohol and drug counselor.
    - Apply the 12 core functions and 46 global criteria required of the substance use disorder counselor.

Click here for the full PDF of learning outcomes.

## Substance Use Disorder Treatment (SUD Tx)

**Degree Type**
Certificate

NHTI's Substance Use Disorder Treatment certificate program will provide you the knowledge, skills, and abilities to fulfill the duties and responsibilities required for entry-level employment in the SUD Tx profession. The courses are taught by instructors with practical experience as helping professionals. After you complete the certificate, you can matriculate into NHTI's Addiction Counseling degree program, which includes field/practicum experience. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** The department chair for this program is Kelly Luedtke, who can be reached at kluedtke@ccsnh.edu or 603-271-6484 x4174.

## Career Information

Students who complete this program can enter the certified recovery support worker profession. The SUD Tx Certificate includes training for the CRSW, a certification ideal for individuals starting a career in the addiction profession. To receive the CRSW certification, students must contact the licensing board and meet additional requirements, which include 500 hours of paid or volunteer work and completion of an exam required by the IC&RC.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL120C | Survey of Addictive Behaviors and Treatment | 3 | 0.00 | 3.00 |
| HSV111C | Introduction to Human Service | 3 | 0.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| ADCL230C | The Four Domains of the Certified Recovery Support Worker | 3 | 0.00 | 3.00 |
| MHTH187C | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0.00 | 4.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| Total Credits | | | 19 | |

### Additional Information

Program Learning Outcomes

Students who complete the program are sensitive to diverse populations and have a strong foundation for a lifetime of engaged employment and participation in a profession that urgently needs qualified, trained, and employable individuals. They acquire a broad understanding of the SUD Tx profession, an interdisciplinary knowledgebase, and the skills required to be a best-practices helping professional (critical thinking, complex reasoning, communication, being a team member, engaging in human interaction, applying content knowledge, lifelong learning, ongoing professional development, and personal growth). In addition, graduates are able to:

- Demonstrate an understanding of the basic, entry-level KSAs required to engage in the competent, respectful, non-judgmental, supportive, and professional relationships required of individuals working in the substance use disorder profession in their supervised interactions with individuals in various therapeutic, clinical, and support situations.
- Demonstrate an understanding of the facts, concepts, theories, and principles taught and learned in certificate courses, how each course informs the other, and how each is related to the basic KSAs required of an entry level SUD Tx professional and the importance of lifelong learning, ongoing integration of learning, professional development, self-care, and socially conscious behavior required of the competent, entry-level SUD Tx professional.
- Demonstrate the basic ability to identify, analyze, evaluate, and select the appropriate strategies, methods, and tools required for effective communication (verbally, non-verbally, in writing, on computers and electronic devices) with individuals in entry-level SUD Tx professional contexts and settings.
- Demonstrate the ability to actively listen, process information, ask questions, seek answers, integrate knowledge, search for meaning, and develop ideas and concepts that result in relevant and consequential action when interacting with one's supervisor, co-workers, and clients.
- Demonstrate an understanding of the importance of developing healthy practices of self-care, self-reflection, increased self-awareness, and personal responsibility, all of which are critical to being a best practices SUD Tx professional and a productive member of society.

Click here for the full PDF of learning outcomes.

# Child and Family Studies

**Degree Type**
Associate of Science

NHTI's Child and Family Studies degree program provides you with an integration of theory, research, and practice from multiple disciplines and offers the well-rounded education needed to work with children and families. You will participate in hands-on experiences catered for your career goals. (The practicum courses provide students with the opportunity to work directly with their populations of interest.) This degree provides you with a foundation of course work to pursue continued education in the areas of counseling, social work, public administration, juvenile justice, conflict resolution, or other related disciplines. The degree is offered both in-person and online.

**Do you have questions?** The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

Students who complete this program can enter into the following professions: early childhood educators, family/parent educators, home-visiting service providers, social services caseworkers, early intervention/special education assistants, and service providers for community agencies serving children, youth, and families.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants may be required to have a personal interview with a department faculty member.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE101C | Growth and Development of the Young Child | 3 | 0.00 | 3.00 |
| HSV111C | Introduction to Human Service | 3 | 0.00 | 3.00 |
| MHTH187C | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **0** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| HSV242C | Ethics and the Professional Helper | 3 | 0.00 | 3.00 |
| ECE167C | Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors | 3 | 0.00 | 3.00 |
| PSYC283C | Group Counseling | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE195C | Child and Family Study Practicum I | 2 | 8.00 | 4.00 |
| CRMJ150C | Criminology | 3 | 0.00 | 3.00 |
| ENGL120MC | Communication: Mindful | 3 | 0.00 | 3.00 |
| | Social Science elective - Child and Family Studies | 3 | 0.00 | 3-4 |
| | General elective - Child and Family Studies | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **14-16** | **8** | **16-18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE242C | Child, Family, and Community | 3 | 0.00 | 3.00 |
| | ECE 298C or ECE 283C | 2 | 8.00 | 4 |
| | Lab Science elective - Child and Family Studies | 3 | 2.00 | 4 |
| | Humanities/Fine Arts/Language elective - Child and Family Studies | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **11** | **10** | **14** |
| Total Credits | | | 60-62 | |

**Additional Information**
Child and Family Studies students complete supervised, hands-on training in the form of two 15-week practica, each 125 hours (~ 8 hours/week) as part of their program of study. These experiences offer the opportunity to apply theories and principles to real-world situations. Students in Child and Family Studies must have successfully completed HSV 111C, HSV 242C, MHTH 187C, PSYC 105C, and PYSC 283C, each with a C or higher, and have permission of department chair of Child and Family Studies.

Program Learning Outcomes

The Child and Family Studies Department is a hands-on, project-centered, competency- and evidence-based program that facilitates the growth of leaders preparing to work with children, families, and communities. Graduates are able to:

- Describe the development, roles, and interaction patterns of children, youth, and families within their social systems.
- Describe the contributions of multiple theories or practices to the field of child and family development, both within and across disciplines.
- Demonstrate the ability to synthesize multiple information sources and points of view into a discussion of major child and family development issues.
- Present a project or paper linking knowledge from work, community, or research activities with knowledge acquired in the study of child and family development.
- Identify dimensions of diversity in children, youth, and families and recognize oppressive forces that hinder their positive development.
- Demonstrate professional standards of ethical conduct.

## Criminal Justice

**Degree Type**
Associate of Science

NHTI's Criminal Justice degree program teaches you field basics and the rules of criminal procedure and criminal law. You'll begin to learn about specialty fields from juvenile justice to corrections operations to police-community relations in justice and the community and will be taught by professionals who have spent a significant amount of time as practitioners in the field. This program can be completed entirely online!

**Do you have questions?** The department chair for this program is Michael Raymond who can be reached at mfraymond@ccsnh.edu or 603-271-6484 x4284.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

#### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CRMJ101C | Introduction to Criminal Justice | 3 | 0.00 | 3.00 |
| CRMJ121C | Criminal Procedure | 4 | 0.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **17** | **0** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CRMJ123C | Criminal Law | 4 | 0.00 | 4.00 |
| CRMJ210C | Juvenile Justice Administration | 3 | 0.00 | 3.00 |
| | ENGL 120C/COMM 120C or COMM 125C/ ENGL 125C | 3 | 0.00 | 3 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| SOCI105C | Introduction to Sociology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CRMJ150C | Criminology | 3 | 0.00 | 3.00 |
| CRMJ205C | Police Administration and Operations | 3 | 0.00 | 3.00 |
| CRMJ215C | Corrections Operations | 3 | 0.00 | 3.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| PSYC205C | Crisis Intervention | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **0** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | BIOL 120C or BIOL 159C | 3 | 2.00 | 4 |
| CRMJ225C | Drug Abuse and the Law | 3 | 0.00 | 3.00 |
| CRMJ230C | Justice and the Community | 3 | 0.00 | 3.00 |
| | CRMJ 270C or CRMJ 275C | 3 | 9.00 | 3 |
| | **Subtotal Credits** | **12** | **11** | **13** |
| Total Credits | | | 62 | |

**Additional Information**

Character Expectations

Background checks are completed by potential employers prior to obtaining any position with arrest or detention powers and typically before being accepted for an internship. Applicants who have been in difficulty with the law may not be employable or eligible for an internship. Because future goals may be compromised, applicants are advised to discuss any concerns with the department chair.

Internship Sites

- CASA of New Hampshire
- DCYF Juvenile Services
- Merrimack County Attorney's Office
- Merrimack County Juvenile Diversion
- N.H. Department of Corrections
- N.H. Division of Children Youth and Families
- N.H. Fish and Game Department
- N.H. Prison for Women

- N.H. Public Defender's Office
- N.H. State Police
- N.H. State Prison for Women
- N.H. State Prison Volunteers
- U.S. Probation Office
- Victims Inc.

Program Learning Outcomes

Upon completion of the program, students will be able to:

- Evaluate theoretical frameworks and application of decision-making in criminal justice.
- Critique police and community interactions and predict response/reactions.
- Deconstruct approaches to substance abuse enforcements.
- Discuss specialized fields within the criminal justice system.

## Early Care and Education for Young Children with Disabilities

**Degree Type**
Associate of Science

NHTI's Early Care and Education for Young Children with Disabilities degree program prepares you to work in the growing profession of early intervention and early childhood special education. You'll learn how to improve learning outcomes and promote optimal development of young children who have or are at risk for developmental delays or disabilities.

This program provides learning opportunities that emphasize best practices in supporting children's access to and participation in inclusive settings and natural learning environments. You'll be involved in immediate, hands-on training in a variety of settings in preschool special education and early intervention and work with highly trained early childhood teachers and professionals, practice the skills you learn in class, and complete assignments directly related to your studies.

**Do you have questions?** The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

Graduates are prepared for immediate entry as competent professionals to work in a variety of early childhood settings, including family-centered early supports and services in public schools, licensed child care centers, and home-based, community-based, and private settings. Some roles in these settings could include intake coordinator, autism educational assistant, home visitor, lead teacher in childcare, and 1-1 support aide/ paraprofessional. Students wishing to pursue other opportunities in early intervention or early childhood special education may further their education at a four-year college/university. This degree meets the training and education requirements for the State of N.H. Early Childhood Professional Development System credential of NH Early Childhood Educator II.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

**First Year**

Students whose placement test scores suggest difficulty with lengthy and complex assignments are strongly advised to complete the program in 3 or more years.

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE101C | Growth and Development of the Young Child | 3 | 0.00 | 3.00 |
| ECE155C | Using Children's Literature to Support Young Children's Language and Literacy Development | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **0** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ASL104C | American Sign Language for Beginners | 3 | 0.00 | 3.00 |
| ECE143C | Teaching and Learning - STEAM | 3 | 0.00 | 3.00 |
| ECE167C | Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors | 3 | 0.00 | 3.00 |
| ECE270C | Teaching Young Children with Exceptionalities | 3 | 0.00 | 3.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **15** | **0** | **15** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE225C | Autism Spectrum Disorder | 3 | 0.00 | 3.00 |
| ECE282C | Preschool Special Education Practicum | 2 | 7.00 | 4.00 |
| | ENGL120MC or ENGL 102C or ENGL102MC | 3 | 0.00 | 3 |
| | EDU201C or EDU204C | 3 | 0.00 | 3-4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **14-15** | **7** | **16-17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE215C | Infant/Toddler Development and Programming | 3 | 0.00 | 3.00 |
| ECE242C | Child, Family, and Community | 3 | 0.00 | 3.00 |
| ECE283C | Early Intervention Practicum | 2 | 7.00 | 4.00 |
| ECE290C | Early Childhood Leadership Seminar | 1 | 0.00 | 1.00 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | **Subtotal Credits** | **12** | **9** | **15** |
| Total Credits | | | 60-61 | |

**Additional Information**

Program Learning Outcomes

The Child and Family Studies program is hands-on, project-centered, and competency and evidence-based to facilitate the growth of future teachers and leaders preparing to work with children, families, and communities. Graduates are able to:

- Understand young children's characteristics and needs to create environments that are healthy, respectful, supportive, and challenging for each child.
- Understand and value the importance of creating respectful, reciprocal relationships to support and empower families in their communities.
- Responsibly observe, document, and assess children in a manner that supports children and families.
- Understand developmentally effective approaches that emphasize positive relationships and supportive interactions to influence outcomes for individual children.
- Design, implement, and evaluate learning experiences that promote a wide range of academic disciplines to build meaningful curriculum.
- Identify and connect themselves as members of the early childhood profession.
- Demonstrate a variety of early childhood field experiences.
- Demonstrate a basic understanding of relevant professional, legal, and regulatory guidelines for serving every child.
- Participate in early intervention and special needs interdisciplinary and transdisciplinary teams.
- Implement interventions for young children with ASD and children with disabilities across all developmental domains.

Program-Specific Requirements

- Students will spend designated hours each week with infants, toddlers, preschoolers, or kindergarteners while taking early childhood courses. These hours will be considered a component of class participation.
- Upon acceptance into the program, students must complete the following paperwork:
    - A complete set of electronic fingerprints completed by the Department of Safety
    - Submission of a criminal record check that comes back clear or non-disqualifying; the cost associated with the fingerprinting and criminal record check is the responsibility of the student.
    - Completion of the licensing child care personnel health form by a licensed health provider indicating the student is in good physical health and has no mental or emotional disturbances that would prohibit him/her from caring for children in a group setting
    - Signed confidentiality form
    - Other related documents distributed by the department chair
- Out-of-state students who are taking classes 100% online will need to complete their state's fingerprinting and background check, child health care form, and any other paperwork required by that state.
- Students must have transportation to and from NHTI approved practicum sites in their senior year.
- Students must have a flexible schedule that allows them to spend weekday mornings and/or afternoons at their practicum site while taking classes. Students should be prepared to plan work hours around their course schedule knowing that these hours will change each semester.

- All students must have access to a digital camera and video-capturing device to complete assignments. Online students will record themselves during practicum to share with their practicum teachers online.

Scholarship Program

CCSNH provides ECE Tuition Assistance to offset educational expenses as students' complete certificates or degrees. Contact Diana Menard, department chair of Child and Family Studies, at 603-271-6484 x4281 or dmenard@ccsnh.edu for more information. You can also visit the CCSNH page on early childhood education tuition assistance here.

There is also a scholarship available for this program through TEACH NH. The TEACH NH Scholarship Program supports the cost of tuition and books, offers paid release time from work for scholarship recipients, and has a bonus upon completing 9-12 credits within a 12-month period. To be eligible, applicants must live in NH and work at least 30 hours a week in a licensed childcare program.

Student Testimonials

*I first chose NHTI's early childhood program for children with disabilities because it specifically worked with my desired age group and focus of children with exceptionalities. I quickly fell in love with my classes, the individual support I received from my teachers, and the opportunity to not only observe but eventually work at the lab school on campus. NHTI allowed me to have a full rounded experience through my studies in a classroom and in the field. I later attended a four-year university and felt more than prepared to complete my bachelor's degree. I recommend NHTI to anyone that I talk to looking to pursue their degree in early childhood education.*

– Emma Heath, graduate of the program

## Early Childhood Education

**Degree Type**
Associate of Science

NHTI's Early Childhood Education degree program prepares you to be an active researcher of children and how they learn. You'll learn to support families as each child's first educator, make connections between theory and practice, and discover why this profession is the "backbone" of our workforce. You'll be involved in immediate, hands-on training and provided opportunities to work beside highly trained early childhood teachers, practice the skills you learn, and complete assignments directly related to your studies.

This program is available 100% online.

**Do you have questions?** Contact Shaunna Babcock, program coordinator, at sbabcock@ccsnh.edu. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

Graduates are prepared for immediate entry into the field of early childhood education as teachers in N.H.-licensed or NAEYC-accredited child care centers, Head Start or Early Head Start programs, family child care, and elementary schools as para-educators. Graduates may further their education at a four-year college for pre-K–grade 3 teacher certification or in other areas of the early childhood field. This degree meets the training and education requirements for the State of N.H. Early Childhood Professional Development System credential of NH Early Childhood Educator II.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways built just for you!

**Key Assessment Transfer Policy**

To maintain the integrity of our ECE associate degree academic program and ensure compliance with accreditation standards, the following policy applies to all students seeking to transfer courses into our ECE associate degree program, accredited by the **National Association for the Education of Young Children (NAEYC)**:

**Completion of Key Assessment**
Students must successfully complete the designated **Key Assessment** associated with a course before the end of

their program of study in order for that course to be eligible for transfer. Courses that include a Key Assessment are essential components of NAEYC accreditation and therefore cannot be transferred without evidence of completed assessment requirements.

Scholarship Program

CCSNH provides ECE Tuition Assistance to offset educational expenses as students' complete certificates or degrees. Contact Diana Menard, department chair of Child and Family Studies, at 603-271-6484 x4281 or dmenard@ccsnh.edu for more information. You can also visit the CCSNH page on early childhood education tuition assistance here.

There is also a scholarship available for this program through TEACH NH. The TEACH NH Scholarship Program supports the cost of tuition and books, offers paid release time from work for scholarship recipients, and has a bonus upon completing 9-12 credits within a 12-month period. To be eligible, applicants must live in N.H. and work at least 30 hours a week in a licensed childcare program.

## Curriculum

### First Year

Students whose placement test scores suggest difficulty with lengthy and complex assignments are strongly advised to complete the program in 3 or more years.

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE101C | Growth and Development of the Young Child | 3 | 0.00 | 3.00 |
| ECE188C | Health, Safety, and Nutrition in Early Childhood Education | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **0** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE143C | Teaching and Learning - STEAM | 3 | 0.00 | 3.00 |
| ECE167C | Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors | 3 | 0.00 | 3.00 |
| ECE215C | Infant/Toddler Development and Programming | 3 | 0.00 | 3.00 |
| | ENGL120MC or ENGL 102C or ENGL102MC | 3 | 0.00 | 3 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **15** | **0** | **15** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE155C | Using Children's Literature to Support Young Children's Language and Literacy Development | 3 | 0.00 | 3.00 |
| ECE275C | Practicum 1 - Observation, Interpretation, Assessment, and Portfolio Documentation | 2 | 7.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **14-15** | **9** | **17-18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE242C | Child, Family, and Community | 3 | 0.00 | 3.00 |
| ECE270C | Teaching Young Children with Exceptionalities | 3 | 0.00 | 3.00 |
| ECE276C | Practicum 2 - Exploring Teaching: Implementing Responsive Emergent Curriculum | 2 | 7.00 | 4.00 |
| ECE290C | Early Childhood Leadership Seminar | 1 | 0.00 | 1.00 |
| | General elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **12-13** | **7** | **14-15** |
| | Total Credits | | 60-62 | |

**Additional Information**
This program offers a sequence of stackable certificates. The entry-level certificate enables students to enter the early childhood profession in as few as three courses with the opportunity to build on their knowledge and skills and advance their career while building credits toward the associate degree.

All early childhood courses, except ECE 290C, require a weekly child care lab component where students actively engage with young children to make connections between theory and practice, carry out class assignments, and learn through observation and active play. Students taking concurrent courses can use the same lab time for all courses. Students completing practicum may use their practicum site as their lab hours for other courses taken concurrent with practicum.

Accreditation

The Associate of Science degree in Early Childhood Education is accredited by the NAEYC Commission on the Accreditation of Early Childhood Higher Education Programs , www.naeyc.org. The accreditation term runs from July 2019 through September 2026.

Mission Statement

The Early Childhood Education program is hands-on, project-centered, competency-based and evidence-informed to facilitate the growth of advocates and leaders who are advancing their work with children, youth, families, and communities.

Program-Specific Requirements

- Students will spend designated hours each week with infants, toddlers, preschoolers, or kindergarteners while taking early childhood courses. These hours will be considered a component of class participation.
- Upon acceptance into the program, students must complete the following paperwork:
  - Submission of a criminal record check that comes back clear or non-disqualifying; the cost associated with the criminal record check is the responsibility of the student.
  - Signed confidentiality form
  - Other related documents distributed by the department chair
- Out-of-state students who are taking classes 100% online will need to complete their state's fingerprinting and background check, child health care form, and any other paperwork required by that state.
- Students must have transportation to and from NHTI approved practicum sites in their senior year.
- Students must have a flexible schedule that allows them to spend weekday mornings and/or afternoons at their practicum site while taking classes. Students should be prepared to plan work hours around their course schedule knowing that these hours will change each semester.
- All students must have access to a digital camera and video-capturing device to complete assignments. Online students will record themselves during practicum to share with their practicum teachers online.

Program Learning Outcomes

Graduates are able to:

- Understand young children's characteristics and needs to create environments that are healthy, respectful, supportive, and challenging for each child.
- Demonstrate that they know about, understand, and value the importance of creating respectful, reciprocal relationships to support and empower families in their communities.
- Responsibly observe, document, and assess children in a manner that supports young children and families.
- Understand developmentally effective approaches which emphasize positive relationships and supportive interactions to influence outcomes for individual children.
- Design, implement, and evaluate learning experiences that promote a wide range of academic disciplines to build meaningful curriculum.
- Identify and connect themselves as members of the early childhood profession.
- Demonstrate a variety of early childhood field experiences.

# Early Childhood Education

**Degree Type**
Certificate

NHTI's Early Childhood Education certificate program helps you meet lead teacher requirements as outlined in N.H.'s Child Care Program Licensing Rules. You'll take six courses that provide a solid foundation to work with young children and their families. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** Contact Shaunna Babcock, program coordinator, at sbabcock@ccsnh.edu. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

This courses in this certificate meet the training and education requirements for the State of N.H. Early Childhood Teacher Credential, Level 4.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE101C | Growth and Development of the Young Child | 3 | 0.00 | 3.00 |
| ECE167C | Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors | 3 | 0.00 | 3.00 |
| ECE188C | Health, Safety, and Nutrition in Early Childhood Education | 3 | 0.00 | 3.00 |
| | Early Childhood Education Certificate elective | | | |
| | Early Childhood Education Certificate elective | | | |
| | Early Childhood Education Certificate elective | | | |
| Total Credits | | | 18-19 | |

**Additional Information**

Program Learning Outcomes

Students who complete this certificate are able to:

- Demonstrate an understanding of young children's characteristics and needs to create environments that are healthy, respectful, supportive, and challenging for each child.
- Demonstrate that they know about, understand, and value the importance of creating respectful, reciprocal relationships to support and empower families in their communities.
- Demonstrate an understanding of developmentally effective approaches which emphasize positive relationships and supportive interactions to influence outcomes for individual children.
- Demonstrate their ability to design, implement, and evaluate learning experiences that promote a wide range of academic disciplines to build meaningful curriculum.

Program-Specific Requirements

- Students will spend designated hours each week with infants, toddlers, preschoolers, or kindergarteners while taking early childhood courses. These hours will be considered a component of class participation. NHTI has an onsite lab school to meet the needs of these required lab hours. All students are expected to use the onsite lab school unless they work full-time in a licensed child care center or are 100% online and live at a distance from the NHTI campus that prohibits in-person attendance.
- Upon acceptance into the program, students must complete the following paperwork:
  - A complete set of electronic fingerprints completed by the Department of Safety
  - Submission of a criminal record check that comes back clear or non-disqualifying; the cost associated with the fingerprinting and criminal record check is the responsibility of the student.
  - Completion of the licensing child care personnel health form by a licensed health provider indicating the student is in good physical health and has no mental or emotional disturbances that would prohibit him/her from caring for children in a group setting
  - Signed confidentiality form
  - Other related documents distributed by the department chair
- Out-of-state students who are taking classes 100% online will need to complete their state's fingerprinting and background check, child health care form, and any other paperwork required by that state.
- Students must have transportation to and from NHTI approved practicum sites in their senior year.
- Students must have a flexible schedule that allows them to spend weekday mornings and/or afternoons at their practicum site while taking classes. Students should be prepared to plan work hours around their course schedule knowing that these hours will change each semester.
- All students must have access to a digital camera and video-capturing device to complete assignments. Online students will record themselves during practicum to share with their practicum teachers online.

Scholarship Program

CCSNH partners with Granite State College to offer tuition assistance to child care providers who are entering or are currently working in the field of early care and education. Eligible individuals must be working at least 20 hours per week. For more information, contact Diana Menard, department chair of Child and Family Studies, at 603-271-6484 x4281 or dmenard@ccsnh.edu. For additional information, visit the CCSNH page on early childhood education tuition assistance here.

There is also a scholarship available for this program through T.E.A.C.H. NH (click here for flyer). The T.E.A.C.H. NH Scholarship Program supports the cost of tuition and books, offers paid release time from work for scholarship recipients, and has a bonus upon completing 9-12 credits within a 12-month period. To be eligible, applicants must live in N.H. and work at least 30 hours a week in a licensed childcare program. Information and applications are available on the N.H. Connections site.

# Early Childhood Education Advanced

**Degree Type**
Certificate

NHTI's Early Childhood Education Advanced certificate program help you further your knowledge in specialized topics such as children with disabilities and infant and toddler developments and allows you to participate in a practicum experience. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** Contact Shaunna Babcock, program coordinator, at sbabcock@ccsnh.edu. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

The courses in the Early Childhood Education Advanced Certificate meet the training and education requirements for the State of NH Early Childhood Teacher Credential, Level 4.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE101C | Growth and Development of the Young Child | 3 | 0.00 | 3.00 |
| ECE167C | Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors | 3 | 0.00 | 3.00 |
| ECE188C | Health, Safety, and Nutrition in Early Childhood Education | 3 | 0.00 | 3.00 |
| | Early Childhood Education elective | | | 3 |
| | Early Childhood Education elective | | | 3 |
| | Early Childhood Education elective | | | 3 |
| | Early Childhood Education elective | | | 3 |
| | Early Childhood Education elective | | | 3 |
| | Total Credits | | 24 | |

### Additional Information

Program Learning Outcomes

Students who complete the program will be able to:

- Understand young children's characteristics and needs to create environments that are healthy, respectful, supportive, and challenging for each child.
- Demonstrate that they know about, understand, and value the importance of creating respectful, reciprocal relationships to support and empower families in their communities.
- Understand developmentally effective approaches which emphasize positive relationships and supportive interactions to influence outcomes for individual children.
- Design, implement, and evaluate learning experiences that promote a wide range of academic disciplines to build meaningful curriculum.
- Responsibly observe, document, and assess children in a manner that supports children and families.
- Implement various interventions for young children with ASD and children with disabilities across all developmental domains.
- Demonstrate a variety of early childhood field experiences.

Program-Specific Requirements

- Students will spend designated hours each week with infants, toddlers, preschoolers, or kindergarteners while taking early childhood courses. These hours will be considered a component of class participation. NHTI has an onsite lab school to meet the needs of these required lab hours. All students are expected to use the onsite lab school unless they work full-time in a licensed child care center or are 100% online and live at a distance from the NHTI campus that prohibits in-person attendance.
- Upon acceptance into the program, students must complete the following paperwork:
  - A complete set of electronic fingerprints completed by the Department of Safety
  - Submission of a criminal record check that comes back clear or non-disqualifying; the cost associated with the fingerprinting and criminal record check is the responsibility of the student.
  - Completion of the licensing child care personnel health form by a licensed health provider indicating the student is in good physical health and has no mental or emotional disturbances that would prohibit him/her from caring for children in a group setting
  - Signed confidentiality form
  - Other related documents distributed by the department chair
- Out-of-state students who are taking classes 100% online will need to complete their state's fingerprinting and background check, child health care form, and any other paperwork required by that state.
- Students must have transportation to and from NHTI approved practicum sites in their senior year.
- Students must have a flexible schedule that allows them to spend weekday mornings and/or afternoons at their practicum site while taking classes. Students should be prepared to plan work hours around their course schedule knowing that these hours will change each semester.
- All students must have access to a digital camera and video-capturing device to complete assignments. Online students will record themselves during practicum to share with their practicum teachers online.

Scholarship Program

CCSNH partners with Granite State College to offer tuition assistance to child care providers who are entering or are currently working in the field of early care and education. Eligible individuals must be working at least 20 hours per week. For more information, contact Diana Menard, department chair of Child and Family Studies, at 603-271-6484 x4281 or dmenard@ccsnh.edu. For additional information, visit the CCSNH page on early childhood education tuition assistance here.

There is also a scholarship available for this program through T.E.A.C.H. NH (click here for flyer). The T.E.A.C.H. NH Scholarship Program supports the cost of tuition and books, offers paid release time from work for scholarship recipients, and has a bonus upon completing 9-12 credits within a 12-month period. To be eligible, applicants must live in N.H. and work at least 30 hours a week in a licensed childcare program. Information and applications are available on the N.H. Connections site.

## Early Childhood Education Entry Level

**Degree Type**

Certificate

NHTI's Early Childhood Education Entry Level certificate program qualifies you to join a workplace as an associate teacher. The Child and Family Studies program at NHTI is hands-on, project-centered, and competency and evidence-based to facilitate the growth of future teachers and leaders preparing to work with children, families, and communities. This program is available 100% online.

**Do you have questions?** Contact Shaunna Babcock, program coordinator, at sbabcock@ccsnh.edu. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

The courses in the Early Childhood Education Entry Level Certificate meet the training and education requirements for the State of NH Early Childhood Teacher Credential, Level 3

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ECE101C | Growth and Development of the Young Child | 3 | 0.00 | 3.00 |
| ECE167C | Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors | 3 | 0.00 | 3.00 |
| ECE188C | Health, Safety, and Nutrition in Early Childhood Education | 3 | 0.00 | 3.00 |
| Total Credits | | | 9 | |

### Additional Information

Program Learning Outcomes

Graduates are able to:

- Understand young children's characteristics and needs to create environments that are healthy, respectful, supportive, and challenging for each child.
- Understand developmentally effective approaches that emphasize positive relationships and supportive interactions to influence outcomes for individual children.
- Design, implement, and evaluate learning experiences that promote a wide range of academic disciplines to build meaningful curriculum.

Program-Specific Requirements

- Students will spend designated hours each week with infants, toddlers, preschoolers, or kindergarteners while taking early childhood courses. These hours will be considered a component of class participation. NHTI has an onsite lab school to meet the needs of these required lab hours. All students are expected to use the onsite lab school unless they work full-time in a licensed child care center or are 100% online and live at a distance from the NHTI campus that prohibits in-person attendance.
- Upon acceptance into the program, students must complete the following paperwork:
  - A complete set of electronic fingerprints completed by the Department of Safety
  - Submission of a criminal record check that comes back clear or non-disqualifying; the cost associated with the fingerprinting and criminal record check is the responsibility of the student.
  - Completion of the licensing child care personnel health form by a licensed health provider indicating the student is in good physical health and has no mental or emotional disturbances that would prohibit him/her from caring for children in a group setting
  - Signed confidentiality form
  - Other related documents distributed by the department chair
- Out-of-state students who are taking classes 100% online will need to complete their state's fingerprinting and background check, child health care form, and any other paperwork required by that state.
- Students must have transportation to and from NHTI approved practicum sites in their senior year.

- Students must have a flexible schedule that allows them to spend weekday mornings and/or afternoons at their practicum site while taking classes. Students should be prepared to plan work hours around their course schedule knowing that these hours will change each semester.
- All students must have access to a digital camera and video-capturing device to complete assignments. Online students will record themselves during practicum to share with their practicum teachers online.

Scholarship Program

CCSNH partners with Granite State College to offer tuition assistance to child care providers who are entering or are currently working in the field of early care and education. Eligible individuals must be working at least 20 hours per week. For more information, contact Diana Menard, department chair of Child and Family Studies, at 603-271-6484 x4281 or dmenard@ccsnh.edu. For additional information, visit the CCSNH page on early childhood education tuition assistance here.

There is also a scholarship available for this program through T.E.A.C.H. NH (click here for flyer). The T.E.A.C.H. NH Scholarship Program supports the cost of tuition and books, offers paid release time from work for scholarship recipients, and has a bonus upon completing 9-12 credits within a 12-month period. To be eligible, applicants must live in N.H. and work at least 30 hours a week in a licensed childcare program. Information and applications are available on the N.H. Connections site.

## Education

**Degree Type**
Associate of Science

NHTI's Education degree program allows you to gain a broad-based teacher education preparation with hands-on practical experiences in the field.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

The NHTI Education degree program prepares students to work in elementary, middle, or secondary schools. Students can pursue related field such as counseling, outdoor education, or community-based programs.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- Strong verbal and written English language skills
- Personal interview with department chair and/or faculty member
- Credit for experiential learning, workshops and/or college courses taken at other institutions is available; students interested in receiving credit must supply appropriate documentation and meet with the director of admissions and the department chair.
- A criminal record check is required of all students before all clinical experiences in the schools.

All associate degree programs at NHTI require successful completion of at least one semester of college-level mathematics. NHTI strongly recommends that all applicants successfully complete high school Algebra I with a C or higher prior to admission. Those students whose placement testing does not demonstrate readiness for college level mathematics may require more than two years to complete their degree.

### Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU101C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| EDU104C | Foundations of Education | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **17** | **0** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU200C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| | EDU 208C or EDU 211C | 3 | 0.00 | 3 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| | General elective | 3 | 0.00 | 3-4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **15-17** | **0** | **15-17** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU201C | Legal and Ethical Issues in Education | 3 | 0.00 | 3.00 |
| EDU203C | Teaching Strategies for Diverse Learners | 3 | 0.00 | 3.00 |
| EDU209C | Curriculum and Assessment | 4 | 0.00 | 4.00 |
| SOCI105C | Introduction to Sociology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **13** | **0** | **13** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU204C | Instructional Technology | 3 | 0.00 | 3.00 |
| EDU210C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| EDU220C | Field Experience in Education | 1 | 6.00 | 3.00 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | General elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **12-13** | **8** | **15-16** |
| | Total Credits | | 60-63 | |

**Additional Information**

You'll be expected to achieve a minimum passing score stipulated by the N.H. Department of Education on the Pearson™ Essentials/PRAXIS™ Core Academic Skills for Educators tests. Those who intend to transfer to a college in the University System of N.H. must achieve a minimum GPA of 2.7 in addition to passing the PRAXIS Core Skills exam. NHTI also has transfer affiliations with Granite State College, New England College, Plymouth State University, Rivier College, and Southern New Hampshire University.

## Health, Character, and Technical Requirements

Candidates are encouraged to explore health requirements associated with employment in a school setting.

### Character Expectations

- The health and safety of children, adolescents, and other learners is of paramount concern. Applicants for teaching positions in public and private schools in N.H. should be aware that background checks through the N.H. Department of Safety must be completed by potential employers prior to employment.
- Applicants who have been in difficulty with the law, depending upon the nature of the problem, may not be employable or even eligible for practica. Applicants need to discuss these issues in an interview or meeting so future goals will not be compromised.

### Technical Standards

These have been established to provide guidance to students about the skills and abilities required to function successfully in public and/or private school classroom as teachers. Applicants who think they may not be able to meet one or more of the technical standards should contact program faculty members. Department faculty will give serious consideration to all academically qualified candidates as long as technical standards can be met with reasonable accommodations. Students in the Education program must have sufficient strength, stamina, and motor coordination to perform the following:

- Hearing and visual acuity to ensure a safe environment and respond quickly in the event of emergency
- Verbal ability to express and exchange information and interpret important instructions
- Writing skills to record students' daily progress and milestones as well as a variety of reports
- Emotional health to work with frequent interruptions, respond appropriately to unexpected situations, and cope with extreme variations in workload and stress levels

## Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.

- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

## Career and Technical Education Alternative Certification

**Degree Type**
Certificate

NHTI's Career and Technical Education Alternative certificate program offers you the knowledge and skills required by the N.H. Department of Education standards for career and technical educator certification. The program allows you to use credits toward an Associate of Science in Education and/or a bachelor's degree. You may have:

- A high school diploma or equivalent and significant experience and would like to earn a credential to teach and college credits toward an associate or bachelor's degree
- Some college courses or an associate degree and significant experience and would like to earn a credential to teach or college credits toward an associate or bachelor's degree
- A bachelor's degree and significant experience and would like to earn a credential to teach

This program is financial aid-eligible.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

Prospective career and technical educators will possess significant life/work experience or academic preparation in a career and technical content area. Career and technical center directors and school districts retain the authority to review the eligibility of all prospective career and technical educators and define any or all of the certificate component courses to be required for credentialing, on an individual basis. These individuals will then be referred to NHTI for course registration and completion.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU101C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| EDU104C | Foundations of Education | 3 | 0.00 | 3.00 |
| EDU204C | Instructional Technology | 3 | 0.00 | 3.00 |
| EDU209C | Curriculum and Assessment | 4 | 0.00 | 4.00 |
| EDU220C | Field Experience in Education | 1 | 6.00 | 3.00 |
| EDU230C | Essentials of Career and Technical Curriculum and Instruction | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| Total Credits | | | 26 | |

**Additional Information**

Accreditation

This program has been developed using the N.H. competencies required for Ed 610.02 Professional Education and Ed 507.02 Teachers of Career and Technical Education.

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.
- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

# ESOL

**Degree Type**
Certificate

NHTI's ESOL certificate program provides you with a strong introduction to ESOL teaching. This program is for:

- Those interested in working in programs that require experience working with ESOL learners
- Para-educators looking to enhance their skills and move toward a certification in ESOL
- Teachers seeking professional development skills related to working with ESOL learners
- People interested in broadening their knowledge, understanding, and appreciation of cultural and linguistic differences, language acquisition, literacy development, and reflective instructional practices
- People interested developing and using instructional and assessment strategies and materials that raise the achievement levels and increase the academic success of ESOL learners

This program is financial aid-eligible.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

This program will prepare students to work in the ESOL community. While the certificate program in ESOL does not directly lead to N.H. licensure in teaching ESOL, those students pursuing licensure may apply coursework toward the Teacher Education Conversion Program in ESOL.

### Admission Requirements

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Interested applicants must hold a bachelor's degree and pass a criminal background check.

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP69C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| TECP73C | Field Experience in Education | 1 | 12.00 | 5.00 |
| TECP86C | Introduction to Linguistics | 3 | 0.00 | 3.00 |
| TECP87C | Language, Reading, and Literacy in ESOL | 3 | 0.00 | 3.00 |
| TECP88C | Curriculum and Design and Assessment in ESOL | 4 | 0.00 | 4.00 |
| Total Credits | | | 17 | |

### Additional Information

Program Learning Outcomes

- Broaden the student's knowledge, understanding, and appreciation of cultural and linguistic differences, language acquisition, literacy development, and reflective instructional practices within the ESOL setting.
- Enhance the student's abilities to develop and use instructional, and assessment strategies and materials that raise the achievement levels and increase the academic success of English language learners.

# Education

**Degree Type**
Certificate

NHTI's Education certificate program provides you with the opportunity to work with learners in a variety of settings. Courses can applied to an associate degree and/or bachelor's degree program. This certificate is stackable into the Associate of Science in Education degree program. This program is financial aid-eligible and can be completed entirely online!

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- K-12 schools
- Community organizations specializing in working with learners

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU101C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| EDU104C | Foundations of Education | 3 | 0.00 | 3.00 |
| EDU200C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| EDU204C | Instructional Technology | 3 | 0.00 | 3.00 |
| EDU209C | Curriculum and Assessment | 4 | 0.00 | 4.00 |
| EDU210C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| Total Credits | | | 18 | |

**Additional Information**

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.

- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.
- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

## Special Education

**Degree Type**
Certificate

NHTI's Special Education certificate program helps you explore careers in special education and can be used for current para-educators looking to enhance their skills and possibly earn a degree. This certificate can be used for teachers who want to develop skills related to working with children with special needs. This certificate is stackable into the Associate in Science in Education degree program. This program is financial aid-eligible.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Paraprofessional work in schools
- Community agencies and organizations specializing in work with people with disabilities

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| EDU101C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| EDU203C | Teaching Strategies for Diverse Learners | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| EDU200C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| EDU204C | Instructional Technology | 3 | 0.00 | 3.00 |
| EDU210C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| Total Credits | | | 22 | |

**Additional Information**

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.
- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

## Human Service

**Degree Type**

Associate of Science

NHTI's Human Service degree program provides you with the knowledge, skills, and abilities to have a rewarding career as a helping professional to further your education. You'll acquire a broad understanding of human/social/community service, an interdisciplinary knowledgebase, and the skills required to be a best-practices helping professional (critical thinking, complex reasoning, communication, being a team member, engaging in human interaction, applying content knowledge, life-long learning, ongoing professional development, and personal growth).

The Human Service degree includes embedded certificates:

- A basic and advanced Human Service certificate, each of which validates student knowledge of specific skills needed for entry-level positions as helping professionals.
- Mindful Communications certificate, which includes four courses that provide students with skills to improve focus, attention, and mood, and reduce stress.

This program is available 100% online.

**Do you have questions?** The department chair for this program is Kelly Luedtke, who can be reached at kluedtke@ccsnh.edu or 603-271-6484 x4174. You can also request more info here!

## Career Information

The Human Service degree may serve as a stepping stone to a career as a helping professional and/or to a 4-year degree in Human Services, Psychology, Counseling, or related majors. Students who complete this program can enter into the following professions (not an inclusive list):

- Case worker
- Residential counselor
- Support worker
- Case management aide
- Client advocate, intake interviewer
- Social work assistant
- Mental health aide
- Behavioral management aide
- Family support worker

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| HSV111C | Introduction to Human Service | 3 | 0.00 | 3.00 |
| MHTH187C | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0.00 | 4.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **13** | **0** | **13** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL120C | Human Biology | 3 | 2.00 | 4.00 |
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| HSV242C | Ethics and the Professional Helper | 3 | 0.00 | 3.00 |
| PSYC283C | Group Counseling | 3 | 0.00 | 3.00 |
| SOCI250C | Conflict Resolution in Modern Society | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **16** | **2** | **17** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL120C | Survey of Addictive Behaviors and Treatment | 3 | 0.00 | 3.00 |
| ENGL102MC | Introduction to Literature: Mindful | 3 | 0.00 | 3.00 |
| HSV195C | Human Service Practicum I | 2 | 8.00 | 4.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| PSYC280C | Individual Counseling: Theory and Practice | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **15** | **8** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL235C | Physiology and Pharmacology of Addiction | 3 | 0.00 | 3.00 |
| HSV221C | Social and Professional Issues in Today's Society | 3 | 0.00 | 3.00 |
| HSV298C | Human Service Practicum II | 2 | 8.00 | 4.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| | **Subtotal Credits** | **11** | **8** | **13** |
| | Total Credits | | 61 | |

**Additional Information**
This program provides students supervised, hands-on training in the form of two 15-week practica of 125 hours (~ 8 hours/week). Options include human services, mental health, and gerontology. Students practically apply classroom knowledge and theory while they refine their skills. At the same time, students gain confidence on their pathway to becoming a best practices helping professional. Students build a solid foundation and a competitive advantage for future success and employment. This foundation also includes the development of soft skills, which are essential for employability. The practicum experience may lead to full-time entry-level positions.

Health, Technical, and Character Standards

The college must ensure patients/clients are not placed in jeopardy by students during learning experiences. Therefore, students in practica, service learning, and clinical experiences must demonstrate sufficient emotional stability to withstand the stresses, uncertainties, and changing circumstances that characterize patient/client care responsibilities. The student is expected to have the emotional stability required to exercise sound judgment, accept direction and guidance from a supervisor or faculty member, and establish rapport and maintain sensitive interpersonal relationships with employees, customers, and/or patients/clients and their families.

Health Considerations

All Human Service majors will receive NHTI health forms, which must be completed with requested health physical exams, and TB testing prior to the start of classes. Each student is required to obtain NHTI liability insurance starting in each academic year. Students will be billed directly. Students are also eligible to purchase health insurance through NHTI for their own health needs.

Character Expectations

- Human Service and Addiction Counseling students work closely with individuals of all ages. Many of the practicum sites and potential employers will perform a background check through the N.H. Department of Safety, police, and potentially the FBI. A student's driving record will be examined and considered prior to acceptance into some practicum and employment opportunities. The student may be called on to pay for the background checks.
- Applicants who have been in difficulty with the law, depending upon the nature of the problem, may not be employable or even eligible for practica. Applicants need to discuss these issues in an interview or meeting so future goals will not be compromised.

Technical Standards

These have been established as guidance tools to inform program applicants of skills and standards necessary for successful completion of the Human Service programs. Any applicant who has concerns or questions regarding the technical standards is encouraged to contact the department chair. Students must be able to demonstrate the ability to:

- Communicate verbally in classes and as a professional in counseling situations
- Use sufficient verbal skills and language to collaborate with a variety of helping professionals in clinical, societal, and professional areas; deliver accurate and required information; and search for information
- Use sufficient writing ability to formulate written assessment, charting notes, reports, etc.
- Sustain cognitive integrity in areas of short- and long-term memory, written documentation, and follow-through of responsibilities
- Concentrate on the execution of treatment plans, assigned skills and tasks, and integration and communication for short and long periods of time
- Work in settings that may lend themselves to frequent interruptions, immediate crisis response, and role responsibility exchange
- Cope with a variety of stressors, including people-place occurrences, and demonstrate safe and required care for individuals and the workplace as a whole
- Secure transportation to practicum sites and classes
- Consistently attend and participate in classes
- Demonstrate and maintain organizational skills, time management, and professional respect and conduct, either at a practicum site or in the community
- Adhere to and practice the Human Service department's ethical guidelines

Sobriety Statement

The Human Service department abides by the accepted national standard that recommends a minimum of two years of sobriety for any prospective trainee in the field of alcohol and other drug-use counseling.

## Program Learning Outcomes

- Demonstrate a knowledge of and the ability to practice and to engage in the competent, respectful, non-judgmental, supportive, and professional relationships required of the human service professional in their interactions with individuals in various situations: academically, one-on-one, groups, as team members, and at a practicum site with clients and staff.
- Understand the facts, concepts, theories, and principles taught and learned in program courses and how each informs the knowledge, skills, attitudes, capabilities, interest in life-long learning, professional development, and socially conscious behavior required of the competent, ethical, and multi-culturally aware human service professional.
- Identify, analyze, evaluate, and select the appropriate strategies, methods, and tools required for effective communication (verbally, non-verbally, in writing, on computers and electronic devices) with individuals in a variety of human service professional contexts and settings.
- Actively listen, process information, ask questions, seek answers, integrate knowledge, search for meaning, and develop ideas and concepts that result in relevant and consequential action.

- Demonstrate an understanding of the importance of developing healthy practices of self-care, self-reflection, increased self-awareness, and personal responsibility, all of which are critical to being a best-practices helping professional and a productive member of society.
- In addition to the above, the graduate will be able to:
    - Describe the obligations required of the helping professional with respect to adhering to best practices behavioral, ethical, and legal standards of conduct and confidentiality.
    - Establish therapeutic relationships and boundaries with diverse clients.
    - Demonstrate basic, entry level interviewing, counseling, and other skills needed to therapeutically interact with clients.
    - Demonstrate an understanding of effects of alcohol and other drugs on the body and brain.
    - Demonstrate knowledge of accepted principles of client documentation and record management.

Click here for the full PDF of learning outcomes.

## Advanced Human Services Certificate

**Degree Type**
Certificate

NHTI's Advanced Human Service certificate program can be completed in one year over two semesters. It provides you with the opportunity to explore and build on the foundational education acquired in the basic Human Service Certificate program. Your coursework focuses on academic and career interests in human services, mental health, gerontology, substance abuse disorder treatment (SUD Tx), and/or the specific sector of the helping professions that interests you. This certificate includes a semester-long internship in which you'll practically apply your classroom lessons; the internship involves approximately 8-10 hours per week for 15 weeks at a site of your choosing.

Because this certificate combines classroom learning with field experience, you'll gain the basic knowledge, skills, and abilities to prepare you to ethically and competently fulfill the duties and responsibilities required for employment as a helping professional. This includes an understanding of and sensitivity to diverse populations. Upon completion, you can matriculate in the Human Service Associate Degree program, which includes a second supervised internship experience. All courses are taught by instructors with practical experience as helping professionals. This program is financial aid-eligible. This program is available 100% online.

**Do you have questions?** The department chair for this program is Kelly Luedtke, who can be reached at kluedtke@ccsnh.edu or 603-271-6484 x4174. You can also request more info here!

### Career Information

Students are provided a strong foundation for employment and participation in the rapidly changing workplace of the helping professional. Individuals already employed in entry-level helping professional positions will find this certificate useful to upgrade their existing knowledge base and advance in their careers. Community-based organizations and agencies where students can seek employment include human services, mental health, gerontology, SUD Tx, social services, child and family services, crisis services, assistance programs, and senior centers.

Students who complete this program can enter into the following professions: case manager, direct support worker, mental health worker, veterans' services worker, recovery support worker, behavioral management aid, group home worker, residential counselor, and social worker assistant.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have completed NHTI's Human Service Certificate and will be subject to a personal interview with the department chair of Human Services.

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ADCL120C | Survey of Addictive Behaviors and Treatment | 3 | 0.00 | 3.00 |
| PSYC280C | Individual Counseling: Theory and Practice | 3 | 0.00 | 3.00 |
| PSYC220C | Human Growth and Development: The Life Span | 3 | 0.00 | 3.00 |
| ADCL235C | Physiology and Pharmacology of Addiction | 3 | 0.00 | 3.00 |
| HSV221C | Social and Professional Issues in Today's Society | 3 | 0.00 | 3.00 |
| HSV195C | Human Service Practicum I | 2 | 8.00 | 4.00 |
| Total Credits | | | 19 | |

**Additional Information**
Graduates can:

- Demonstrate a knowledge of and the ability to practice and to engage in the competent respectful, non-judgmental, supportive, and professional relationships required of the human service professional in their interactions with individuals in various situations: academically, one-on-one, groups, as team members, and at a practicum site with clients and staff.
- Understand the facts, concepts, theories, and principles taught and learned in program courses and how each informs the knowledge, skills, attitudes, capabilities, interest in life-long learning, professional development, and socially conscious behavior required of the competent, ethical, and multi-culturally aware human service professional.
- Identify, analyze, evaluate, and select the appropriate strategies, methods, and tools required for effective communication (verbally, non-verbally, in writing, on computers and electronic devices) with individuals in a variety of human service professional contexts and settings.
- Actively listen, process information, ask questions, seek answers, integrate knowledge, search for meaning, and develop ideas and concepts that result in relevant and consequential action.
- Understand the importance of developing healthy practices of self-care, self-reflection, increased self-awareness, and personal responsibility, all of which are critical to being a best-practices helping professional and a productive member of society.
- In addition to the above, graduates will be able to:
    - Describe the obligations required of the helping professional with respect to adhering to best practices behavioral, ethical, and legal standards of conduct and confidentiality.
    - Establish therapeutic relationships and boundaries with diverse clients.
    - Demonstrate basic, entry-level interviewing, counseling, and other skills needed to therapeutically interact with clients.
    - Demonstrate knowledge of accepted principles of client documentation and record management.

Program Learning Outcomes

Learning outcomes for this advanced certificate include critical thinking, complex reasoning, communication, being a team member, engaging in human interaction, applying content knowledge, plus lifelong learning, ongoing professional development, and personal growth.

In addition, students are able to:

- Describe the obligations required of the helping professional with respect to adhering to best practices behavioral, ethical, and legal standards of conduct and confidentiality.
- Establish therapeutic relationships and boundaries with diverse clients.
- Demonstrate basic, entry-level interviewing, counseling, and other skills needed to therapeutically interact with clients.
- Demonstrate knowledge of accepted principles of client documentation and record management.

Students gain knowledge of human service delivery systems, case management techniques, ethics, and group facilitation skills. Learned communication skills include conflict resolution and the appropriate interpersonal and social skills to use in interactions with diverse populations using principles of equity, justice, and inclusion.

Click here for the full PDF of learning outcomes.

## Human Services

**Degree Type**
Certificate

NHTI's Human Service certificate program provides you with the knowledge, skills, and abilities to fulfill the duties and responsibilities required for entry-level employment as a helping professional. After completing this certificate, you can matriculate into NHTI's Advanced Human Service Certificate or Human Service Associate Degree. Both include supervised, real-world internship experiences. Courses are taught by instructors with practical experience as helping professionals. This program is financial aid-eligible.

**Do you have questions?** The department chair for this program is Kelly Luedtke, who can be reached at kluedtke@ccsnh.edu or 603-271-6484 x4174. You can also request more info here!

### Career Information

Potential community-based organizations and agencies where students seek employment include human services, mental health, gerontology, substance use disorder treatment, social services, child and family services, crisis services, assistance programs, and senior centers. Potential job titles include case manager, direct support worker, mental health worker, veterans services worker, recovery support worker, behavioral management aid, group home worker, residential counselor, and social worker assistant.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Candidates are required to have a personal interview with the department chair of Human Services.

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| HSV111C | Introduction to Human Service | 3 | 0.00 | 3.00 |
| HSV242C | Ethics and the Professional Helper | 3 | 0.00 | 3.00 |
| MHTH187C | The Helping Relationship: Interpersonal Communication Skills for Today's Professional | 4 | 0.00 | 4.00 |
| PSYC105C | Introduction to Psychology | 3 | 0.00 | 3.00 |
| PSYC283C | Group Counseling | 3 | 0.00 | 3.00 |
| SOCI250C | Conflict Resolution in Modern Society | 3 | 0.00 | 3.00 |
| Total Credits | | | 19 | |

**Additional Information**

Accreditation

This program has been developed using the N.H. competencies required for Ed 610.02 Professional Education and Ed 507.02 Teachers of Career and Technical Education.

Program Learning Outcomes

Learning outcomes for this certificate include critical thinking, complex reasoning, communication, being a team member, engaging in human interaction, applying content knowledge, plus lifelong learning, ongoing professional development, and personal growth. In addition, students are able to:

- Describe the obligations required of the helping professional with respect to adhering to best practices behavioral, ethical, and legal standards of conduct and confidentiality.
- Establish therapeutic relationships and boundaries with diverse clients.
- Demonstrate basic, entry-level interviewing, counseling, and other skills needed to therapeutically interact with clients.
- Demonstrate knowledge of accepted principles of client documentation and record management.

Students gain knowledge of human service delivery systems, case management techniques, ethics, and group facilitation skills. Learned communication skills include conflict resolution and appropriate interpersonal and social skills for interactions with diverse populations using principles of equity, justice, and inclusion. Graduates can also:

- Demonstrate a knowledge of and the ability to practice and to engage in the competent respectful, non-judgmental, supportive, and professional relationships required of the human service professional in their interactions with individuals in various situations: academically, one-on-one, groups, as team members, and at a practicum site with clients and staff.
- Understand the facts, concepts, theories, and principles taught and learned in program courses and how each informs the knowledge, skills, attitudes, capabilities, interest in life-long learning, professional development, and socially conscious behavior required of the competent, ethical, and multi-culturally aware human service professional.
- Identify, analyze, evaluate, and select the appropriate strategies, methods, and tools required for effective communication (verbally, non-verbally, in writing, on computers and electronic devices) with individuals in a variety of human service professional contexts and settings.
- Actively listen, process information, ask questions, seek answers, integrate knowledge, search for meaning, and develop ideas and concepts that result in relevant and consequential action.
- Understand the importance of developing healthy practices of self-care, self-reflection, increased self-awareness, and personal responsibility, all of which are critical to being a best practices helping professional and a productive member of society.
- In addition to the above, graduates will be able to:
    - Describe the obligations required of the helping professional with respect to adhering to best practices behavioral, ethical, and legal standards of conduct and confidentiality.
    - Establish therapeutic relationships and boundaries with diverse clients.
    - Demonstrate basic, entry-level interviewing, counseling, and other skills needed to therapeutically interact with clients.
    - Demonstrate knowledge of accepted principles of client documentation and record management.

Click here for the full PDF of learning outcomes.

## Teacher Education Conversion Program

**Degree Type**
Certificate

NHTI's Teacher Education Conversion Program is for you if you already hold a bachelor's degree and want a license to teach mathematics, science, special education, or English Speakers of Other Languages (ESOL). We offer the following specializations:

- TECP for ESOL
- TECP - General Special Education with Certification (requires a prior teaching license)
- TECP - General Special Education Without Certification (does not require a prior teaching license)
- TECP - Mathematics or Science

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

Students who complete the program are recommended to the N.H. State Department of Education – Bureau of Credentialing for licensure. NHTI also has transfer (articulation) agreements in place for students want to pursue a master's degree. The NHTI Teacher Education Conversion Programs offers licensure in the following areas:

- Chemistry grades 7-12
- ESOL grades K-12
- Life Science grades 7-12
- Mathematics grades 5-8, 7-12
- Middle-Level Science grades 5-8
- Physical Science Education grades 7-12
- Physics Education grades 7-12
- Special Education grades K-12

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Application Process

Applicants are required to have:

- A TECP application
- Official transcripts from all undergraduate and graduate programs attended; candidates must hold a Bachelor's and/or Master's degree
- Current resume
- Two letters of recommendation or reference forms
- Copy of teaching certification or N.H. Statement of Eligibility (if applicable)
- Pearson Essential Academic Skills scores or PRAXIS™ Core Academic Skills for Educators Exam tests scores, if applicable (unless candidate holds a current teaching licensure)

Once the application is complete, transcripts are reviewed by faculty to assess the candidate's fundamental knowledge of the N.H. content standards. Applicants are interviewed by faculty, and the TECP director will discuss the requirements for school districts with regard to former Highly Qualified Teacher and current Every Student Succeeds Act as it applies to ESOL and special education teachers, and will discuss the transcript review results. Determination is then made regarding acceptance, and the applicant is notified of the decision.

Program Requirements

Candidates must maintain a cumulative grade point average of at least a 2.75 to remain in the program. A criminal record check will be required. To be recommended for the N.H. teaching license a candidate must:

- Pass Content Area Assessment (Pearson or Praxis) before student teaching/practicum.

- Successfully complete all required coursework
- Successfully complete a supervised student teaching or practicum experience
- Earn a passing score on the N.H. Teacher Candidate Assessment of Performance where applicable
- Successfully complete an electronic portfolio approved by the Education faculty

## Curriculum

| | |
|---|---|
| Total Credits | 0 |

**Additional Information**
The Teacher Education Conversion Programs focus on areas of teaching that are in critical need in the state. Many candidates could already be teaching while still completing this program, and most could be hired as teachers upon completion.

Accreditation

The Teacher Education Conversion Programs has Program Approval by the NH State Board of Education.

Program Learning Outcomes

The program goals include preparing the student with knowledge, skills, expertise, innovation, and enthusiasm necessary to succeed as a teacher; ensuring they are afforded opportunities for observation, exploration, and reflection in and out of the classroom; applying their content expertise and pedagogical principles in the teaching and assessment of learning.

# Teacher Education Conversion Program - General Special Education with Certification

**Degree Type**
Certificate

NHTI's Teacher Education Conversion Program for Special Education certificate program provides you the opportunity to become licensed to teach in K-12 special education if you have already earned your bachelor's degree and currently hold another N.H. teaching license.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Special education teaching in K-12 schools
- Teaching or leadership positions in community agencies specializing in work with children with disabilities

The following N.H. state certifications are earned:

- License for special education teaching K-12

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Application Process

Applicants are required to have:

- A TECP application
- Official transcripts from all undergraduate and graduate programs attended; candidates must hold a Bachelor's and/or Master's degree
- Current resume
- Two letters of recommendation or reference forms
- Copy of teaching certification or N.H. Statement of Eligibility (if applicable)
- Pearson Essential Academic Skills scores or PRAXIS™ Core Academic Skills for Educators Exam tests scores, if applicable (unless candidate holds a current teaching licensure)

Once the application is complete, transcripts are reviewed by faculty to assess the candidate's fundamental knowledge of the N.H. content standards. Applicants are interviewed by faculty and the TECP director and will discuss the transcript review results. Determination is then made regarding acceptance, and the applicant is notified of the decision.

Program Requirements

Candidates must maintain a cumulative grade point average of at least a 2.75 to remain in the program. A criminal record check will be required. To be recommended for the N.H. teaching license a candidate must:

- Pass Content Area Assessment (Pearson or Praxis) before student teaching/practicum.
- Successfully complete all required coursework
- Successfully complete a supervised student teaching or practicum experience
- Earn a passing score on the N.H. Teacher Candidate Assessment of Performance where applicable
- Successfully complete an electronic portfolio approved by the Education faculty

## Curriculum

**For those holding a teaching license**

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP50C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| TECP60C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| TECP62C | Teaching Strategies for Diverse Learners | 3 | 0.00 | 3.00 |
| TECP63C | Instructional Technology | 3 | 0.00 | 3.00 |
| TECP67C | Reading and Language Development | 3 | 0.00 | 3.00 |
| TECP69C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| TECP70C | Special Education Assessment | 3 | 0.00 | 3.00 |
| TECP71C | Consultation/Collaboration and Individual Education Plans | 3 | 0.00 | 3.00 |
| TECP82C | Methods and Practicum in General Special Education | 2 | 15.00 | 7.00 |
| TECP92C | The Teaching Portfolio | 1 | 0.00 | 1.00 |
| Total Credits | | | 31-42 | |

**Additional Information**

The Teacher Education Conversion Programs focus on areas of teaching that are in critical need in the state. Many candidates could already be teaching while still completing this program, and most could be hired as teachers upon completion.

Accreditation

The Teacher Education Conversion Programs has Program Approval by the NH State Board of Education.

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.
- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

## Teacher Education Conversion Program - General Special Education without Certification

**Degree Type**
Certificate

NHTI's Teacher Education Conversion Program - General Special Education (with certification) program provides you the opportunity to become licensed to teach if you have already earned your bachelor's degree but do not hold a teaching license.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Special education teaching in K-12 schools

- Teaching or leadership positions in community agencies specializing in work with children with disabilities

The following N.H. state certifications are earned:

- License for special education teaching K-12

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Application Process
Applicants are required to have:

- A TECP application
- Official transcripts from all undergraduate and graduate programs attended; candidates must hold a Bachelor's and/or Master's degree
- Current resume
- Two letters of recommendation or reference forms
- Copy of teaching certification or N.H. Statement of Eligibility (if applicable)
- Pearson Essential Academic Skills scores or PRAXIS™ Core Academic Skills for Educators Exam tests scores, if applicable (unless candidate holds a current teaching license)

Once the application is complete, transcripts are reviewed by faculty to assess the candidate's fundamental knowledge of the N.H. content standards. Applicants are interviewed by faculty and the TECP director and will discuss the transcript review results. Determination is then made regarding acceptance, and the applicant is notified of the decision.

Program Requirements
Candidates must maintain a cumulative grade point average of at least a 2.75 to remain in the program. A criminal record check will be required. To be recommended for the N.H. teaching license a candidate must:

- Pass Content Area Assessment (Pearson or Praxis) before student teaching/practicum.
- Successfully complete all required coursework
- Successfully complete a supervised student teaching or practicum experience
- Earn a passing score on the N.H. Teacher Candidate Assessment of Performance where applicable
- Successfully complete an electronic portfolio approved by the Education faculty

## Curriculum

For those who do not currently hold a teaching license:

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP50C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| TECP60C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| TECP61C | Legal and Ethical Issues in Education | 3 | 0.00 | 3.00 |
| TECP62C | Teaching Strategies for Diverse Learners | 3 | 0.00 | 3.00 |
| TECP63C | Instructional Technology | 3 | 0.00 | 3.00 |
| TECP66C | Curriculum and Assessment | 4 | 0.00 | 4.00 |
| TECP67C | Reading and Language Development | 3 | 0.00 | 3.00 |
| TECP69C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| TECP70C | Special Education Assessment | 3 | 0.00 | 3.00 |
| TECP71C | Consultation/Collaboration and Individual Education Plans | 3 | 0.00 | 3.00 |
| | TECP83C or both TECP98C and TECP99C | | | |
| TECP92C | The Teaching Portfolio | 1 | 0.00 | 1.00 |
| | Total Credits | | 42-45 | |

**Additional Information**
The Teacher Education Conversion Programs focus on areas of teaching that are in critical need in the state. Many candidates could already be teaching while still completing this program, and most could be hired as teachers upon completion.

Accreditation

The Teacher Education Conversion Programs has Program Approval by the NH State Board of Education.

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.

- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

## Teacher Education Conversion Program - Mathematics or Science

**Degree Type**
Certificate

NHTI's Teacher Education Conversion Program – Mathematics or Science certificate program provides those who already possess a bachelor's degree the opportunity to become licensed to teach mathematics, science, or computer science.

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

### Career Information

Students who complete the program are recommended to the N.H. State Department of Education – Bureau of Credentialing for licensure. NHTI also has transfer (articulation) agreements in place for students want to pursue a master's degree. The NHTI Teacher Education Conversion Programs offers licensure in the following areas:

- Chemistry grades 7 – 12
- Life Science grades 7 – 12
- Mathematics grades 5 – 8, 7 – 12
- Middle-Level Science grades 5 – 8
- Physical Science Education grades 7-12
- Physics Education grades 7 – 12

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Application Process

Applicants are required to have:

- A TECP application
- Official transcripts from all undergraduate and graduate programs attended; candidates must hold a Bachelor's and/or Master's degree
- Current resume
- Two letters of recommendation or reference forms
- Copy of teaching certification or N.H. Statement of Eligibility (if applicable)
- Pearson Essential Academic Skills scores or PRAXIS™ Core Academic Skills for Educators Exam tests scores, if applicable (unless candidate holds a current teaching license)

Once the application is complete, transcripts are reviewed by faculty to assess the candidate's fundamental knowledge of the N.H. content standards. Applicants are interviewed by faculty and the TECP director and will discuss the transcript review results. Determination is then made regarding acceptance, and the applicant is notified of the decision.

Program Requirements

Candidates must maintain a cumulative grade point average of at least a 2.75 to remain in the program. A criminal record check will be required. To be recommended for the N.H. teaching license a candidate must:

- Pass Content Area Assessment (Pearson or Praxis) before student teaching/practicum.
- Successfully complete all required coursework
- Successfully complete a supervised student teaching or practicum experience
- Earn a passing score on the N.H. Teacher Candidate Assessment of Performance where applicable
- Successfully complete an electronic portfolio approved by the Education faculty

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP50C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| TECP51C | Foundations of Education | 3 | 0.00 | 3.00 |
| TECP60C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| TECP61C | Legal and Ethical Issues in Education | 3 | 0.00 | 3.00 |
| TECP63C | Instructional Technology | 3 | 0.00 | 3.00 |
| TECP66C | Curriculum and Assessment | 4 | 0.00 | 4.00 |
| TECP68C | Content Literacy | 3 | 0.00 | 3.00 |
| TECP69C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| TECP92C | The Teaching Portfolio | 1 | 0.00 | 1.00 |
| | **Subtotal Credits** | **25** | **0** | **25** |

**Choose one of the following options:**

Option 1 – For Mathematics TECP candidates who do not hold a current license:

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | TECP80C or both TECP95C and TECP96C | 2 | 30.00 | 1-14 |
| | **Subtotal Credits** | **2** | **30** | **1-14** |

Option 2 – For Mathematics TECP candidates who do hold a current license:

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP84C | Practicum and Methods for Teaching Middle/Secondary School Mathematics | 2 | 15.00 | 7.00 |
| | **Subtotal Credits** | **2** | **15** | **7** |

Option 3 – For Science TECP candidates who do not hold a current license:

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | TECP81C or both TECP93C and TECP94C | 2 | 30.00 | 1-14 |
| | **Subtotal Credits** | **2** | **30** | **1-14** |

Option 4 – For Science TECP candidates who do hold a current license:

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP85C | Practicum and Methods of Teaching Middle/Secondary School Science | 2 | 15.00 | 7.00 |
| | **Subtotal Credits** | **2** | **15** | **7** |
| | Total Credits | | 26-39 | |

**Additional Information**
The Teacher Education Conversion Programs focus on areas of teaching that are in critical need in the state. Many candidates could already be teaching while still completing this program, and most could be hired as teachers upon completion.

Accreditation

The Teacher Education Conversion Programs has Program Approval by the NH State Board of Education.

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.
- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

## Teacher Education Conversion Program for ESOL

**Degree Type**
Certificate

NHTI's Teacher Education Conversion Program for English Speakers of Other Languages certificate program provides those who currently already hold a bachelors degree with the opportunity to become licensed to teach English Speakers of Other Languages (ESOL).

**Do you have questions?** Contact Cynthia Lucero, program coordinator, at clucero@ccsnh.edu or 603-271-6484 x4246. The department chair for this program is Diana Menard, who can be reached at dmenard@ccsnh.edu or 603-271-6484 x4281.

## Career Information

Students who complete the program are recommended to the N.H. State Department of Education – Bureau of Credentialing for licensure. NHTI also has transfer (articulation) agreements in place for students want to pursue a master's degree. The NHTI Teacher Education Conversion Programs offers certification in the following areas:

- Chemistry grades 7-12
- ESOL grades K-12
- Life Science grades 7-12
- Mathematics grades 5-8, 7-12
- Middle-Level Science grades 5-8
- Physical Science Education grades 7-12
- Physics Education grades 7-12
- Special Education grades K-12

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Application Process

Applicants are required to have:

- A TECP application
- Official transcripts from all undergraduate and graduate programs attended; candidates must hold a Bachelor's and/or Master's degree
- Current resume
- Two letters of recommendation or reference forms
- Copy of teaching certification or N.H. Statement of Eligibility (if applicable)
- Pearson Essential Academic Skills scores or PRAXIS™ Core Academic Skills for Educators Exam tests scores, if applicable (unless candidate holds a current teaching license)

Once the application is complete, transcripts are reviewed by faculty to assess the candidate's fundamental knowledge of the N.H. content standards. Applicants are interviewed by faculty and the TECP director and will discuss the transcript review results. Determination is then made regarding acceptance, and the applicant is notified of the decision.

Program Requirements

Candidates must maintain a cumulative grade point average of at least a 2.75 to remain in the program. A criminal record check will be required. To be recommended for the N.H. teaching license a candidate must:

- Pass Content Area Assessment (Pearson or Praxis) before student teaching/practicum.
- Successfully complete all required coursework
- Successfully complete a supervised student teaching or practicum experience
- Earn a passing score on the N.H. Teacher Candidate Assessment of Performance where applicable
- Successfully complete an electronic portfolio approved by the Education faculty

## Curriculum

Please note that TECP91C is for students who already hold a teaching license.

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| TECP50C | Introduction to Exceptionalities | 3 | 0.00 | 3.00 |
| TECP51C | Foundations of Education | 3 | 0.00 | 3.00 |
| TECP60C | Supporting Students with Challenging Behaviors | 3 | 0.00 | 3.00 |
| TECP61C | Legal and Ethical Issues in Education | 3 | 0.00 | 3.00 |
| TECP63C | Instructional Technology | 3 | 0.00 | 3.00 |
| TECP69C | Cross-Cultural Education Seminar | 2 | 0.00 | 2.00 |
| TECP86C | Introduction to Linguistics | 3 | 0.00 | 3.00 |
| TECP87C | Language, Reading, and Literacy in ESOL | 3 | 0.00 | 3.00 |
| TECP88C | Curriculum and Design and Assessment in ESOL | 4 | 0.00 | 4.00 |
| | TECP90C or both TECP52C and TECP53C | 2 | 30.00 | 1-14 |
| TECP91C | Practicum, Methods/Materials, and Culture in ESOL Education | 2 | 15.00 | 7.00 |
| TECP92C | The Teaching Portfolio | 1 | 0.00 | 1.00 |
| Total Credits | | | 36-49 | |

**Additional Information**
The Teacher Education Conversion Programs focus on areas of teaching that are in critical need in the state. Many candidates could already be teaching while still completing this program, and most could be hired as teachers upon completion.

Accreditation

The Teacher Education Conversion Programs has Program Approval by the NH State Board of Education.

Program Learning Outcomes

Upon completion of the program of study the NHTI education student will:

- Demonstrate knowledge in the area of learner development by demonstrating an understanding of how learners develop, recognizing that patterns of learning and development vary, and demonstrate the ability to facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- In the area of learning differences, demonstrate an understanding of individual differences and diverse cultures and communities and demonstrate the ability to create inclusive learning environments that allow each learner to reach his or her full potential and the ability to employ universal design principles and assistive technology.
- In the area of the learning environments, demonstrate the ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning and demonstrate the use of learning environments not limited to the classroom but extended into the larger community and virtual experiences.
- In the area of content knowledge, demonstrate an understanding of the central concepts, tools of inquiry, and structure of his or her discipline(s) through demonstration of the creation of learning experiences that make the discipline(s) accessible and meaningful for learners and demonstrate innovative applications using differing perspectives to engage learners in critical and creative thinking and collaborative problem-solving related to authentic local and global issues.
- In the area of learning facilitation, use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.

- Plan for learning facilitation, as demonstrated by being an active member of a learning community, to draw upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and pedagogy to plan learning experiences that support every learner in meeting rigorous learning goals.
- Demonstrate learning facilitation strategies, as demonstrated by an understanding and use of a variety of strategies and tools to encourage learners to develop deep understanding of content areas and their connections to other disciplines and an ability to build skills in accessing, applying, and communicating information.
- In the area of professional responsibility, demonstrate being a reflective practitioner and using evidence to continually evaluate his or her practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community, the ability to adapt practice to meet the needs of each learner, and the ability to collaborate, as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.

# STEM and Advanced Manufacturing

## Sustainable Agriculture

**Degree Type**
Associate of Science

NHTI's Sustainable Agriculture degree program prepares you for the business and science behind running a small profitable farm in Northern New England and gives you the courses needed for transfer into a 4-year degree program. You'll develop the skills to market your product through farmers markets, roadside stands, community-supported agriculture, and restaurants as part of the local food-to-table movement. As an advocate for the production of environmentally friendly food in their community, you'll understand the holistic role of the agroecosystem and how to balance the economic, environmental, and social needs of the farmer and community. You'll specialize based on your agricultural preference. This program is financial aid-eligible.

**Do you have questions?** The department chair for this program is Amy West, who can be reached at awest@ccsnh.edu.

### Career Information

Students develop the skills necessary and complete the classes needed to enter these careers (not an inclusive list):

- Farmer/farm manager
- Market gardener
- Farmers market manager
- Sustainable agriculture consultant
- Local food buyer for supermarket
- Organic/sustainable retail and support
- Agricultural fair worker
- Manager and marketer of agricultural operations
- Manager of working lands and landscapes
- Agriculture/food/nutrition/natural resources-related researcher
- Policymaker

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

**First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL111C | General Biology I | 3 | 2.00 | 4.00 |
| INDL101C | STEM in the First-Year Experience | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | Mathematics elective for sustainable agriculture | | | |
| | **Subtotal Credits** | **10** | **2** | **11** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AGRI110C | Sustainable Agriculture I | 3 | 2.00 | 4.00 |
| SOCI180C | Environment and Society | 3 | 0.00 | 3.00 |
| BIOL112C | General Biology II | 3 | 2.00 | 4.00 |
| ENVS101C | Fundamentals of Environmental Science | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **12** | **6** | **15** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL212C | Ecology | 3 | 2.00 | 4.00 |
| ENVS220C | Introduction to Soil Science | 3 | 2.00 | 4.00 |
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| | Sustainable Agriculture elective | | | 3-4 |
| | **Subtotal Credits** | **9** | **4** | **14-15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| ENVS290C | Senior Capstone Project and Seminar | 3 | 2.00 | 4.00 |
| | Sustainable Agriculture elective | | | 3-4 |
| | **Subtotal Credits** | **10** | **2** | **14-15** |
| | Total Credits | | 60 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to agriculture.
  - Students will complete research and use peer-reviewed sources of literature.
- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will assess agricultural trends and identify appropriate management strategies.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab and field safety procedures.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate knowledge of sustainable agricultural practices.
  - Students will describe connections between the environment and human societies and how each affects the other.

Technical Standards

Students must have the strength, stamina, motor coordination, and sensory capabilities for the following actions:

- Standing for sustained periods of time; walking, running, bending, and sitting on the floor/ground
- Frequent lifting, moving, and transferring of equipment, plants, and/or livestock
- Sufficient visual and hearing acuity to ensure a safe environment and respond quickly to clients, colleagues, and partners in the event of an emergency
- Sufficient verbal ability to express and exchange information and ideas and to interpret instructions to clients, colleagues, and partners
- Ability to work with frequent interruptions, respond appropriately to unexpected situations, demonstrate safe care for colleagues and the workplace, and cope with variations in workload and stress levels
- Ability to consistently attend and participate in classes and lab
- Ability to demonstrate and maintain organizational skills and time management in classes and labs

NHTI reserves the right to amend its technical standards at any time and impose them on all current students.

# Sustainable Agriculture Technology

**Degree Type**
Certificate

**This program is not currently accepting new students.**

NHTI's Sustainable Agriculture Technology certificate program prepares future farmers like you for the business and science of running a small profitable farm in Northern New England. You'll learn sustainable alternatives to industrialized farming and how to be successful in the marketplace without competing with industrialized and specialized large-scale operations. You'll develop the skills necessary to market your product. As an advocate for the production of environmentally friendly food in their community, you'll understand the holistic role of the agroecosystem and how to balance the economic, environmental and social needs of the farmer and community. This program is financial aid-eligible.

**Do you have questions?** The department chair for this program is Amy West, who can be reached at awest@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list): farmer, market gardener, farmers market manager, and local food buyer for supermarket.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ACCT101C | Accounting and Financial Reporting I | 3 | 0.00 | 3.00 |
| BUS170C | Principles of Marketing | 3 | 0.00 | 3.00 |
| AGRI110C | Sustainable Agriculture I | 3 | 2.00 | 4.00 |
| AGRI112C | Practical Applications for Sustainable Agriculture I | 1 | 3.00 | 2.00 |
| AGRI115C | Practical Applications for Sustainable Agriculture II | 1 | 3.00 | 2.00 |
| | BIOL115C or BIOL117C or ENVS101C | 3 | 2.00 | 4 |
| Total Credits | | | 18 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to agriculture.
  - Students will develop specialized portfolios of their proposed agriculture business.
- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will assess agricultural trends and identify appropriate management strategies.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab and field safety procedures.
  - Students will utilize current technology to evaluate farm management methods.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate knowledge of sustainable agricultural practices.
  - Students will describe connections between the environment and human societies and how each affects the other.

Technical Standards

Students must have the strength, stamina, motor coordination, and sensory capabilities for the following actions:

- Standing for sustained periods of time; walking, running, bending, and sitting on the floor/ground
- Frequent lifting, moving, and transferring of equipment, plants, and/or livestock
- Sufficient visual and hearing acuity to ensure a safe environment and respond quickly to clients, colleagues, and partners in the event of an emergency
- Sufficient verbal ability to express and exchange information and ideas and to interpret instructions to clients, colleagues, and partners
- Ability to work with frequent interruptions, respond appropriately to unexpected situations, demonstrate safe care for colleagues and the workplace, and cope with variations in workload and stress levels
- Ability to consistently attend and participate in classes and lab
- Ability to demonstrate and maintain organizational skills and time management in classes and labs

NHTI reserves the right to amend its technical standards at any time and impose them on all current students.

## Animation and Graphic Game Programming

**Degree Type**

Associate of Science

### This program is not currently accepting new students.

NHTI's Animation and Graphic Game Programming degree program is a mix of computer science, software engineering, game development technology, and project management. You'll use the latest technology and tools, including Unreal and Unity, in academic labs with machines and tech including VR/AR/XR technology. The AGGP degree program is managed, maintained, and updated by an industry professional with Batman and Marvel on his resume. You'll develop an online portfolio displaying your talents, skills, and ability to work within a team. The portfolio is used to help obtain a job and for entrance into schools.

### Career Information

AGGP graduates are strong programmers prepared for an entry-level programming job in the game industry, a related field, or programming.

**Admission Requirements**

Applicants are required to have one of the following:

- At least three years of college preparatory mathematics (Algebra I, Algebra II, and Geometry) with minimum grades C or higher
- College board Math SAT or other formalized testing with a score that places applicant into Math 124C/XC or higher-level course
- Completion of one or both AGGP Math electives with a C or higher

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AGGP101C | Introduction to Game Design and Creation with Programming | 2 | 3.00 | 3.00 |
| AGGP103C | Introduction to Content Development | 2 | 2.00 | 3.00 |
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | Mathematics elective (MATH 124C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **14** | **8** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AGGP131C | Introduction to 2-D and 3-D Game Development | 2 | 3.00 | 3.00 |
| AGGP140C | Digital Art Modeling and Animation | 2 | 3.00 | 3.00 |
| CPET125C | Data Structures | 2 | 3.00 | 3.00 |
| | Communications or Literature elective | 3 | 0.00 | 3 |
| | Mathematics elective (MATH 124C or higher level) | 4 | 0.00 | 4 |
| | Science elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **16-17** | **9-11** | **19-20** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AGGP225C | 3-D Game Engine Application Development | 2 | 3.00 | 3.00 |
| AGGP231C | Application Development and Software Prototyping | 2 | 3.00 | 3.00 |
| AGGP291C | Project Definition and Portfolio Specifications | 1 | 3.00 | 2.00 |
| CPET240C | Programming for Windows Operating Systems | 3 | 3.00 | 4.00 |
| VRTS101C | Introduction to Drawing | 2 | 4.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **13** | **16** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AGGP247C | Math and Physics for Game Programmers | 2 | 3.00 | 3.00 |
| AGGP292C | Portfolio Development | 2 | 3.00 | 3.00 |
| AGGP294C | Animation and Graphic Game Programming Capstone Project | 2 | 5.00 | 4.00 |
| CPET252C | Networking and Internet Technologies | 3 | 3.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **12-13** | **14** | **17-18** |
| Total Credits | | | 72-74 | |

**Additional Information**

Program Learning Outcomes

Upon completion, graduates of the AGGP degree program are able to:

- Program in multiple programming languages and environments using object-oriented and procedural programming techniques to create and debug sophisticated software applications using different operating systems, device platforms, application frameworks, or game engines.
- Analyze problems including proposed features and technical issues, decompose them into sub-problems, and develop appropriate solutions.
- Demonstrate initiative to prototype and develop solutions using documentation and research.
- Apply math and physics to develop solutions for proposed features or technical issues.
- Demonstrate discipline-specific project management and teamwork skills.
- Apply theoretical and practical knowledge to analyze and solve complex problems.
- Gain proficiency in the technology and methods used in professional game development.
- Communicate effectively with an expected level of effectiveness.

Students learn:

- Programming tools used in the industry, such Microsoft's Visual Studio
- Multiple programming languages, including C++ and C#
- Applications and asset pipelines for art and design content
- Development for multiple platforms, including PC, Linux, mobile, consoles, VR/AR/XR, and the web
- Software engineering for complex and robust applications
- Project management tools and techniques, including Source Control and SCRUM
- Database development and networking programming
- Math and physics for games
- Opportunities for game publication in the web marketplace

## Game Development Programming Certificate

**Degree Type**

Certificate

### This program is not currently accepting new students.

NHTI's Game Development Programming program certificate program teaches you programming, design skills, and multiple programming languages using industry-proven game development technologies. You'll create several game projects, including a team project. Courses in this program are offered days and evenings and can be completed in nine months. It is possible to complete this certificate's instruction and hands-on training in NHTI's computer labs. This program is financial aid-eligible.

**Do you have questions?** Contact Aaron Conn, department chair, at aconn@ccsnh.edu or 603-271-6484 x4143.

## Career Information

Graduates will be able to enter an internship, apprenticeship, or on-the-job training program in game development; undertake preparation for entry-level game development certification exams; and/or continue in the Animation and Graphic Game Programming degree at NHTI.

**Admission Requirements**

Applicants are required to have one of the following:

- At least three years of college preparatory mathematics (Algebra I, Algebra II, and Geometry) with minimum grades C or higher
- College board Math SAT or other formalized testing with a score that places applicant into Math 124C/XC or higher-level course
- Completion of one or both AGGP Math electives with a C or higher

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| AGGP101C | Introduction to Game Design and Creation with Programming | 2 | 3.00 | 3.00 |
| AGGP103C | Introduction to Content Development | 2 | 2.00 | 3.00 |
| AGGP131C | Introduction to 2-D and 3-D Game Development | 2 | 3.00 | 3.00 |
| AGGP140C | Digital Art Modeling and Animation | 2 | 3.00 | 3.00 |
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| CPET125C | Data Structures | 2 | 3.00 | 3.00 |
| Total Credits | | | 18 | |

**Additional Information**

Program Learning Outcomes

Graduates are able to:

- Know the syntax and usage of programing languages used in the game industry.
- Apply object-oriented programing design and techniques in software projects.
- Prototype content and game systems.
- Import custom content using content pipelines from one or more major game engines.
- Design and create games in a variety of genres using the systems from one or more major game engines.
- Identify and research topics about the game industry and game programming.
- Identify game mechanics and systems found within game genres and specific games.
- Be proficient in the use of one or more major source control systems.
- Understand and apply basic project management planning and techniques.

# Architectural Engineering Technology

**Degree Type**

Associate of Science

NHTI's Architectural Engineering Technology degree program combines architecture and engineering theory with applied hands-on activities in NHTI labs. You'll study architectural design and engineering processes and develop skills in design, sketching, engineering, and computer-aided design (CAD) and visualization. You'll learn from dedicated and experienced faculty and acquire knowledge about industry practices and culture through a unique guest speaker program. The ARET program offers:

- A strong reputation for excellence
- Lecture and lab hands-on experience with small classes
- Exciting job opportunities at graduation
- First two years of a four-year education
- Day and evening classes

**Do you have questions?** The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Graduates work in architectural firms, engineering firms, and construction companies; some choose to work for architects, engineers, contractors, or government agencies. They can also pursue educational and career advancements while working full time in the industry. ARET students are eligible to take the Fundamentals of Engineering exam, open to anyone who has a degree in engineering or a related field or is currently enrolled in the last year of an ETAC of ABET-accredited engineering degree program.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have at least three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C. It is strongly recommended applicants have completed high school courses in Chemistry and Physics.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET103C | Architectural Graphics and Sketching | 2 | 2.00 | 3.00 |
| ARET120C | Materials and Methods of Construction | 4 | 0.00 | 4.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| PHYS133C | Physics I (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **13** | **4** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET104C | Architectural Design Studio I | 2 | 2.00 | 3.00 |
| ARET150C | Statics and Strength of Materials | 3 | 2.00 | 4.00 |
| ARET192C | Revit Architecture | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **16** | **4** | **18** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET202C | Architectural Design Studio II | 2 | 2.00 | 3.00 |
| CVET220C | Surveying | 2 | 3.00 | 3.00 |
| CVET240C | Timber and Steel Design | 3 | 2.00 | 4.00 |
| COMM125C | Communication and the Literature of Science and Technology | 3 | 0.00 | 3.00 |
| PHYS135C | Physics II (Algebra-based) | 3 | 2.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **16-17** | **9** | **20-21** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET250C | Environmental Systems | 3 | 0.00 | 3.00 |
| ARET270C | Construction Management | 3 | 0.00 | 3.00 |
| ARET297C | Architectural Design Studio III | 2 | 2.00 | 3.00 |
| CVET235C | Reinforced Concrete Design | 2 | 3.00 | 3.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **13** | **5** | **15** |

**Second Year: Civil Focus**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CVET201C | Civil CAD | 2 | 2.00 | 3.00 |
| CVET220C | Surveying | 2 | 3.00 | 3.00 |
| CVET240C | Timber and Steel Design | 3 | 2.00 | 4.00 |
| | ENGL 125C or COMM 125C | 3 | | 3 |
| PHYS135C | Physics II (Algebra-based) | 3 | 2.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **16-17** | **9** | **20-21** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET270C | Construction Management | 3 | 0.00 | 3.00 |
| CVET235C | Reinforced Concrete Design | 2 | 3.00 | 3.00 |
| CVET297C | Highway Design | 3 | 2.00 | 4.00 |
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15** | **5** | **17** |
| Total Credits | | | 68-70 | |

**Additional Information**

Accreditation

This program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

Program Learning Outcomes

*ETAC of ABET General Criterion 3 Student Outcomes:*

- An ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities
- An ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge
- An ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments
- An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and an ability to identify and use appropriate technical literature
- An understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity and a commitment to quality, timeliness, and continuous improvement

*ETAC of ABET Program Criteria for Architectural Engineering Technology and Similarly Named Programs Outcomes:*

- Employ concepts of architectural theory and design in a design environment
- Utilize instruments, methods, software, and techniques that are appropriate to produce A/E documents and presentations
- Utilize measuring methods that are appropriate for field, office, or laboratory
- Apply fundamental computational methods and elementary analytical techniques in sub disciplines related to architectural engineering

*Program Educational Objectives (PEOs):* The ARET PEOs are broad statements that support the mission of the ARET program and NHTI. The ARET department's mission reflects on the following PEOs. Graduates are able to:

- Be effective life-long learners and demonstrate continuing professional development.
- Demonstrate the ability to solve problems and participate in a team based environment.
- Demonstrate effective communication and interpersonal skills.
- Exhibit an active and effective civic life with respect for diversity and local and global issues.

Program Mission Statement

To graduate competent, skilled, and adequately equipped students who would be productive members of the profession and the community.

## Civil Engineering Technology

**Degree Type**

Associate of Science

NHTI's Civil Engineering Technology degree program combines civil engineering and technology theory with a solid foundation in math and science. You'll learn the fundamentals of CVET, teamwork, and presentations through hands-on activities in NHTI labs. You'll also solve design and engineering problems and learn about the industry practices and culture through our unique guest speakers program. Skills include how to:

- Produce engineering documents using CAD software
- Perform standard field and laboratory tests on materials typically used in civil engineering technology
- Estimate material quantities for technical projects

**Do you have questions?** The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Major specialties within civil engineering are structural, water resources, environmental, construction (including construction management), transportation, and geotechnical engineering. Graduates interested in management or upper-level engineering careers in the field can pursue bachelor's degrees in civil engineering, CVET, construction engineering, surveying and mapping, or construction management. Students who complete this program can enter into the following professions (not an inclusive list): civil engineering technologists/ technicians, cartographer, land surveyors, and CAD operators.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have at least three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C or higher. It is recommended that applicants have satisfactorily completed high school courses in Chemistry and Physics.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET103C | Architectural Graphics and Sketching | 2 | 2.00 | 3.00 |
| ARET120C | Materials and Methods of Construction | 4 | 0.00 | 4.00 |
| CHEM105C | Chemistry | 3 | 2.00 | 4.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| PHYS133C | Physics I (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **16** | **6** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET104C | Architectural Design Studio I | 2 | 2.00 | 3.00 |
| ARET150C | Statics and Strength of Materials | 3 | 2.00 | 4.00 |
| ARET192C | Revit Architecture | 3 | 0.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **16** | **4** | **18** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CVET201C | Civil CAD | 2 | 2.00 | 3.00 |
| CVET220C | Surveying | 2 | 3.00 | 3.00 |
| CVET240C | Timber and Steel Design | 3 | 2.00 | 4.00 |
| | ENGL 125C or COMM 125C | 3 | | 3 |
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **17-18** | **7** | **20-21** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CVET202C | Soil Mechanics and Foundation Design | 2 | 2.00 | 3.00 |
| CVET235C | Reinforced Concrete Design | 2 | 3.00 | 3.00 |
| CVET245C | Hydrology/Drainage Design | 3 | 0.00 | 3.00 |
| CVET297C | Highway Design | 3 | 2.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **13** | **7** | **16** |
| | Total Credits | | 73-74 | |

**Additional Information**

Program Learning Outcomes

Students receive an associate in science in CVET upon successful completion of this program.

*ETAC of ABET Requirements*

- An ability to apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline
- An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline
- An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments and an ability to identify and use appropriate technical literature
- An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results
- An ability to function effectively as a member of a technical team

*Program Educational Outcomes:* The CVET program educational objectives (PEOs) are broad statements that support the mission of the program and NHTI. The program's mission reflects on the following PEOs. Graduates:

- Are effective lifelong learners and demonstrate continuing professional development.
- Demonstrate the ability to solve problems and participate in a team-based environment.
- Demonstrate effective communication and interpersonal skills.
- Exhibit an active and effective civic life with respect for diversity and local and global issues.

*ETAC of ABET's Program Criteria for Civil Engineering Technology and Similarly Named Programs a-d.*

- Utilization of principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering
- Performance of standardized field and laboratory tests related to civil engineering
- Utilization of surveying methods appropriate for land measurement and/or construction layout
- Application of fundamental computational methods and elementary analytical techniques in subdisciplines related to civil engineering

Program Mission Statement

To graduate competent, skilled, and adequately equipped students who would be productive members of the profession and the community.

Student Testimonials

*I wasn't really sure what direction I wanted to go. I figured NHTI was a good place to test the water, because it wasn't as expensive as UNH or one of those big schools. I had taken a lot of engineering courses through Project Running Start, so that sort of steered me toward engineering. I liked all the teachers, and enjoyed the classes. With AET, there are not a ton of Gen Ed classes; most of your classes are engineering-related. I took the state engineering test and was able to pass it. It's really meant for 4-year programs and only has a 66% pass rate, so that really shows you that the quality of the education here at NHTI is substantial. The department always gets students job opportunities. I'm working as a drafter now, doing a lot of 3D work. And starting this fall my employer is going to help pay for me to go to UNH for my bachelor's degree.*

– Kurt Jackman, AET '12, CVET '14

# Biology

**Degree Type**
Associate of Science

NHTI's Biology degree program provides you with an excellent foundation for studies in pre-medicine, pre-dentistry, and pre-veterinary medicine. This program is recommended if you are looking to pursue further study in biology, botany, zoology, ecology, microbiology, agriculture, forestry, molecular biology, cell biology, genetics, and marine biology.

This program provides a broad-based curriculum in the biological sciences and helps you meet the requirements for other degree programs. If you choose to pursue a four-year degree, the core courses in this program offer the basic competencies, knowledge, and skills to do so. It also prepares you for careers in biological science; provides the skills, methods, and knowledge needed for further study; and promotes an appreciation of the sciences.

**Do you have questions?** Reach out to Beth Wilkes, program coordinator, at bwilkes@ccsnh.edu. The department chair for this program is Amy West, who can be reached at awest@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list): biological technician, forest or conservation technician, and medical or clinical laboratory technician. Other possible positions include veterinary technician, medical assistant, plant science technician, and sales associate for medical equipment, pharmaceuticals, and biological materials. Students who graduate from this program have the skills necessary to work in the field as a biological science technician.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL111C | General Biology I | 3 | 2.00 | 4.00 |
| CHEM103C | General Chemistry I | 3 | 2.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| INDL101C | STEM in the First-Year Experience | 3 | 0.00 | 3.00 |
| | Mathematics elective (Calculus track) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **17** | **4** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL112C | General Biology II | 3 | 2.00 | 4.00 |
| CHEM104C | General Chemistry II | 3 | 2.00 | 4.00 |
| | English elective | 3 | 0.00 | 3 |
| PHIL242C | Contemporary Ethical Issues | 3 | 0.00 | 3.00 |
| PHYS133C | Physics I (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **15** | **6** | **18** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL202C | Microbiology | 3 | 3.00 | 4.00 |
| BIOL211C | Genetics | 3 | 2.00 | 4.00 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| PHYS135C | Physics II (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **13** | **7** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| BIOL260C | Cell Biology | 3 | 3.00 | 4.00 |
| BIOL290C | Senior Capstone Project and Seminar | 3 | 2.00 | 4.00 |
| | Biology elective | 3 | 2.00 | 3-4 |
| | Biology elective | 3 | 2.00 | 3-4 |
| | **Subtotal Credits** | **12-14** | **9** | **14-16** |
| | Total Credits | | 69 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to biological sciences.
  - Students will complete research and use peer-reviewed sources of literature.
- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will connect principles of natural sciences to biological issues.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab and field safety procedures.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will explain the significance of research results.
  - Students will analyze theoretical principles across a broad range of sub-disciplines in biological sciences.

Student Achievements

NHTI Biology students complete a capstone project over two consecutive semesters. This hands-on experience strengthens their ability to apply theory to the development of practical solutions to real-world problems. See a collection of our previous students' capstone projects!

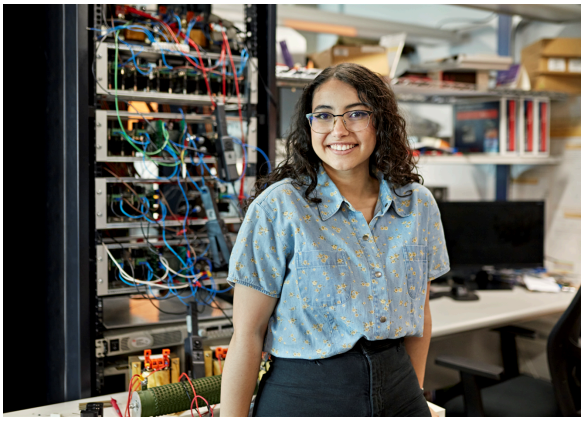
## Computer Engineering Technology

**Degree Type**

Associate of Science

### This program is not currently accepting new students.

Check out **NHTI's IT – Software Development Program**!



NHTI's Computer Engineering Technology degree program offers a combination of computer science, engineering theory, and hands-on skills in labs with state-of-the-art equipment. Class and lab size are kept small to foster student interaction with faculty. The majority of program courses are taught by full-time faculty with advanced degrees as well as significant and relevant industry experience.

**Do you have questions?** Contact Dennis Tappin at dtappin@ccsnh.edu.

### Career Information

Graduates are prepared for careers in software development and computer engineering and can choose to pursue a bachelor's degree in either computer science or computer engineering. Graduates can enter into the following professions:

- Software developer
- Full-stack developer
- .NET developer
- IoT developer
- Cloud computing engineer
- Software control system engineer
- Bios/driver developer
- Mobile application designer or developer
- Microprocessor/embedded system programmer
- System verification engineer
- Software quality assurance

- Data communications software developer

**Admission Requirements**
Applicants are required to have at least three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C or higher in at least two of the three college preparatory math courses. It is also recommended applicants have satisfactorily completed high school courses in Chemistry and Physics.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| ELET101C | Circuit Analysis I | 3 | 3.00 | 4.00 |
| ELET115C | Digital Fundamentals | 2 | 3.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **15** | **9** | **18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET125C | Data Structures | 2 | 3.00 | 3.00 |
| ELET144C | Embedded Microsystems | 3 | 3.00 | 4.00 |
| | ENGL 120C/COMM 120C or COMM 125C/ ENGL 125C | 3 | 0.00 | 3 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| | PHYS 133C or PHYS 231C | 3 | 2.00 | 4 |
| | **Subtotal Credits** | **15** | **8-9** | **18** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET240C | Programming for Windows Operating Systems | 3 | 3.00 | 4.00 |
| CPET260C | Computer Real-Time Interfacing | 3 | 3.00 | 4.00 |
| CPET301C | Computer Project Definition | 1 | 0.00 | 1.00 |
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| | PHYS 135C or PHYS 232C | 3 | 2.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **17** | **8-9** | **20** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET215C | Integrated Circuits and Interfacing | 3 | 3.00 | 4.00 |
| CPET222C | Data Communications and internetworking | 3 | 3.00 | 4.00 |
| CPET252C | Networking and Internet Technologies | 3 | 3.00 | 4.00 |
| CPET303C | Computer Project | 1 | 4.00 | 3.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **13-14** | **13** | **18-19** |
| Total Credits | | | 74-75 | |

**Additional Information**

Accreditation

This program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

Capstone Project

Students in this program complete a capstone project during their final semester. A variety of industry partners provide students with a real-world project on site at the company's facility. Students work with industry professionals as they take their project from the definition phase into development and through to completion. This hands-on experience strengthens their ability to apply engineering theory to the development of practical solutions to real-world software development and engineering problems. Prospective employers see this as a distinguishing feature of NHTI's computer engineering technology program.

Curriculum Notes

- Students planning to pursue 4-year degrees should consider taking Calculus-based Physics and discuss this option with their academic advisors. To meet the requirements, students may need to alter their course sequence; contact your academic advisor for assistance.
- Students are required to complete at least one of the following math courses: MATH 205C, MATH 206C, MATH 208C, or MATH 210C. MATH 206C is strongly recommended for students that plan to pursue a bachelor's degree.
- To fulfill the program degree requirements and to meet the prerequisite requirement of subsequent major field courses, students are required to earn a grade of C- or higher in each major field course and in each math and physics course.
- For students with a need for a reduced course load, a 3-year version of this program is available. Contact the department chair for details.

Program Learning Outcomes

Graduates are able to:

- Demonstrate proficiency in multiple programming environments and multiple programming languages using object-oriented and procedural programming techniques to create and debug sophisticated software applications for different operating systems and runtime frameworks.
- Apply practical knowledge of math and physics to electric circuits and data communications.
- Read a schematic, set up and use measurement equipment, accurately measure a waveform, and compare measured results of a waveform with theoretical results calculated from a schematic.
- Demonstrate discipline-specific project management and teamwork skills.
- Critically analyze problem statements, decompose a problem into subproblems, and develop solutions.
- Demonstrate initiative in developing solutions to computer engineering problems using documentation and research.
- Gain knowledge of social, technical, and professional ethics required in a professional environment, including a respect for diversity.
- Participate in a professional work environment to produce work that meets industry standard specifications and learning skills necessary to complete assignments.

# Electronic Engineering Technology

**Degree Type**

Associate of Science

This program is not currently accepting new students.

NHTI's Electronic Engineering Technology degree program offers a combination of engineering theory and hands-on skills using state-of-the-art equipment. Class and lab size are kept small, giving you ample opportunity to interact with instructors. The majority of program courses are taught by full-time faculty with advanced degrees and significant, relevant industry experience. You can continue your education by transferring to at a 4-year engineering program and with dual admittance to UNH's EET bachelor's degree program.

**Do you have questions?** Contact Dennis Tappin at dtappin@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Electronic circuit designer
- IoT developer
- Microprocessor/embedded system developer
- Computer hardware designer
- FPGA/PLD developer
- System verification engineer
- Electrical/electronics engineering technician
- Electro-mechanical technicians

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| ELET101C | Circuit Analysis I | 3 | 3.00 | 4.00 |
| ELET115C | Digital Fundamentals | 2 | 3.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **15** | **9** | **18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ELET102C | Circuit Analysis II | 3 | 3.00 | 4.00 |
| ELET110C | Electronics I | 3 | 3.00 | 4.00 |
| | ENGL 120C/COMM 120C or COMM 125C/ ENGL 125C | 3 | 0.00 | 3 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| | PHYS 133C or PHYS 231C | 3 | 2.00 | 4 |
| | **Subtotal Credits** | **16** | **8-9** | **19** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ELET144C | Embedded Microsystems | 3 | 3.00 | 4.00 |
| ELET210C | Electronics II | 3 | 3.00 | 4.00 |
| ELET305C | Design Project Preparation | 1 | 5.00 | 3.00 |
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| | PHYS 135C or PHYS 232C | 3 | 2.00 | 4 |
| | **Subtotal Credits** | **14** | **13-14** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ELET215C | Advanced Digital Electronics | 3 | 3.00 | 4.00 |
| | ELET 251C or MATH 206C | 3 | 3.00 | 4 |
| ELET306C | Senior Design Project | 2 | 5.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **14-16** | **11** | **18-19** |
| | Total Credits | | 74-75 | |

**Additional Information**

Accreditation

This program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

Capstone Project

Students complete a capstone project over two consecutive semesters. This hands-on experience strengthens their ability to apply engineering theory to the development of practical solutions to real-world engineering problems. A fully equipped project lab and mentoring by faculty with extensive industry experience/expertise provide a unique learning environment. Prospective employers see this as a distinguishing feature of NHTI's EET program.

Here are the Capstone projects from NHTI's 2021 students:

- Michael Flick – click here to see the presentation
- Jai-Lynn Goss – click here to see the presentation

- Christian Hale – click here to see the presentation
- Nicole Horn – click here to see the presentation
- Yuly Monsalve-Cabeza – click here to see the presentation
- Noah Pelchat – click here to see the presentation
- Joshua Welton – click here to see the presentation

Curriculum Notes

- Students planning to pursue 4-year degrees should consider taking Calculus-based Physics and discuss this option with their academic advisors. To meet the requirements, students may need to alter their course sequence; contact your academic advisor for assistance.
- Students are required to complete a minimum of 1 math course from Math List A. If ELET 251C is substituted for MATH 206C, students are required to complete a minimum of 1 math course from Math List B:
    - Math List A: MATH 206C, MATH 208C, MATH 210C
    - Math List B: MATH 205C, MATH 208C, MATH 210C
- It is recommended students who plan to pursue a bachelor's degree in engineering take both MATH 206C and MATH 210C.
- To fulfill the program degree requirements and to meet the prerequisite requirement of subsequent major field courses, students are required to earn a grade of C- or higher in each major field course and in each math and physics course.
- For students with a need for a reduced course load, a 3-year version of this program is available. Contact the department chair for details.

Specific Admissions Requirements

Applicants require at least three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C or higher in at least two of the three college preparatory math courses. It is also recommended applicants have satisfactorily completed high school courses in Chemistry and Physics.

# Environmental Sciences

**Degree Type**
Associate of Science

NHTI's Environmental Sciences degree program provides an interdisciplinary approach to studying the social, ethical, and ecological interactions between the natural world and society. It offers the first two years of courses necessary for a four-year bachelor's degree in environmental science for students interested in transferring.

**Do you have questions?** The department chair for this program is Amy West, who can be reached at awest@ccsnh.edu.

## Career Information

Graduates of associate and bachelor's degree programs have more employment opportunities. Graduates can find employment as city planning aides, economic research assistants, grazing examiners, soil testers, meteorological aids, and tree wardens. With a bachelor's degree, graduates can find employment as biotechnologists, wildlife technicians, and specimen technicians.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

General Education Requirements

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| ECON101C | Macroeconomics | 3 | 0.00 | 3.00 |
| GEOL101C | Essentials of Geology | 3 | 2.00 | 4.00 |
| | Mathematics elective (Calculus track) | 4 | 0.00 | 4 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| SOCI180C | Environment and Society | 3 | 0.00 | 3.00 |
| INDL101C | STEM in the First-Year Experience | 3 | 0.00 | 3.00 |
| | Environmental Science elective | | | 3-4 |
| | Environmental Science elective | | | 3-4 |
| | **Subtotal Credits** | **24** | **2** | **32-33** |

Major Requirements

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET160C | Introduction to Geographic Information Systems | 2 | 2.00 | 3.00 |
| BIOL111C | General Biology I | 3 | 2.00 | 4.00 |
| BIOL112C | General Biology II | 3 | 2.00 | 4.00 |
| BIOL212C | Ecology | 3 | 2.00 | 4.00 |
| BIOL215C | Freshwater Ecology | 3 | 2.00 | 4.00 |
| CHEM103C | General Chemistry I | 3 | 2.00 | 4.00 |
| CHEM104C | General Chemistry II | 3 | 2.00 | 4.00 |
| ENVS101C | Fundamentals of Environmental Science | 3 | 2.00 | 4.00 |
| ENVS290C | Senior Capstone Project and Seminar | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **26** | **18** | **35** |
| Total Credits | | | 67-68 | |

**Additional Information**

Program Learning Outcomes

- Students will communicate effectively.
  - Students will employ vocabulary pertinent to environmental science.
  - Students will complete research and use peer-reviewed sources of literature.
- Students will use critical thinking.
  - Students will apply the scientific method.
  - Students will connect principles of ecology and other natural sciences to environmental issues.
- Students will demonstrate the application of scientific technology.
  - Students will practice lab and field safety procedures.
  - Students will utilize current technology to collect, analyze, and present data.
- Students will express quantitative and qualitative scientific knowledge.
  - Students will demonstrate competence in chemistry, biology and other foundational courses that support scientific understanding.

- Students will describe connections between the environment and human societies and how each affects the other.

Student Achievements

NHTI Environmental Sciences students complete a capstone project over two consecutive semesters. This hands-on experience strengthens their ability to apply theory to the development of practical solutions to real-world problems. See a collection of our previous students' capstone projects!

## Industrial Design Technology

**Degree Type**

Associate of Science

### This program is not currently accepting new students.

HTI's Industrial Design Technology degree program prepares you for an entry-level position in industrial design. You'll master design fundamentals with courses in drawing, 2D design, 3D design, engineering design, and manufacturing principles. Emphasis is placed on math and physical sciences, and English and social sciences broaden and improve communication skills. Graduates have the foundation to pursue a bachelor's degree or opportunities for life-long learning or professional development.

**Do you have questions?** Contact Kiera Reese at kreese@ccsnh.edu.

### Career Information

Students who complete this program can enter into entry-level positions in the field of industrial design.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

**First Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET103C | Architectural Graphics and Sketching | 2 | 2.00 | 3.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MCET105C | Engineering Design | 4 | 0.00 | 4.00 |
| VRTS101C | Introduction to Drawing | 2 | 4.00 | 4.00 |
| | **Subtotal Credits** | **12** | **6** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | Mathematics elective (MATH 124C or higher level) | 4 | 0.00 | 4 |
| MCET106C | Advanced CAD Modeling | 2 | 2.00 | 3.00 |
| VRTS103C | Two-Dimensional Design | 2 | 3.00 | 3.00 |
| VRTS104C | Three-Dimensional Design | 2 | 3.00 | 3.00 |
| | Science elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **13-14** | **8-10** | **16-17** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | INDS 110C or VRTS 11C or VRTS 115C | 3 | 0.00 | 3 |
| INDS150C | Industrial Design Studio 1 | 3 | 3.00 | 4.00 |
| INDS232C | Business of Design | 3 | 0.00 | 3.00 |
| MFET111C | Manufacturing and Materials Processing | 3 | 3.00 | 4.00 |
| | VRTS 193C or VRTS 195C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **15** | **6** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL 120C/COMM 120C or COMM 125C/ ENGL 125C | 3 | 0.00 | 3 |
| INDS250C | Industrial Design Studio II | 3 | 3.00 | 4.00 |
| INDS242C | Manufacturing Techniques | 3 | 0.00 | 3.00 |
| | PSYC 105C or PSYC 225C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **12** | **3** | **13** |
| | Total Credits | | 61-62 | |

**Additional Information**

Program Learning Outcomes

Graduates are able to:

- Employ design research that contributes to the definition and solution of design problems.
- Apply principles of engineering, basic science, math, and psychology to formulate creative design solutions for a given problem, creating rough and finished concept sketches assessing those concepts and selecting the most appropriate final design.
- Demonstrate proficient skills in sketching and rendering with appropriate media, technical drawing, 3-D physical and computer modeling, and prototyping.

## Information Technology – Software Development

**Degree Type**
Associate of Science

NHTI's Information Technology – Software Development degree program prepares you to obtain and succeed in well-paying jobs in one of the fastest growing fields in the world. You'll complete hands-on training in the design and development of software applications for web, mobile, and desktop environments. NHTI's IT department offers a sequence of stackable certificates in software development and related technologies; each enables you to develop marketable skills and earn industry-recognized certifications in as few as four courses while building credits toward the associate degree.

**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

### Career Information

Graduates can enter into the following professions (not an inclusive list):

- IT help desk technician
- Entry-level software developer
- Junior-level software developer

The program also prepares students for the CompTIA A+ certification and the Microsoft Technology Associate certification exams.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL120MC | Communication: Mindful | 3 | 0.00 | 3.00 |
| IST106C | IT Career Topics | 1 | 0.00 | 1.00 |
| IST120C | Programming Essentials in Python | 2 | 2.00 | 3.00 |
| IST146C | Network Support Technician | 2 | 2.00 | 3.00 |
| IST101C | Hardware and Operating Systems | 2 | 2.00 | 3.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **6** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| IST210C | Object-Oriented Programming | 2 | 2.00 | 3.00 |
| IST216C | Introduction to Web Programming | 2 | 2.00 | 3.00 |
| IST140C | Database Design and Management | 2 | 2.00 | 3.00 |
| MATH125C | Finite Mathematics | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **6** | **17** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL102MC | Introduction to Literature: Mindful | 3 | 0.00 | 3.00 |
| IST180C | Cloud Services and Windows Server | 2 | 2.00 | 3.00 |
| IST240C | Advanced Web Programming | 2 | 2.00 | 3.00 |
| IST290C | IT Career Development | 1 | 2.00 | 2.00 |
| | PSYC 105C or SOCI 105C | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **11** | **6** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST215C | Advanced Windows Programming | 2 | 2.00 | 3.00 |
| IST218C | Mobile Application Development | 2 | 2.00 | 3.00 |
| IST294C | Senior IT Internship | 0 | 8.00 | 2.00 |
| | Software: Science elective | | | 4 |
| | **Subtotal Credits** | **4** | **12** | **12** |
| | Total Credits | | 60 | |

**Additional Information**
Students are required to complete a senior internship in the area of their concentration and career goals. The internship provides real-life experience applying skills learned in the classroom. Employers work closely with the students and professors to ensure an environment that enhances their education, provides experience, and introduces them to the IT business environment.

Mindful Communications Options

Mindfulness and communication training creates opportunities for growth and leadership, flexibility, adaptability, and the confidence to handle challenges. At NHTI, learning about emotional intelligence, patience, and nonverbal communication cues are key parts of the IT curriculum. Employers expect new engineers and IT professionals to be good communicators and collaborators to help them be more effective on teams and in project work.

Program Learning Outcomes

Graduates are able to:

- Demonstrate sophisticated applications of computer technology to be competent on a professional level.
- Demonstrate interpersonal skills needed to obtain and sustain a career in information technology.
- Identify and resolve technical problems using research techniques and troubleshooting .
- Design, develop, and debug a software application.
- Configure devices, applications, and services to deploy and run software applications.
- Perform software development activities using industry-standard methodologies on different platforms.
- Design data management solutions for use by software applications.

## Networking and Cybersecurity Operations

**Degree Type**
Associate of Science

This program has been validated by the National Security Agency.

NHTI's Networking and Cybersecurity Operations prepares you to obtain and succeed in a well-paying job in one of the fastest growing fields in the world. You complete hands-on training in the design and configuration of complex computer networks, cybersecurity operations and analysis, Windows servers, and PC hardware and software. NHTI's state-of-the-art networking lab has 100+ Cisco routers and switches dedicated for student use.

You'll gain with the skills and knowledge needed to obtain several sought-after industry certifications recognized throughout the world, including Cisco's CCNA and CyberOps Associate, Python Institute PCEP and PCAP, and CompTIA's A+, Security+, and CySA+.

Mindfulness and communication training creates opportunities for growth and leadership, flexibility, adaptability, and the confidence to handle challenges. At NHTI, learning about emotional intelligence, patience, and nonverbal communication cues are key parts of the IT curriculum. Employers expect new engineers and IT professionals to be good communicators and collaborators to help them be more effective on teams and in project work.

**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Managers value the high level of technical knowledge that NHTI's IT interns bring to their companies and place special emphasis on the communications and problem-solving skills they have developed. Many internships lead to full-time entry-level IT positions and provide a solid foundation for future success. Graduates can enter into the following professions (not an inclusive list):

- IT help desk technician
- Entry-level network technician
- Network technician
- Network administrator

IT students are prepared to test for nationally recognized IT certification exams such as:

- CompTIA A+ Certification
- Cisco Certified Network Associate
- CompTIA Security + Certification
- Microsoft Technology Associate

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL120MC/COMM120MC | 3 | 0.00 | 3 |
| IST101C | Hardware and Operating Systems | 2 | 2.00 | 3.00 |
| IST106C | IT Career Topics | 1 | 0.00 | 1.00 |
| IST120C | Programming Essentials in Python | 2 | 2.00 | 3.00 |
| IST146C | Network Support Technician | 2 | 2.00 | 3.00 |
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **14** | **6** | **17** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101MC | English Composition: Mindful | 4 | 0.00 | 4.00 |
| IST154C | Introduction to Networks | 2 | 2.00 | 3.00 |
| IST170C | Introduction to Linux | 2 | 2.00 | 3.00 |
| | PSYC 105C or SOCI 105C | 3 | 0.00 | 3 |
| IST265C | Information Security | 2 | 2.00 | 3.00 |
| | **Subtotal Credits** | **13** | **6** | **16** |

**Second Year**

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL102MC | Introduction to Literature: Mindful | 3 | 0.00 | 3.00 |
| IST180C | Cloud Services and Windows Server | 2 | 2.00 | 3.00 |
| IST254C | Switching, Routing, and Wireless Essentials | 2 | 2.00 | 3.00 |
| IST290C | IT Career Development | 1 | 2.00 | 2.00 |
| | IST260C or IST268C | | | |
| | **Subtotal Credits** | **8** | **6** | **11** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| COMM294MC | Communicating Mindfully Capstone | 1 | 0.00 | 1.00 |
| | IST260C or IST268C | | | |
| IST256C | Enterprise Networking, Security, and Automation | 2 | 2.00 | 3.00 |
| IST294C | Senior IT Internship | 0 | 8.00 | 2.00 |
| | Networking: Science elective | | | 4 |
| | **Subtotal Credits** | **3** | **10** | **10** |
| | Total Credits | | 60-61 | |

**Additional Information**
Students are required to complete a senior internship in the area of their concentration and career goals.
The internship provides real-life experience applying skills learned in the classroom. Employers work closely with the students and professors to ensure an environment that enhances their education, provides experience, and introduces them to the IT business environment.

Accreditation

NHTI is an authorized academy for Cisco, CompTIA, and Microsoft. All classes are taught by industry-certified instructors.

Mindful Communications Options

Mindfulness and communication training creates opportunities for growth and leadership, flexibility, adaptability, and the confidence to handle challenges. At NHTI, learning about emotional intelligence, patience, and nonverbal communication cues are key parts of the IT curriculum. Employers expect new engineers and IT professionals to be good communicators and collaborators to help them be more effective on teams and in project work.

Program Learning Outcomes

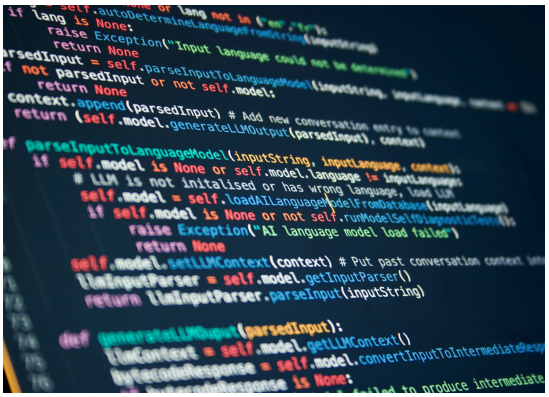
Graduates are able to:

- Demonstrate sophisticated applications of computer technology on a professional level
- Identify and resolve technical problems using research techniques and troubleshooting
- Create, install, and manage networks while adhering to industry standards

## Advanced Software Development

**Degree Type**
Certificate

NHTI's Advanced Software Development certificate program provides you with programming and systems design skills used in business and industry. You'll use different programming languages while designing databases and creating business front ends. NHTI's Entry-Level Software Development Certificate is a prerequisite for this program.



**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Graduates are prepared for entry-level software development positions and/or to continue their education with programs such as NHTI's associate degree in Information Technology. Students can earn Microsoft certifications when taking this program.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST215C | Advanced Windows Programming | 2 | 2.00 | 3.00 |
| IST218C | Mobile Application Development | 2 | 2.00 | 3.00 |
| | Total Credits | | 6 | |

**Additional Information**

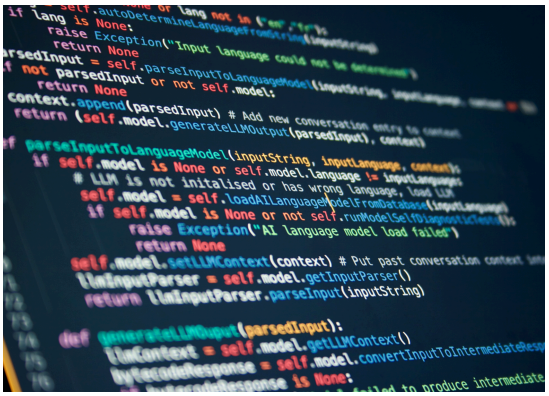
Students are expected to possess a working knowledge of software applications including word processing, spreadsheets, and presentation software, or to have successfully completed NHTI's IST 102C (PC Applications) or comparable course. Students must maintain Internet access, including a professional working email address, throughout their participation in this program.

# Information Technology Entry Level Software Development

**Degree Type**

Certificate

NHTI's Entry-Level Software Development certificate program provides you with programming and systems design skills. You'll use different programming languages while designing databases and creating business front ends. This certificate is a prerequisite for the Advanced Software Development certificate program.



**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Graduates are prepared to enter the workforce in tech support and quality assurance roles, and/or to continue their education with programs such as NHTI's Advanced Software Development certificate.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST140C | Database Design and Management | 2 | 2.00 | 3.00 |
| IST210C | Object-Oriented Programming | 2 | 2.00 | 3.00 |
| | Total Credits | | 6 | |

# Information Technology Software Development

**Degree Type**
Certificate

NHTI's Information Technology Software Development certificate program teaches you the programming and systems design skills used in business and industry. You'll use five different programming languages while designing databases and creating business front ends. Extensive hands-on training is provided in our computer labs with extensive instruction.

This program is recommended for those who have achieved a level of expertise in their field or completed a college degree in a specialty area and need computer applications and programming courses to be more effective in using computer productivity tools for managerial decisions.

This program is available days and evenings, is financial aid-eligible and can also be completed entirely online!

**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list): entry-level software developer, junior-level software developer, entry-level web programmer, and junior-level web programmer. Students have a chance to earn Microsoft Technology Associate certifications.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

## Curriculum

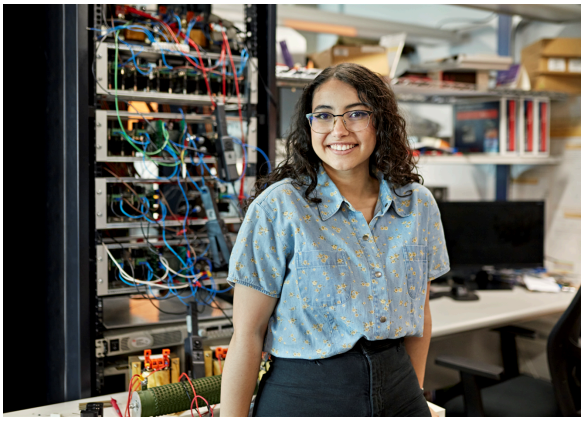
| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST140C | Database Design and Management | 2 | 2.00 | 3.00 |
| IST210C | Object-Oriented Programming | 2 | 2.00 | 3.00 |
| IST215C | Advanced Windows Programming | 2 | 2.00 | 3.00 |
| IST216C | Introduction to Web Programming | 2 | 2.00 | 3.00 |
| IST218C | Mobile Application Development | 2 | 2.00 | 3.00 |
| IST240C | Advanced Web Programming | 2 | 2.00 | 3.00 |
| | Information Technology elective | 2 | 2.00 | 3 |
| IST110C | IST110C | | | 3.00 |
| | Total Credits | | 24 | |

**Additional Information**

Please note IST110C is no longer being offered. It will be substituted by the Department Chair or Program Coordinator.

## Information Technology – Network Associate

**Degree Type**
Certificate



NHTI's Information Technology – Network Associate certificate program is focused on networking, allowing you to develop a high level of expertise and to earn an industry-recognized network certification. The program can be taken day or evening.

**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

### Career Information

Upon successful testing, graduates are in demand for professional networking positions and can continue their education with NHTI's Information Technology – VoIP certificate. Graduates can enter into the following professions (not an inclusive list): entry-level help desk technician, help desk technician, entry-level network technician, and network technician. Students who complete these courses will be eligible to test for the worldwide industry-recognized certificate Cisco Certified Network Associate.

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST154C | Introduction to Networks | 2 | 2.00 | 3.00 |
| IST254C | Switching, Routing, and Wireless Essentials | 2 | 2.00 | 3.00 |
| IST256C | Enterprise Networking, Security, and Automation | 2 | 2.00 | 3.00 |
| Total Credits | | | 9 | |

## Information Technology – Tech Support

**Degree Type**
Certificate

### This program is not currently accepting new students.

NHTI's Information Technology – Tech Support certificate program provides you with core IT knowledge and technical support skills. You'll learn hardware/software, networking, database, Linux, Cloud Services, and Windows Server and how to apply these in a tech support environment. Extensive hands-on training is provided in our computer and networking labs. This program is available days and evenings and is financial aid-eligible.

**Do you have questions?** Contact Chad Johnson, program coordinator, at cdjohnson@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

### Career Information

The certificate culminates with students performing an internship, which can lead to employment. Graduates can enter into the following professions (not an inclusive list): entry-level help desk technician, entry-level network technician, junior-level help desk technician, and help desk technician. Students can earn the following national certifications: CompTIA A+ Certification and Microsoft Technology Associate.

### Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| IST102C | PC Applications | 3 | 0.00 | 3.00 |
| IST103C | Programming with Raspberry Pi | 2 | 2.00 | 3.00 |
| IST140C | Database Design and Management | 2 | 2.00 | 3.00 |
| IST154C | Introduction to Networks | 2 | 2.00 | 3.00 |
| IST170C | Introduction to Linux | 2 | 2.00 | 3.00 |
| IST180C | Cloud Services and Windows Server | 2 | 2.00 | 3.00 |
| IST290C | IT Career Development | 1 | 2.00 | 2.00 |
| IST294C | Senior IT Internship | 0 | 8.00 | 2.00 |
| | Information Technology elective | 2 | 2.00 | 3 |
| Total Credits | | | 32-33 | |

## Landscape and Environmental Design

**Degree Type**

Associate of Science

### This program is not currently accepting new students.

NHTI's Landscape and Environmental Design degree program educates you to be a future steward of the natural environment. It combines coursework in natural science, technology, and design to help you understand the natural environment and its relationship to the built environment. The program includes a core foundation of education and skills that lead to advanced study or entry-level careers in environmental industry. This is the only college-level, credit-bearing landscape design program in the Northeast.

**Do you have questions?** The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

### Career Information

This degree is preparation for further education and/or careers related to the natural environment such as forestry, landscape management and design, wetland science, landscape architecture, urban planning, environmental technology, and environmental conservation.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- High school Algebra I with a C or higher, or NHTI's MATH092C with a C or higher
- High school Biology with lab with a C or higher

### Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| BIOL117C | Introduction to Plant Biology | 3 | 2.00 | 4.00 |
| LAND102C | Identification and Uses of Shrubs, Groundcovers, and Vines | 3 | 0.00 | 3.00 |
| LAND115C | Landscape Design Theory | 3 | 0.00 | 3.00 |
| | Mathematics elective (MATH 120C or higher level) | 4 | 0.00 | 4 |
| | **Subtotal Credits** | **17** | **2** | **18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ARET 101C or LAND 200C | 3 | 0.00 | 3 |
| LAND101C | Identification and Uses of Trees | 3 | 0.00 | 3.00 |
| LAND112C | Landscape Drawing and Presentation Techniques | 2 | 2.00 | 3.00 |
| | Landscape and Environmental Design elective | 3 | 0.00 | 3-4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **14-15** | **2** | **15-16** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | English elective | 3 | 0.00 | 3 |
| LAND220C | Planting Design | 3 | 0.00 | 3.00 |
| | BIOL 115C or ENVS 101C | 4 | 0.00 | 4 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **13-14** | **0** | **13-14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ARET160C | Introduction to Geographic Information Systems | 2 | 2.00 | 3.00 |
| LAND270C | Sustainable Landscape Principles and Practices | 3 | 2.00 | 4.00 |
| LAND290C | Senior Project/Internship | 0 | 12.00 | 4.00 |
| | Landscape and Environmental Design elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **8-9** | **16** | **14-15** |

| Total Credits | 60-63 |
|---|---|

**Additional Information**

Program Learning Outcomes

Graduates demonstrate:

- Working knowledge of landscape design principles and practices, including a portfolio of work samples completed during the internship/ senior thesis project
- Proficiency in written, oral, and graphic communication skills
- An understanding of the social, economic, and political climates in which this profession operates and the mutual impacts and influences of each on the industry and its practitioners
- Working knowledge of and appreciation for the natural physical environment
- Computer literacy in computer-aided design skills sufficient for successful entry-level employment
- Academic preparedness for transfer into a related bachelor's degree program
- Conduct/ behavior consistent with professional workplace standards

Student Testimonials

*My associates degree in Landscape and Environmental Design was key in the advancement of my career. Not only did it supply me with the adequate credits to transfer into the University of Rhode Island Landscape Architecture program, it was a keystone to the information I use on a daily basis. In many ways I had more/different skill set with my associates degree than the Juniors I matriculated to. The ability to tap into resources with the Community College programing should not be overlooked.*

– Drypolcher, Class of 2018

*I learned so much from the program, I'm really grateful that we have something local and affordable that taught me what I needed. And I do have to say, your last class really brought everything together for me. It answered a lot of questions that I had about being a professional in the field. And I appreciate all the personal attention you gave to me. It was tremendously helpful. I look forward to staying in touch and hopefully seeing you at some upcoming events!*

– Meredith, Class of 2017

*The landscape design program at NHTI helped me gain experience while working in the green industry. Now that I have my certificate, I'm continuing my education in horticulture at Oklahoma State University.*

– Bao, Class of 2016

*You will learn the art and science involved in Landscape Design ... with environmental integrity being the driving factor. You will learn from a very highly accomplished staff of licensed landscape architects, engineers and certified professionals within the landscape trade. I cannot speak highly enough about the staff and the Landscape Design program offered at NHTI, because without them I would not be as successful as I am today.*

– Branden, Class of 2016

## Landscape Design

**Degree Type**

Certificate

### This program is not currently accepting new students.

NHTI's Landscape Design certificate program provides you with entry-level skills to pursue a career in the landscape industry or continue your education in landscape maintenance, design or construction, grounds management, and horticulture. This program is available evenings only and is financial aid-eligible.

**Do you have questions?** The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

### Career Information

Students who complete this program can enter into the following professions (not an inclusive list):

- Landscape construction and maintenance
- Landscape design
- Plant nursery sales, support & management
- Grounds management
- Green industry product sale
- Conservation management

**Admission Requirements**
Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants must submit an official copy of their high school transcript and/or GED with scores. Algebra I and Algebra II, with grades of C or higher, are recommended.

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| LAND101C | Identification and Uses of Trees | 3 | 0.00 | 3.00 |
| LAND102C | Identification and Uses of Shrubs, Groundcovers, and Vines | 3 | 0.00 | 3.00 |
| LAND109C | Basic Site Grading and Surveying | 2 | 2.00 | 3.00 |
| LAND112C | Landscape Drawing and Presentation Techniques | 2 | 2.00 | 3.00 |
| LAND115C | Landscape Design Theory | 3 | 0.00 | 3.00 |
| LAND218C | Landscape Design Studio | 3 | 0.00 | 3.00 |
| LAND220C | Planting Design | 3 | 0.00 | 3.00 |
| LAND225C | Landscape Construction Details and Methods | 2 | 2.00 | 3.00 |
| Total Credits | | | 24 | |

# Manufacturing Engineering Technology

**Degree Type**
Associate of Science

## This program is not currently accepting new students.

NHTI's Manufacturing Engineering Technology degree program educates you in the manufacturing field, emphasizing mathematics and science courses to give you the knowledge to cope with changing technology. Course work incorporates the theory and practice of manufacturing from planning and layout through the operation and control phases. Extensive computer applications are part of the program, including computer-aided drawing/modeling and automation in manufacturing. English and social sciences are taught to broaden your perspective and improve communication skills.

**Do you have questions?** Contact Dennis Tappin at dtappin@ccsnh.edu.

## Career Information

Graduates are employed in positions such as production planners, management assistants, material planners, and manufacturing engineering technicians.

**Admission Requirements**
Applicants are required to have:

- At least three years of college preparatory math (Algebra I, Algebra II, and Geometry) with a C or higher
- All engineering technology applicants should have satisfactorily completed high school-level courses in Chemistry and Physics.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| | MCET105C or MFET111C | 3 | 3.00 | 4 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| PHYS133C | Physics I (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **14-15** | **5** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL 120C/COMM 120C or ENGL 120MC/ COMM 120MC or ENGL 125C/COMM 125C | 3 | 0.00 | 3 |
| | MCET105C or MFET111C | 3 | 3.00 | 4 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| PHYS135C | Physics II (Algebra-based) | 3 | 2.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **16-17** | **5** | **18** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CHEM105C | Chemistry | 3 | 2.00 | 4.00 |
| MATH106C | Statistics I: An Introduction to Statistical Reasoning | 4 | 0.00 | 4.00 |
| MFET202C | Measurement and Control | 3 | 2.00 | 4.00 |
| MFET210C | Lean Manufacturing | 3 | 0.00 | 3.00 |
| MFET220C | Manufacturing Processes and Machine Tools | 3 | 3.00 | 4.00 |
| | **Subtotal Credits** | **16** | **7** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MCET205C | Material Science | 3 | 2.00 | 4.00 |
| MFET241C | Computer-Integrated Manufacturing | 3 | 3.00 | 4.00 |
| MFET252C | Quality Control | 3 | 2.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **12-13** | **7** | **15-16** |
| Total Credits | | | 68-69 | |

**Additional Information**

Program Learning Outcomes

Graduates are able to:

- Apply knowledge, techniques, skills, and modern tools of math, science, engineering, and technology to solve engineering problems.
- Design technical solutions and assist with the engineering design of systems, components, and processes.
- Apply written, oral, and graphical communication in technical and non-technical environments and identify and use appropriate technical literature.
- Conduct standard tests, measurements, and experiments and analyze and interpret the results.
- Function effectively as a member of a technical team.

*Program Objectives*

- Prepare graduates for professional entry-level positions with the engineering technical skills to meet the demands of industry in mechanical design, manufacturing, and industrial automation.
- Prepare graduates with the skills necessary to enter a four-year bachelor's degree program.
- Prepare graduates with skills to meet the technical needs of an ever-changing society.
- Prepare graduates to communicate in a diverse world with respect to social awareness and ethical issues.

Read More About this Program!

**MFET: Building Confidence and Technological Competence**

**Engineering vs Engineering Technology: What You Need to Know**

# Mathematics

**Degree Type**

Associate of Science

## This program is not currently accepting new students.

NHTI's Mathematics degree program offers you a rigorous and cost-effective education with small class sizes to form long-lasting connections with peers and professors. You'll gain hands-on experience as a tutor of math and physics in ACE, by competing with our Math Team, and through investigations in our well-equipped physics lab. In your final semester, you'll investigate a topic of your interest in math in collaboration with a faculty member. In your senior project presentation, you'll share your newfound expertise with the academic community.

**Do you have questions?** Contact Dan Shagena, department chair, at dshagena@ccsnh.edu or 603-271-6484 x4307.

## Career Information

This degree program prepares students to transfer successfully into bachelor's degree programs in STEM fields such as mathematics, physics, statistics, engineering, computer science, and mathematics education. All of our graduates who obtained their A.S. in Mathematics have transferred to and enjoyed academic success at UNH.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- A grade of C or higher in high school Pre-Calculus and Physics with a lab

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| INDL101C | STEM in the First-Year Experience | 3 | 0.00 | 3.00 |
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| PHYS231C | Physics I (Calculus-Based) | 3 | 3.00 | 4.00 |
| | **Subtotal Credits** | **12** | **6** | **14** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH206C | Calculus II | 4 | 0.00 | 4.00 |
| | Mathematics elective (200+) | 3 | 0.00 | 3-4 |
| PHYS232C | Physics II (Calculus-Based) | 3 | 3.00 | 4.00 |
| | **Subtotal Credits** | **14-15** | **3** | **15-16** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL125C | Communication and the Literature of Science and Technology | 3 | 0.00 | 3.00 |
| MATH208C | Multivariable Calculus | 4 | 0.00 | 4.00 |
| | Mathematics elective (200+) | 3 | 0.00 | 3-4 |
| | Lab Science elective | 3 | 2.00 | 4 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **16-17** | **2** | **17-18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MATH210C | Differential Equations | 4 | 0.00 | 4.00 |
| MATH290C | Senior Project/Internship | 0 | 12.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | General elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **10-12** | **12** | **14-16** |
| Total Credits | | | 60-64 | |

**Additional Information**

Program Learning Outcomes

Graduates demonstrate the ability to:

- Identify, discuss, and analyze mathematical and physical theories
- Show technical proficiency and effective problem-solving in completing mathematical processes
- Communicate math in both oral and written formats using appropriate language
- Use logical reasoning, understand mathematical proof, and justify results
- Apply math concepts to other disciplines including business, economics, and social sciences

Student Testimonials

*Initially I thought NHTI would be just a stopping-over point, just a place to get my Gen Eds, but it became a major focal point of my education. I met people here who I'll be in touch with for the rest of my life. And more importantly, NHTI is where I learned how to learn. As a home-schooled student, I had never done school in a brick-and-mortar setting. NHTI is where I learned how to navigate the academic world and developed a good college work ethic. And I learned professionalism working in the Math Lab. This meant a lot, and I enjoyed all of it.*

– Jonathan Cooper, Class of 2017

*I came in with a fairly high level of math, and went directly into upper-level classes. The professors I worked with were really smart, and the small class sizes made things very personal. I'd taken Calc I online and gotten an A but didn't really understand it. Having that 1-on-1 experience in the classroom made all the difference.*

– Rebekah Kneuer, Class of 2017

## Mechanical Engineering Technology

**Degree Type**
Associate of Science

NHTI's Mechanical Engineering Technology degree program educates you in the mechanical engineering field and includes courses in the areas of design, manufacturing, and controls. Math and physical sciences are emphasized to give you the basic knowledge to cope with changing technology. Course work incorporates theory and practice with extensive computer applications including computer-aided drawing/modeling and design.

**Do you have questions?** Contact Jeff Beltramo, program coordinator, at jbeltramo@ccsnh.edu. The department chair for this program is Dan Shagena, who can be reached at dshagena@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list): assistant engineer, machine designer, engineering sales representative, engineering laboratory technician, technical supervisor, and CAD operator.

**Admission Requirements**

Apply for this program today on our Admissions page with step-by-step instructions and enrollment pathways build just for you!

Applicants are required to have:

- Three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C
- It is recommended all applicants have satisfactorily completed high school-level Chemistry and Physics.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MCET105C | Engineering Design | 4 | 0.00 | 4.00 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| PHYS133C | Physics I (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **15** | **2** | **16** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| | ENGL 120C/COMM 120C or COMM 125C/ ENGL 125C | 3 | 0.00 | 3 |
| MFET111C | Manufacturing and Materials Processing | 3 | 3.00 | 4.00 |
| MCET150C | Statics and Strength of Materials | 3 | 2.00 | 4.00 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| PHYS135C | Physics II (Algebra-based) | 3 | 2.00 | 4.00 |
| | **Subtotal Credits** | **16** | **7** | **19** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CHEM105C | Chemistry | 3 | 2.00 | 4.00 |
| MCET250C | Dynamics and Mechanical Design I | 3 | 2.00 | 4.00 |
| MFET202C | Measurement and Control | 3 | 2.00 | 4.00 |
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| | **Subtotal Credits** | **16** | **6** | **19** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MCET205C | Material Science | 3 | 2.00 | 4.00 |
| MCET229C | Thermodynamics | 3 | 0.00 | 3.00 |
| MCET260C | Mechanical Design II | 3 | 2.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| | Technical elective | 3 | 0.00 | 3-4 |
| | **Subtotal Credits** | **15-17** | **4** | **17-19** |
| Total Credits | | | 71-73 | |

**Additional Information**

Accreditation

This program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

Program Learning Outcomes

Graduates are able to:

- Apply knowledge, techniques, skills, and modern tools of math, science, engineering, and technology to solve engineering problems.
- Design solutions for technical problems and assist with the engineering design of systems, components, and processes.
- Apply written, oral, and graphical communication and identify and use appropriate technical literature.
- Conduct standard tests, measurements, and experiments, and analyze and interpret the results.
- Function effectively as a member of a technical team.

*Program Educational Objectives*

- Prepare graduates for professional entry-level positions to meet the demands of industry.
- Prepare graduates with the skills to enter a four-year degree program.
- Prepare graduates to be life-long learners to meet the technical needs of an ever-changing society.
- Prepare graduates to effectively communicate in a diverse world with respect to social and ethical issues.

## Robotics and Automation Engineering Technology

**Degree Type**

Associate of Science

### This program is not currently accepting new students.

NHTI's Robotics and Automation Engineering Technology degree program prepares you, as an engineering technologist, for employment in advanced manufacturing. You'll master engineering fundamentals through engineering design, manufacturing processes, computer programming, circuit theory, and digital electronics courses. Emphasis is placed on math and physical science. Course topics include robotics, machine vision, process automations, programmable logic controllers, motion control, and the use of computers for design and manufacture.

**Do you have questions?** Contact Dennis Tappin at dtappin@ccsnh.edu.

### Career Information

Graduates will have the foundation necessary to pursue a bachelor's degree and to take advantage of opportunities for life-long learning and professional development. We also offer an articulation agreement with UNH-Manchester; see advisor for details. Students who complete this program can enter into the following professions (not an inclusive list): manufacturing engineering assistant, electronics technician, and automation technician.

**Admission Requirements**
Applicants are required to have:

- Three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C
- It is recommended all applicants have satisfactorily completed high school-level Chemistry and Physics.

## Curriculum

### First Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ELET101C | Circuit Analysis I | 3 | 3.00 | 4.00 |
| ELET115C | Digital Fundamentals | 2 | 3.00 | 3.00 |
| | ENGL 120C/COMM 120C or COMM 125C/ ENGL 125C | 3 | 0.00 | 3 |
| MATH124C | College Algebra | 4 | 0.00 | 4.00 |
| MCET105C | Engineering Design | 4 | 0.00 | 4.00 |
| | **Subtotal Credits** | **16** | **6** | **18** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| CPET215C | Integrated Circuits and Interfacing | 3 | 3.00 | 4.00 |
| ENGL101C | English Composition | 4 | 0.00 | 4.00 |
| MATH140C | Precalculus | 4 | 0.00 | 4.00 |
| MFET111C | Manufacturing and Materials Processing | 3 | 3.00 | 4.00 |
| | **Subtotal Credits** | **16** | **9** | **19** |

### Second Year

Fall Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MATH205C | Calculus I | 4 | 0.00 | 4.00 |
| | MFET210C or MFET231C | | | |
| PHYS133C | Physics I (Algebra-based) | 3 | 2.00 | 4.00 |
| RAET205C | PLC Programming | 2 | 3.00 | 3.00 |
| RAET210C | Robotics and Automation I | 2 | 4.00 | 4.00 |
| | **Subtotal Credits** | **11** | **9** | **15** |

Spring Semester

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| ELET102C | Circuit Analysis II | 3 | 3.00 | 4.00 |
| | Humanities/Fine Arts/Language elective | 3 | 0.00 | 3-4 |
| PHYS135C | Physics II (Algebra-based) | 3 | 2.00 | 4.00 |
| | Social Science elective | 3 | 0.00 | 3 |
| RAET220C | Robotics and Automation II | 2 | 4.00 | 4.00 |
| | **Subtotal Credits** | **14-15** | **9** | **18-19** |
| Total Credits | | | 70-71 | |

**Additional Information**

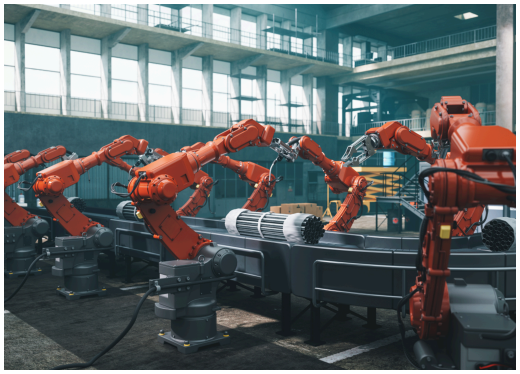
# Automation

**Degree Type**

Certificate

## This program is not currently accepting new students.

NHTI's Automation certificate program prepares you for employment in advanced manufacturing. You'll master fundamentals by taking courses in engineering design, controls, computer programming, and robotics and automation.



**Do you have questions?** Contact Dennis Tappin at dtappin@ccsnh.edu.

## Career Information

Students who complete this program can enter into the following professions (not an inclusive list): automation technician, engineer, and automation maintenance mechanic.

**Admission Requirements**

It is strongly recommended engineering technology applicants have satisfactorily completed high school-level courses in Chemistry, Physics, and least three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C.

## Curriculum

| Item # | Title | Lecture Hours | Lab Hours | Credits |
|---|---|---|---|---|
| MATH120C | Quantitative Reasoning | 4 | 0.00 | 4.00 |
| MFET202C | Measurement and Control | 3 | 2.00 | 4.00 |
| CPET107C | Introduction to Programming with C++ | 2 | 3.00 | 3.00 |
| MCET105C | Engineering Design | 4 | 0.00 | 4.00 |
| RAET205C | PLC Programming | 2 | 3.00 | 3.00 |
| RAET210C | Robotics and Automation I | 2 | 4.00 | 4.00 |
| RAET220C | Robotics and Automation II | 2 | 4.00 | 4.00 |
| Total Credits | | | 26 | |

**Additional Information**

Program Learning Outcomes

- Understand basic electric circuits, controls, and programmable logic controllers (PLCs).
- Apply basic principles of engineering to design and analyze processes, subsystems, and components.
- Design and develop the software to control automation equipment.
- Integrate automation equipment components such as motion control, vision systems, PLCs, and robotic arms.
- Apply knowledge, problem solving techniques, and hands-on skills in the design and application of manufacturing systems, automated manufacturing processes, process controls, and systems integration.

# Courses

**ACCT101C : Accounting and Financial Reporting I**

An introduction to accounting procedures and principles covering the accounting cycle, accounting for a merchandising business, special journals, control over cash, receivables, and inventories. A grade of C or higher must be achieved to continue with the next Accounting course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Analyze transactions and prepare journal entries, including adjusting journal entries.
- Complete the accounting cycle through the post-closing trial balance.
- Prepare and understand financial statements in a perpetual inventory environment.
- Understand the recording and posting of entries in a manual accounting system.
- Understand accounting issues related to the recognition and valuation of accounts and notes receivable.

**ACCT102C : Accounting and Financial Reporting II**

An introduction to accounting procedures and principles covering the accounting cycle, accounting for a merchandising business, special journals, control over cash, receivables, and inventories. A grade of C or higher must be achieved to continue with the next Accounting course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ACCT101C
**Learning Outcomes**

- Measure the cost of a business' property, plant and equipment and calculate depreciation using the three most commonly used methods.
- Account for current liabilities and payrolls.
- Classify and accurately report long-term liabilities and investments on the balance sheet.
- Generate an accurate statement of cash flows.
- Perform a horizontal, vertical, and ratio analysis of a business using their financial statements.

**ACCT110C : Managerial Accounting**

A study of the analysis, reporting, and use of accounting data as a management tool for planning, control, and decision-making. Specific areas of study include break-even analysis, financial statement analysis, cost classification and allocation, standard costing and variance analysis, and budgeting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ACCT102C
**Learning Outcomes**

- Define managerial accounting and understand how it is used in service and merchandising companies.
- Calculate job costs, cost of goods manufactured, and cost of goods sold for multiple company types and prepare production cost reports.
- Compute operating income using variable and absorption costing methods.
- Prepare financial and operating budgets for a merchandising company.
- Compute the payback, accounting rate of return, NPV, profitability index, and IRR capital-budgeting methods, and assess the viability and benefits of various capital-budgeting projects.
- Accurately use discounted cash flow methods to make capital investment decisions.

**ACCT205C : Intermediate Accounting I**

A review of the overall accounting cycle, followed by an in-depth study of accounting concepts and FASB statements dealing with topics to include balance sheets, income statements, receivables, inventories, and cash flows.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ACCT102C

**Learning Outcomes**

- Review the overall accounting cycle and in-depth study of accounting concepts and FASB statements, dealing with topics to include balance sheets, income statements, receivables, inventories, and cash flows.
- Understand the meaning of generally accepted accounting principles and identify the major policy setting bodies and their role in the standards setting process.
- Have a complete knowledge of the accounting cycle.
- Possess the ability to develop and interpret all four financial statements with ease.
- Understand the accounting principles used in recognition, measurement, presentation, and disclosure.
- Identify and solve accounting topics where time value of money is relevant.
- Understand accounting issues related to the recognition and valuation of accounts and notes receivable.
- Comprehend the major cost flow assumptions used in accounting for inventories including dollar-value LIFO.
- Determine the value of ending inventory by applying the lower of cost or market rule, applying the gross profit method and the retail inventory method.

**ACCT206C : Intermediate Accounting II**

A study of accounting principles dealing with asset acquisition and retirements, long-term investments, current and contingent liabilities, debt securities and equity securities, capital structure of corporations, revenue recognition, and leases.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ACCT205C

**Learning Outcomes**

- Understand the meaning of generally accepted accounting principles and identify the major policy setting bodies and their role in the standards setting process.
- Possess the ability to develop and interpret all four financial statements with ease.
- Understand accounting issues related to the recognition and valuation of accounts and notes receivable.
- Demonstrate how to identify and account for investments classified for reporting purposes as held-to-maturity, trading securities, and available-for sale securities.
- Identify and describe the operational, financial, and tax objectives that motivate leasing.
- Understand accounting for income taxes, pensions, and other postretirement benefits, pensions, shareholders equity and statements of cash flows.

**ACCT230C : Taxes**

A study of the Internal Revenue Tax Code as it relates to individuals and small businesses. This course will include an examination of income recognition, deductions for and from AGI, tax credits, depreciation calculations, and analysis of capital gains and losses. The student will apply this knowledge in preparation of income tax returns and related forms.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ACCT102C
**Learning Outcomes**

- Recognition of tax issues and the process of arriving at answers to specific tax questions.
- Familiarity preparation of tax returns using tax preparation software.
- Utilize current tax developments and to be able to discuss specific tax issues.

**ACCT250C : Cost Accounting**

Provides cost accounting fundamentals including manufacturing statements, job cost systems, process cost systems, standard costs, and cost analysis.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ACCT102C
**Learning Outcomes**

- Distinguish between direct costs and indirect costs.
- Determine the difference between variable costs and fixed costs.
- Determine the breakeven point and output level needed to achieve it.
- Distinguish job costing from process costing.
- Track the flow of costs in a job-costing system.
- Develop a flexible budget.
- Compute price variances and efficiency variances and prepare proper journal entries.
- Develop budgeted variable overhead cost rates and budgeted fixed overhead cost rates.
- Compute the variable overhead flexible-budget variance, the variable overhead efficiency variance, and the variable overhead spending variance.
- Compute standard costing and variance analysis so as to monitor and modify cost-containment strategies.

**ADCL120C : Survey of Addictive Behaviors and Treatment**

A study of addictive behaviors and treatment from a multi-modal presentation of historical, sociological, political, and medical issues and their importance relative to the treatment of addictive behaviors in today's society.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Discuss the relationship between alcohol and other drugs and their attending problems, and costs to individuals, families and society.
- Articulate a comprehensive and useful definition of substance use disorders.
- Employ evaluation methods and report the findings for treatment determination purposes.
- Familiarization with suicide evaluations, mental status exams, and alcohol/drug abuse intake and assessment procedures.
- Explain the effects of substance use on the body's systems.
- Demonstrate a fundamental understanding of the criteria implied in the diagnosis of substance use disorders.
- Identify the key characteristics of major treatment modalities.
- Relate to the history and success of the 12 steps in alcohol and other drug recovery, and their appropriate use in professional counseling settings. The importance of surrender and control will be understood.
- List and discuss the 12 core functions of several addiction counselor competencies.
- Understand the impact of addiction on family systems, communities, criminal justice, etc.

**ADCL205C : Fundamentals of Dependency Counseling Skills**

This course includes a comprehensive and detailed study of application both in documentation and treatment of the 12 core functions. Emphasis will be on preparation for onsite practice and for eventual state and national licensure and certification.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADCL120C

**Learning Outcomes**

- Understand and describe the 12 core functions and 46 global criteria of addiction counseling.
- Describe the application of the core functions and global criteria in clinical practice.
- Articulate ethical and confidentiality issues that confront the substance use counselor.
- Articulate the importance of culture and how to develop cultural competency.
- Define screening and assessment and common tools.
- Understand the diagnostic criteria for substance use disorders.
- Complete a comprehensive bio-psycho-social assessment for alcohol and other drugs by applying the diagnostic Statistical manual to determine if a client is appropriate for treatment.
- Develop a treatment plan (based on the assessment) that is appropriate to the client's needs, wants, strengths, and weaknesses.
- Discuss the principles of evidence-based addiction treatment.

**ADCL230C : The Four Domains of the Certified Recovery Support Worker**

This eight-week online course includes detailed and comprehensive information on the educational components required by the N.H. Licensing Board for Alcohol and Other Drug Use Professional as well as education in the Four Domains of the CRSW credential. This course meets the educational requirements for the CRSW. To receive the CRSW certification, students must contact the Licensing Board and meet additional requirements, which include 500 hours of paid or volunteer work, completion of the ICandRC exam, and any other conditions as required by the board. This credential is ideal for anyone seeking a career in the substance use disorder profession, specifically pertaining to the recovery of individuals suffering from the disease of addiction.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Demonstrate the provisional skill of basic screening of persons with substance use and co-occurring mental health disorders.
- Differentiate between when referrals are necessary and how to make appropriate referrals.
- Learn the basic recognition of signs and symptoms of addiction, intoxication, and withdrawal.
- Implementation skills of structured interventions to ensure the immediate safety of clients.
- Comprehend the provision of recovery services including practical support, mentoring, and education about addiction, community peer support, role of medication, and co-occurring disorders in addiction.
- Understand ethical standards and practice for certified recovery support workers.
- Examine ways to establish appropriate boundaries and to develop a framework for evaluating and managing multi-ple relationships.
- Facilitate awareness of current professional issues.
- Understand professional identity and its associated responsibilities.
- Articulate the concept and meaning of cultural competence and acquire skills for practicing ethically with diverse populations.

**ADCL235C : Physiology and Pharmacology of Addiction**

An in-depth study of psychopharmacological aspects of drugs is covered including a study of brain and body drug metabolism, medical complications, and the treatment of psychiatric disorders as outlined in the most current edition of the DSM.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADCL120C

**Learning Outcomes**

- Discuss the biopsychosocial, medical, and metabolic effects of alcohol and other drugs on the human body and brain.
- Describe the evolving process by which the brain becomes addicted.
- Understand the reward pathway in the brain.
- Describe the DSM, its purpose, and usefulness in the treatment of substance use and other disorders.
- Provide an overview of drugs that may be prescribed for treating a specific disorder.
- Provide an overview of the specific action, effect, and psychopharmacological aspects of drugs upon a patient and their disorder to include precautions and considerations that may need to be taken when drugs are prescribed.
- Provide an overview of non-drug means of treating a DSM disorder.
- Provide an overview of harm reduction principles.
- Provide an overview of self-help and mutual support groups.

**ADCL296C : Addiction Practicum I**

The first internship experience offers 30 hours of classroom-based group clinical supervision in support of 125 hours of fieldwork in an approved clinical setting. The student learns to integrate into an agency atmosphere within which they may research, observe, role-play, and practice the fundamental skills of screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, client education, referral, record keeping, and consultation.

The student will also complete an interview with the practicum coordinator the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department chair by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.

**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ADCL120C
ADCL205C
HSV111C
MHTH187C
PSYC105C
PSYC283C
HSV242C
PSYC220C
ADCL235C
**Corequisite Courses**
ADCL235C
**Learning Outcomes**

- Engage in supervision via online as is mirrored in the professional workplace.
- Practice and adhere to ethical and professional standards and guidelines and behavioral characteristics.
- Understand the purpose of clinical supervision.
- Appreciate and Understand a community learning environment and each member's roles in it.

**ADCL297C : Addiction Practicum II**

The second internship experience offers 30 hours of classroom-based group clinical supervision in support of 125 hours of fieldwork in an approved clinical setting. The student assumes increased responsibility culminating in substantial use of the fundamental skills of screening, intake, orientation, assessment, treatment planning, counseling, case management, crisis intervention, client education, referral, record keeping, and consultation in direct contact with clients/patients. A greater understanding of available treatment resources is accomplished via an inspection of the statewide continuum of care.

The student will also complete an interview with the practicum coordinator the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department chair by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.

**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Engage in supervision via online as is mirrored in the professional workplace.
- Practice and adhere to ethical and professional standards and guidelines and behavioral characteristics.
- Understand the purpose of clinical supervision.
- Appreciate and Understand a community learning environment and each member's roles in it.

**ADED100C : Dental Hygiene I**

An introduction to the theories and principles of the delivery of dental hygiene care, including evaluation of the patient, professional and clinical services. Emphasis will be placed on current concepts in preventive dentistry.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Student Learning Outcomes

1. Dental Hygiene Practice CG3: Discuss the purpose of the ADHA Code of Ethics for Dental Hygienist. (PC1.2). Identify the major work-related risk factor in the development of cumulative trauma disorders in dental hygienists. (PC4.1)
2. Infection Control under “Preparation for DH Practice” meeting the standard of care for the practice dental hygiene. CG3: Explain the general purpose of OSHA, CDC, OSAP and HIPAA. (PC 1.4). Explain basic infection control concepts. (PC 8.1).
3. Dental Hygiene Process of Care CG1: Explain the “Dental Hygiene Process of Care. (PC 6). Describe the principles and behavioral foundation for the dental hygiene process of care. (PC 6). Explain the importance of comprehensive and accurate documentation (charting and record keeping). (PC 6.1,6.3,6.4,6.5)
4. Patient assessment in the clinical practice of dental hygiene. CG2. Describe the normal structures of the head, neck, and oral cavity, and discuss abnormal findings. (PC 6.3). Discuss the role of the dental professional in preventing tobacco use and how to apply a tobacco cessation program for the patient. (PC4). List the significant factors involved in taking a medical history and vital signs. (PC 6.1, 6.2, 6.10, 6.13, 7.6). Describe the considerations involved and the techniques for examining the primary and permanent dentition. (PC 6.4). Describe both healthy and abnormal gingival conditions utilizing proper terminology. (PC 6.5, 8.9,8.10). Describe the effects of soft and hard deposits on tissues of the oral cavity. (PC 8.10).
5. Instrumentation and clinical treatment. CG2. Explain steps and the indications for instrumentation. (PC 8.2). Describe the major parts of assessment instruments and treatment instruments. (PC 8.2). Summarize the characteristics of assessment and treatment instruments. (PC 8.2).
6. Integrate considerations needed in treating the pedo patient. (PC 8.9).
7. Describe composition of cleansing and polishing agents and present rationale for appropriate utilization of each. (PC 8.2)
8. Describe composition of cleansing and polishing agents and present rational for appropriate utilization of each. (PC 8.2)
9. Prevention in the clinical practice of dental hygiene. CG1, CG2: Critically analyze published reports of oral health and evaluate the safety and efficacy of oral health products and/or treatments. (PC 2.2, 2.3). Demonstrate knowledge of oral physiotherapy techniques by describing specific oral conditions necessitating utilization each aid in oral home-care procedures. (PC 8.10). Explain the importance of client education and health promotion. (PC 4, 5.1). Compare and contrast fluoride supplements as they are used in dental hygiene practice. (PC8.5).
10. Care planning in the clinical practice of dental hygiene. CG1, CG2: Effectively prepare a client centered care plan that follows the dental hygiene process of care and is based on the client’s assessment findings and risk factors. (PC 2.4, 5.1, 6.1-6.5, 6.10,6.12-6.15, 7, 8.10). Explain the rational for planning dental hygiene care for the periodontal patient. (PC7.4).

**ADED101C : Intro to Dental Hygiene Science**

An introduction to the field of dentistry and dental hygiene. Other topics include study strategies, basic dental terminology, introduction to evidence-based research writing, tooth designation systems, and basic office procedures.

**Credits** 1

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Course Goals

1. Cultivate values of the dental hygiene profession by developing an understanding of dental office function, procedures, processes, and team roles.
2. Summarize the foundations of clinical dental hygiene experience including preventive and therapeutic care according to the dental hygiene process of care; assessment, dental hygiene diagnosis, planning, implementation, evaluation and documentation.
3. Identify ethical decisions that are supported by evidence-based research by obtaining, analyzing, and recording information around scientific research studies and data collection.
4. Utilize learning preferences, study strategies, and time management skills to enhance learning and create successful outcomes related to professional goals.

Student Learning Outcomes

1. Define, articulate, spell, and integrate terms associated with the field of dental hygiene.
2. Develop a basic understanding of dental office functions, procedures, practices, ethics, and core values.
3. Explain the Dental Hygiene Process of Care and describe the principles for the dental hygiene process of care.
4. Utilize the specific tooth identification system most used in the United States dental settings, The Universal Numbering System for both the deciduous and permanent dentition.
5. Develop an understanding of learning styles and how they relate to study strategies.
6. Explain the general purpose of infection control protocols, procedures, rules, and regulations for the practice of dental hygiene.
7. Explain the function and process of biofilm development and understand the impact on oral health.
8. Explain the purpose of evidence-based practice and research in the practice of dental hygiene.
9. Develop an understanding of the purpose for basic prevention strategies used in the practice of dental hygiene.
10. Recognize the five stages of tooth development and the process of tooth eruption in the primary and permanent dentitions.

**ADED103C : Dental Hygiene II**

An introduction to common systemic diseases with emphasis on dental hygiene treatment planning, as well as the prevention and management of medical and dental emergencies. Topics discussed relate to substance abuse, stress, occupational and environmental hazards, and special-needs patients.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL195C
ADED100C
ADED113C
ADED134C

**Learning Outcomes**

Student Learning Outcomes

- Define how physical examination, evaluation, and treatment modification can function in identifying and preventing potential life-threatening situations in the dental hygiene environment. (Program Competencies 6.1, 6.2, 6.10, 6.13, 6.15)
- Discuss the ethical and legal considerations of risk assessment and emergency management within the dental hygiene scope of practice. (Program Competencies1.1, 1.4, 6.13, 8.7)
- Demonstrate the ability to utilize pertinent reference tools for identification and information regarding medical conditions and medications. (Program Competencies 2.5, 6.1, 6.15)
- Develop a dental hygiene care plan for patients with the following medically compromised conditions (Program Competencies 7): cardiovascular disease, pulmonary disease, kidney disease, liver disease, blood disorders, neurologic disorders.
- Develop a dental hygiene care plan for special needs patients during pregnancy, infancy, and adolescence. (Program Competencies 7)
- List the basic equipment and drugs for managing medical emergencies in the dental environment. (Program Competencies 3.5, 8.7)
- State protocol for the emergency management of (Program Competencies 8.7): acute myocardial infarction, airway obstruction, anaphylaxis, asthmatic episode, cerebrovascular accident, hyperventilation, hypoglycemia, seizures, vas-odepressor syncope.

**ADED105C : Dental Radiology for Dental Assisting**

Lectures and demonstrations are coordinated with lab practice on manikins to develop mastery of dental radiographic techniques. Emphasis will be placed on patient and operator safety, exposure errors, asepsis protocol, radiographic techniques, equipment function, and patient management. Students will complete two patients experiences near the end of the term.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisite or Corequisite**
ADED110C

ADED175C

ADED191C
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

Student Learning Outcomes

1. Explain and utilize the principles of the bisecting and paralleling techniques to expose clinically diagnostic radiographic images.
2. Recall factors involved in x-ray generation.
3. Explain and apply the principles of radiation safety.

**ADED110C : Dental Assisting Science I**

A study of the anatomy of the head, emphasizing the osteological landmarks and the structures of the oral cavity. Both the permanent and primary dentitions are studied, including embryonic development and eruption patterns. In addition, an introduction to the structure and function of the human body systems in health and disease will be presented.

When this course is delivered online, the Commission on Dental Accreditation (CODA) requires the use of a proctoring service. Proctored tests require students to download and use an electronic proctoring application, and ensure a disruption-free environment.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

Student Learning Outcomes

1. List the classifications and function of each of the teeth.
2. Provide the shorthand identification of each tooth using Palmer, FDI, and Universal.
3. Identify the different tissues of the teeth and oral cavity.
4. Label the parts of the gingival unit and attachment unit.
5. Provide a timeline for the development of the head and neck from embryonic structures to full development of the oral cavity.
6. Describe the dentitions using eruption and shedding dates.
7. Recognize overbite, overjet, cross-bite, open bite, and occlusion variations.
8. Label the noteworthy landmarks of the face and oral cavity.
9. Identify the anatomical landmarks of the head and neck.
10. List the major systems in the human body, their functions, and major parts of each system.

**ADED111C : Dental Assisting Science II**

An introductory study of drugs with specific consideration of those used in dentistry. Emphasis on drug origin, properties, dosages, and therapeutic effects. Studies in oral pathology will include signs and symptoms of the diseases common to the oral cavity to include neoplastic disease and the inflammatory response.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED110C

**Learning Outcomes**

Student Learning Outcomes

1. Describe the general principles of pharmacology including drug actions, side effects, indications, therapeutic effects and contraindications.
2. Identify federal agencies and acts designed to regulate drugs.
3. Identify the components of a prescription, the symbols and terminology used in prescription writing.
4. Identify common drugs used in dentistry to treat dental-related infections and the influences that drugs taken for non-dental purposes may have on a proposed treatment.
5. Describe the relationships among systemic diseases, medications, and oral health that impact overall patient care.
6. Demonstrate a basic knowledge of the language of pathology and an understanding of the etiology, pathophysiology, structural and functional alterations that result from the disease processes.
7. Explain the importance of patient demographics, etiology, clinical conditions, appropriate imaging and differential diagnoses for diagnoses and treatment planning with suspected lesions/diseases/conditions.
8. Identify deviations from normal oral tissues based on clinical signs and symptoms, as well as dental imaging.

**ADED112C : Introduction to Periodontology**

Provides the dental hygiene student with an introduction to periodontics. The periodontium is presented in health and in disease histologically and clinically. Etiology, prevention, diagnosis, and phase I therapy are discussed. Discussions are coordinated with experience in a clinical setting

**Credits** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED100C
ADED113C
ADED136C
ADED140C

**Corequisite Courses**

ADED103C
ADED114C
ADED126C
ADED162C

**ADED113C : Clinical Dental Hygiene I**

A pre-clinical course for the development and application of information relating to preventive dental hygiene services. Includes topics on asepsis, infection control, gathering and evaluating patient medical and dental histories, legal and ethical considerations, body mechanics, intra and extra oral exams, and instrumentation. Use of adjunct dental hygiene aids is also taught. Skills will be practiced on student partners. A classroom seminar for learning activities and group discussion is included. All students enrolled in ADED 113C will be charged a $500 per semester clinical surcharge.

**Credits** 3

**Lab/Practicum/Clinical Hours** 8

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

ADED100C

ADED134C

**Learning Outcomes**

Student Learning Outcomes

1. Deliver dental hygiene care utilizing proper ethical, legal and professional behavior and dress. (1.1,1.2,1.4)
2. Provide dental hygiene services while adhering to current concepts of infection control to prevent the transmission of disease. (1.4,8.1)
3. Provide and perform assessment procedures to a student partner/patient following acceptable standards of care with respect to attainment of the following (6.1,6.3,6.4,6.5): Medical History and Vital Signs; Dental, Family, Social and Cultural History; Extraoral and Intraoral Exam; Dental Examination for Caries and Restorations; Evaluation of the periodontium; Detection of calculus; Detection of biofilm; Detection of intrinsic and extrinsic stain.
4. Apply the principles of record management, paper and digital, for thorough, accurate, and legible documentation. (1.4,2.4,6.1,6.3,6.4,6.5)
5. Implement dental hygiene interventions designed to improve the oral health of self. (4.1)
6. Implement effective dental hygiene interventions designed to assist the patient in achieving and maintaining oral health. (4.2, 5.1, 8.9, 8.10)
7. Apply basic principles of instrumentation on a typodont student partner/patient so that debridement and deposit removal may be performed with maximum effectiveness, safety and efficiency. (8.2)
8. Demonstrate competent ergonomic principles while delivering dental hygiene services. (4.2)
9. Manage medical emergencies in the patient care environment (8.8)

**ADED114C : Clinical Dental Hygiene II**

A continuation of Clinical Dental Hygiene I. Students will apply techniques learned directly on clinical patients. Emphasis is placed on the introduction of additional dental hygiene instruments, as well as dental health education techniques. A classroom seminar for learning activities and group discussion is included. All students enrolled in ADED 114C will be charged a $500 per semester clinical surcharge.

**Credits** 3

**Lab/Practicum/Clinical Hours** 8

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED100C

ADED113C

ADED134C

**Learning Outcomes**

Student Learning Outcomes

1. Deliver dental hygiene care utilizing proper ethical, legal and professional behavior and dress. CG1
2. Provide dental hygiene services while adhering to current concepts of infection control to prevent the transmission of disease. CG1, 2
3. Perform assessment procedures to a student partner/patient following acceptable standards of care with respect to attainment of the following CG1, 2: Medical History and Vital Signs and smoking status; Dental, Family, Social and Cultural Background; Extraoral and Intraoral Exam; Dental Examination for Caries and Restorations; Evaluation of the periodontium; Detection of calculus; Occlusal Exam.
4. Apply and integrate the principles of accurate patient documentation that is maintained through record management and clinical portfolio organization, for thorough, accurate, organized, legible and legal documentation. CG1, 2
5. Implement effective dental hygiene interventions designed to assist the patient in achieving and maintaining oral health. CG 1
6. Integrate theory to practice in maintaining sharp instruments in order to effectively and efficiently perform basic principles of instrumentation on a patient so that debridement and deposit removal without tissue trauma may be attained. CG1
7. Perform and integrate basic principles of instrumentation on patients so that debridement and deposit removal may be performed with maximum effectiveness, safety and efficiency. CG1
8. Apply and integrate basic principles of coronal polishing on a patient so that biofilm and stain removal is attained. CG1
9. Integrate theory to practice in the application of topical fluoride to clinical patients. CG1
10. Demonstrate competent ergonomic positioning while delivering dental services. CG2
11. Evaluate the effectiveness of dental hygiene services and interventions designed to assist the patient in achieving and maintaining oral health. CG2
12. Summarize and communicate a plan for successful dental hygiene intervention prior to implementation in patient care. CG2
13. Utilize effective patient management skills throughout the dental appointment. CG1, 2
14. Manage medical emergencies and utilize basic life support if needed as authorized by certification in CPR. CG2
15. Demonstrate professional communication skills when advising completed patients of need for a continuing supportive care plan with a dental health care professional. CG1, 2
16. Critically evaluate the effectiveness of implemented patient education, preventive, and therapeutic service and make modifications if necessary to provide patient-centered care. CG2

**ADED126C : Nutrition for the Dental Hygienist**

An introduction to the basic fundamentals of the science of nutrition for the dental hygienist. Essentials of adequate dietary intake and nutritional balances and imbalances including total body health and dental care are discussed. Topics include the role of nutrients in the development and maintenance of hard and soft oral tissues, nutritional needs throughout the life cycle, and nutritional issues that may impact oral health. Special emphasis is placed on the application of dietary analysis and nutritional counseling as a preventive dental service.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED100C
ADED113C
CHEM125C
ADED136C
ADED140C

**Corequisite Courses**

ADED103C
ADED112C
ADED162C

**Learning Outcomes**

Student Learning Outcomes

Upon completion of this course, students will be able to:

1. Describe the basic concepts of nutritional science in relation to the general health and physiology of the human body.
2. Compare their personal dietary intake and patterns to the Dietary Guidelines for Americans, utilizing MyPlate.gov and Diet & Wellness Plus+ software.
3. Articulate the specific relationship between nutrition and dental health.
4. Identify the function and food sources of nutrients essential to systemic and oral health.
5. Explain the role of nutrition in the synthesis and maintenance of the hard and soft oral tissues.
6. Describe the role of nutrition in the initiation and progression of dental caries and periodontal disease.
7. Examine food factors and eating patterns that may contribute to the development of caries and/or impact healing of oral tissues.
8. Analyze their personal carbohydrate intake.
9. Assess the nutritional value of food in relation to purchasing and planning meals.
10. Assess, analyze, and make recommendations to improve dietary patterns of individuals (including oneself) so improved nutritional intake may be attained and/or maintained.
11. Assess and analyze the role of nutrition in your personal dental health status and develop a treatment plan.
12. Appraise the nutrient content of their diet.
13. Demonstrate foundational knowledge of nutritional needs throughout the life cycle.
14. Examine the role of nutrition in the prevention and management of systemic & oral disease.
15. Formulate dietary measures that may prevent or delay the onset of chronic disease, as well as oral diseases.
16. Assess and analyze the medical, dental, social, and diet history of a dental patient and make recommendations to improve dietary patterns so improved dental health may be attained and/or maintained.
17. Provide sound nutritional concepts relative to general health and the prevention of dental disease.
18. Judge the validity of nutrition information on the Internet and in the media.

**ADED134C : Oral Anatomy I**

A detailed study of the anatomy of primary and permanent dentitions. Other topics include tooth morphology, tooth eruption sequence, basic dental terminology and occlusion. This course is coordinated with hands on laboratory exercises that allow students to practice tooth identification and application of the visible anatomical landmarks of the oral cavity. The included laboratory sessions are coordinated with lectures to provide practical applications of dental anatomy.

**Credits** 3

**Lab/Practicum/Clinical Hours** 1

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED101C

**Learning Outcomes**

Course Goals

The course goals (CG) link to program competencies (PC). The program goals and competencies are located within the NHTI Dental Hygiene Program Manual. Upon completion of this course, the student will be able to:

1. Develop acquired knowledge, skills, and concepts related to dental terminology and its use in the dental setting, specifically with colleagues, patients, and dental records.
2. Apply scientific understanding of dental anatomy, tooth development, and the eruption process to the clinical setting during patient care and assessment.

Student Learning Outcomes

1. Define and integrate terms associated with head and neck anatomy.
2. Determine the age of a patient based on a comprehensive understanding of the process of tooth eruption and exfoliation and list the dates of eruption for the deciduous and permanent teeth.
3. Specify how the physiologic tooth form protects the periodontium and identify the anatomic landmarks of the gingiva.
4. Identify the gingival unit and attachment apparatus from the perspective of anatomy.
5. Demonstrate the ability to identify form and function as it relates to the anatomical features of the dentitions.
6. Identify all anatomic structures and landmarks of the oral cavity.
7. Recognize variations of normal orofacial structures associated with the head, neck, and oral cavity.
8. Identify and categorize individual teeth according to morphologic traits associated with each tooth type in both the deciduous and permanent dentitions.
9. Demonstrate the ability to connect morphologic differences in tooth anatomy with specific dental anomalies.
10. Identify systemic variables that are related to various tooth anomalies.
11. Identify character traits, arrangements, and functions associated with the deciduous dentition.
12. Classify a patient's occlusion using molar and canine relationship using Angle's Classification System and relate facial profiles to this system.
13. Develop a basic understanding of a spreadsheet layout, function, and development process.
14. Utilize three specific tooth identification systems; Universal, ISO, and Palmer notation systems for both the deciduous and permanent dentition periods.

**ADED136C : Oral Anatomy II**

A detailed study of the embryonic development of the hard and soft tissues of the face and oral cavity. This course includes the study of the anatomical structure of the head and neck with emphasis on the cranial nerves, muscles of mastication and facial expression, temporomandibular joint, vascular and lymphatic systems, tooth development and histology of dental tissues and supporting structures.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL195C

ADED134C

**Corequisite Courses**

ADED100C

ADED113C

ADED136C

**Learning Outcomes**

Student Learning Outcomes

1. Compare the primary embryonic layers (location and developmental structures) and summarized the importance in the development of an embryo, including the five histophysiology processes of initiation, proliferation, histodifferentiation, morphodifferentiation and apposition.
2. Summarize the development of facial structures such as when development begins, the sources of development, the sequence of development, actual and apparent fusion, including identification of structures during prenatal development.
3. Summarize the three (3) stages of tooth development including the cells in the tooth germ during the cap, bell and apposition stage, in addition identify the structures each component of the tooth germ will produce in mature teeth.
4. Analyze the structural pattern of dentin including the following terms: dentinal tubules, dentinal fibers (Tomes Fiber), odontoblasts, interglobular dentin, dentin matrix, Tomes granular layer, dead tract, sclerotic dentin and secondary dentin.
5. Summarize the root development incorporating the role of each of the following terms: inner and outer dental epithelium, Hertwig's Root Sheath, Rests of Malassez, and epithelial rests of malassez.
6. Summarize cementum formation using the terms Hertwig's Sheath, periodontal connective tissue cells, cementoblasts, and the location and function the periodontal ligament.
7. Discriminate between the structures of enamel such as the amelolast, enamel rod, rod sheath, interrod substance, bands of Hunter-Schreger, stripes of Retzius, enamel lamellae, enamel tufts, enamel spindles, apatite crystals, intercrystal spaces, perikymata, enamel spindles and enamel tufts.
8. Assess the clinical significance of cementoid, hypercementosis, excementosis, cementum hyperplasia, cementicles, cementocytes, acellular and cellular cementuf.
9. Identify the four cellular zones within the developing pulp including fibroblasts, histiocytes, undifferentiated mesenchymal cells, odontoblasts, intercellular substance, Korff's fibers, blood vessels, nerves, denticles and diffuse calcifications.
10. Compare and contrast the clinical difference in pulp shape between a newly erupted tooth and an aged tooth.
11. Identify and describe the osseous structures and landmarks of the skull with clinical significance and pathology in the practice of dentistry.
12. Identify and discuss the bony prominences, bony depressions, bony openings and skeletal articulation of the following: frontal bone, occipital bone, parietal bones, temporal bones, ethmoid bone, sphenoid bone, inferior nasal bones, lacrimal bones, mandible, maxillae, vomer bone and zygomatic bones.
13. Identify and discuss the origin, insertion, action, innervation, functions and pathology of the following: muscles of facial expression: muscles of mastication, intrinsic and extrinsic tongue muscles, muscles of the soft palate, suprahyoid & infrahyoid muscles, cervical muscles
14. Discuss the processes of mastication, speech, and swallowing in regard to the muscle of mastication.
15. Identify the components, the movement and pathology of the TMJ within the skull.
16. Discuss and integrate the TMJ pathology into patient care.
17. Describe and discuss the components and division of the nervous system.

18. Identify and trace the twelve (12) cranial nerves and paraphrase their functions.
19. Identify, trace and summarize the location and innervations of the following: trigeminal nerve – V1, V2 and V3, facial nerve and branches, glossopharyngeal nerve and branches, and hypoglossal nerve and branches
20. Discuss and integrate the pathology of the nervous system into the clinical practice of dental hygiene.
21. Identify and trace the routes of the blood vessels of the head and neck region on the skull.
22. Identify and discuss the arterial blood supply to the head and neck region including the structures supplied by the following: internal carotid artery, external carotid artery, anterior branches of the external carotid artery, medical branches of the external carotid artery, posterior branches of the external carotid artery, and terminal branches of the external carotid artery.
23. Identify and discuss the venous drainage system of the head and neck region including the structures drained by the following: facial vein, retromandibular vein, superficial temporal vein, maxillary vein, internal jugular vein and external jugular vein
24. Identify and discuss the clinical importance and pathology associated with the vascular system in head and neck anatomy into clinical practice.
25. Discuss the importance of head and neck anatomy into the administration of local anesthesia and control of pain during dental procedures.
26. Summarize the location, function, secretion and importance of the major and minor salivary gland.
27. Summarize the location, function, and pathology of the glands and lymphatic nodes in the head and neck region.

**ADED140C : Dental Radiology for Dental Hygiene**

Provides the foundational knowledge and skills needed for the appropriate use of diagnostic imaging in a dental practice, including digital radiography, radiation biology and protection, quality assurance procedures, radiation physics, radiographic interpretation, radiographic landmarks, and ethics. Emphasis is placed on patient and operator protection and equipment function. Lectures and laboratory demonstrations are coordinated with laboratory practice on a manikin to develop mastery of digital dental radiographic techniques. Patients will be scheduled near the end of the term when students exhibit acceptable radiographic skills and basic principles of radiographic interpretation.

**Credits** 3

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED134C

BIOL195C

**Corequisite Courses**

ADED100C

ADED113C

ADED136C

**Learning Outcomes**

Student Learning Outcomes

The dental hygiene student will be able to explain the principles of radiation as it relates to physics, biology, hygiene, and safety.

1. Demonstrate and value the importance of proper asepsis protocol.
2. Describe the current federal and state guidelines regarding radiation safety and protection.
3. List and describe the regulatory agencies involved with radiation.
4. Value the importance of radiation safety for self and patient.
5. Describe the production of x-rays.
6. Describe the biological effects of radiation
7. Discuss the history of radiation.
8. Identify and explain the function of the components of the x-ray unit

The dental hygiene student will be able to produce and interpret diagnostically acceptable radiographs utilizing various radiographic techniques and apply the principles of quality assurance and ethics in dental radiography.

1. Expose radiographs using paralleling and bisecting techniques.
2. Identify radiographic exposure and technique errors.
3. Describe proper radiographic processing.
4. Demonstrate correct radiographic film mounting technique.
5. Discuss techniques for managing patients with variations of anatomy or special challenges, such as, strong gag reflex, tori, etc.
6. Discuss the purpose and importance of a quality assurance program.
7. Assess the need for radiographs based on patient's history and exam while using the ADA guidelines.
8. Value the need to utilize radiographs in assessment, planning and implementation of the dental hygiene care plan.
9. List the advantages and disadvantages of digital radiography.
10. Describe the purpose and use of intraoral radiography, occlusal radiographs, extraoral projections, panoramic projections.
11. Discuss the factors affecting radiographic image.

**The dental hygiene student will be able to describe the fundamentals of oral radiographic techniques and interpretation**

1. Describe the purpose and use of localization techniques

2. List the advantages and disadvantages of cone beam volume computed technology, computed assisted technology, and magnetic resonance imaging.
3. Identify normal radiographic anatomy, common restorative materials, calculus, bone loss, caries, radiolucent pathology and radiopaque pathology on radiographs.
4. Describe the ideal pre-radiation treatment, possible oral manifestations and treatment for patients with head and neck cancer.

**ADED155C : Oral Hygiene Education/Nutrition**

Methods of preventive oral hygiene education, including patient motivation, will be discussed. Lectures in nutrition will stress the importance of good eating habits in maintaining optimal general and dental health. Emphasis will be given to the essential role of the dental assistant in counseling the patient in these disciplines. (

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED 110C

**Learning Outcomes**

Student Learning Outcomes

- State the rationale of preventive dentistry and thoroughly describe the components.
- Research peer-reviewed literature to recommend home care products to patients.
- Describe acquired pellicle, plaque, and calculus and give their relevance to dental diseases.
- Demonstrate the major tooth brushing techniques and proper flossing technique.
- Discuss why patient motivation and communication is essential for control of dental diseases.
- Explain the negative health effects of tobacco use and apply appropriate intervention techniques.
- List the classes of nutrients and describe their major functions in the body.
- Discuss nutrient and energy needs with patients in the clinical setting.
- Identify dietary supplements that are contraindicated for dental treatment.
- Explain the different types of eating disorders and the signs you would see in the oral cavity and other physical signs.

Course Goals

1. Develop a homecare treatment plan for patients. (PC 5,8)
2. Assist the patient with nutritional counseling to help prevent dental disease. (PC 5, 8)

**ADED161C : Dental Materials-DA**

Study of the composition and properties of materials used in dentistry. Lab sessions emphasize practice in manipulation of various materials.

**Credits** 3

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 2

**Prerequisite or Corequisite**

ADED110C

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Student Learning Outcomes

1. Prepare the different types of cements used in a dental office for a certain procedure
2. Identify the different types of materials used in a dental office and demonstrate the proper way to manipulate those materials.
3. Utilize the different types of impression materials.
4. Assist the doctor with different types of restorative materials.

Course Goals

- Demonstrate by both course objective and subjective examination, knowledge of the language of materials and a clear
- understanding of the application, handling, and proper utilization of the varied and different materials used in the practice of dentistry.

**ADED162C : Dental Materials for Dental Hygiene**

An introduction to the composition and properties of dental materials with emphasis on materials currently utilized in dental and dental hygiene treatments. Lab sessions are coordinated with lectures to provide practice in manipulation of materials with emphasis on impression taking and preparation of study casts.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED100C
ADED113C
CHEM125C
ADED136C

**Learning Outcomes**

Student Learning Outcomes

1. Determine considerations when selecting dental materials to be used in the mouth.
2. Define the properties of dental materials for preventive measures or as direct restorative materials.
3. Define the properties of the dental materials used as indirect restorative materials that aid in restoring the oral cavity to optimum health.
4. Fabricate a study model demonstrating proper and accurate use of gypsum products.
5. Demonstrate the correct procedure when using alginate material to take an impression.
6. Compare and contrast alginate, agar hydrocolloid, rubber base impression material, impression compound, and zinc oxide eugenol impression material.
7. Explain the various types of waxes and their uses in dentistry.
8. Compare and contrast the various materials used as luting agents, liners, and bases.
9. Explain the composition of periodontal dressings and demonstrate the manipulation and application of the material on a dentex model.
10. Explain the composition, uses, and polymerization process of heat and cold cured resins.
11. Describe the fabrication and care of a denture.
12. Compare and contrast direct esthetic restorative materials including composite, glass ionomers, enamel adhesives, and dentin bonding agents.
13. Describe the composition and uses of the restorative material amalgam.
14. Demonstrate the correct procedure for fabricating athletic mouth guards and whitening trays.

**ADED175C : Dental Assisting Theory I**

Designed to teach the dental assisting student clinical techniques. Includes information on sterilization and disinfection techniques, charting, and the use of dental equipment and instruments. Students are introduced to four-handed chairside assisting as it pertains to all types of dental procedures including oral evacuation, instrument transfer, tray set-ups, and completing dental clinical records. Emphasis is placed on the dental health team concept.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Student Learning Outcomes

1. Assist the dentist during all phases of four-handed dentistry.
2. Follow OSHA and Infection Control Guidelines in performing the proper disinfection and sterilization techniques in a dental office.
3. Complete a clinical chart for a patient.
4. Identify the different types of instruments used for different procedures in a dental office.
5. Identify the different types of equipment used in a dental office.

**ADED182C : Office Procedures and Management with Computer Applications**

Development of working knowledge of office procedures to include communication and telephone techniques, appointment scheduling, and document management including HIPAA regulations. Other topics include fundamentals of financial systems, dental insurance, inventory control, and job search preparation. Technology in the business office and the use of specialized office management software is highlighted.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED110C

**Learning Outcomes**

Student Learning Outcomes

1. Explain the concept of dentistry as a business and a healthcare provider.
2. Recognize barriers to patient communication including verbal and non-verbal methods of communication and the importance in a dental office.
3. Discuss the importance of staff management and conflict resolution.
4. Explain the responsibilities of treating patients in the dental office following the accepted standard and proper professional behavior.
5. Describe the application of digital technologies and how it impacts the dental office.
6. Identify the three types of dental supplies and types of inventory ordering and storage.
7. Understand guidelines for dental insurance claims and benefits.
8. Create a professional resume and cover letter.
9. Recognize the appropriate attire to wear to a dental job interview.

**ADED191C : Dental Assisting Clinical Experience I**

Clinic sessions are coordinated with lectures in preclinical theory. Demonstration and practice of procedures in simulated clinical situations include maintaining office asepsis, instrument sterilization, 4-handed chairside assisting, patient interaction and comfort, health history management, preliminary oral inspection, and taking alginate impressions. Recording patient information in Dentrix is introduced. A classroom seminar for learning activities and group discussion is included. All students enrolled in ADED 191C will be charged a clinical surcharge per semester.

**Credits** 2

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance into the NHTI Dental Assisting Program, up-to-date Clinical Clearance, CPR Certification
ADED110C
ADED161C
ADED175C

**Corequisite Courses**

ADED110C
ADED161C
ADED175C

**Learning Outcomes**

Student Learning Outcomes

1. Demonstrate the preparation and breakdown of a dental unit as related to patient treatment.
2. Describe the roles of each student responding to a simulated office emergency.
3. Identify and state the function of common instruments and supplies used in general dentistry.
4. Provide a dentist with the instruments needed to complete a specific dental procedure.
5. Explain the role of the dental assistant as a member of a dental office team.
6. Seat and position a patient for treatment in a specific area of the mouth.
7. Record patient medical history and vital signs.
8. Record and interpret the dentist's findings on a patient chart.
9. Explain the importance of preventing dental issues for oral health.
10. Identify and describe the important landmarks of the face and oral cavity.
11. Initiate the set-up for an impression and follow through to the completed model.

**ADED196C : Dental Assisting Clinical Experience II**

Experience in a dental office performing chairside dental assisting, laboratory procedures, office procedures, and dental radiography. A classroom seminar for group discussion is included. All students enrolled in ADED 196C will be charged a clinical surcharge per semester.

**Credits** 5

**Lab/Practicum/Clinical Hours** 12

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Up-to-date CPR and clinical clearance with current health and liability insurance, passing grade on DANB Radiation Health and Safety Exam by March 1st

ADED105C
ADED110C
ADED161C
ADED175C
ADED191C

**Learning Outcomes**

Student Learning Outcomes

1. Demonstrate the ability to perform the advanced skills that can be delegated to dental assistants graduating from CODA accredited programs.
2. Identify and fulfill the duties of a graduate dental assistant in a general practice.
3. Describe and participate in the duties of the front desk staff.
4. Maintain the chain of asepsis critical to working as a dental professional.
5. Maintain a professional demeanor on and off the job.

**ADED201C : Dental Hygiene III**

A study of the etiology and pathogenesis of periodontal disease from a histological and clinical perspective. Emphasis is placed on the dental hygiene practitioner's role in clinical assessment and recognition of the pathological periodontal changes, and the response of the diseased tissues to therapy. Discussions are coordinated with experience in a laboratory and clinical setting.

**Credits** 2

**Lab/Practicum/Clinical Hours** 1

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED103C
ADED114C
ADED136C
ADED140C

**Learning Outcomes**

Student Learning Outcomes

1. List the clinical, histologic, and radiographic features of periodontal health.
2. Describe mechanisms of the initiation and progression of periodontal diseases as related to the interaction of host, agent, and environmental factors.
3. Classify and differentiate periodontal diseases using guidelines established by the American Academy of Periodontology.
4. Explain the pathogenesis and progression of the various periodontal diseases.
5. Differentiate periodontal health from active and inactive disease.
6. Assess and document the client's periodontal status.
7. Devise a patient-centered dental hygiene care plan while providing the evidence-based rationale for therapy and critical analysis of client assessments.
8. Differentiate interpret initial non-surgical periodontal therapy and supportive periodontal therapy based on current theories of treatment and analyze rationales for techniques.
9. Describe the role of the dental hygiene practitioner during the surgical phase of periodontal therapy.
10. Select and evaluate evidence-based information relating to current concepts, theories, and treatment regimens in periodontics.
11. Analyze and support the ethical and legal concepts that apply to dental hygiene periodontal practice.

**ADED212C : Clinical Dental Hygiene III**

Practical application of dental hygiene theories and techniques, with emphasis on individual patient's oral health needs and the further development of oral prophylactic and radiographic techniques, including the preparation of diagnostic aids and patient education. Students will gain experience through work in their on-campus clinical assignments.

**Credits** 4

**Lab/Practicum/Clinical Hours** 12

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Current CPR certification
- NHTI health clearance

ADED103C
ADED114C
ADED126C
ADED162C
ADED140C

**Corequisite Courses**

ADED240C
ADED242C
ADED247C
ADED248C

**Learning Outcomes**

Student Learning Outcomes

1. Demonstrate effective verbal and nonverbal communication techniques when providing dental hygiene care.
2. Apply effective interview techniques to question a parent, child, women, and elders for information using open-ended questioning.
3. Employ proper infection control protocol to prevent disease transmission before, during, and after the provision of dental hygiene services.
4. Describe the necessary modifications to dental hygiene treatment based on a risk assessment of the patient's health history, special needs, ASA classification, psychological status, and medications.
5. Describe and document significant findings in the patient record using precise, descriptive terms.
6. Demonstrate total patient care scenario through ideal dental hygiene care planning, intervention, and evaluation of a periodontal case study that includes a comprehensive analysis of the patient's periodontium using medical history findings, assessment, and radiographic data.
7. Recognize a patient's risk factors for oral disease that requires intervention and use of therapeutic topical agents for disease management that include fluoride, antimicrobial agents, and local delivery/controlled release agents.
8. Demonstrate the correct use of the dental instrumentation for the detection of deposits, probe measurements, and removal of calculus deposits with the proper use of fulcrums and consideration of tooth irregularities without trauma to hard or soft tissues.
9. Apply the principles of appropriate instrument sharpening technique to maintain the original shape and effectiveness of the instrument in patient care.
10. Demonstrate the effective removal of extrinsic stain with mechanical polishing techniques using the selective polishing theory of indications and contraindications of the use of mechanical polishing.
11. Apply pain and anxiety management strategies that include the application of topical anesthetics and the administration of block and infiltration anesthesia that helps mitigate local and systemic complications due to the injection of local anesthetic solutions, including the causes, symptoms, treatment, and prevention.
12. Critically evaluate the effectiveness of clinical dental hygiene interventions that align with patient goals and self-care assessment based on clinical assessment findings during the process of follow-up patient care.
13. Apply the principles of professional and ethical behavior when providing patient care to include comprehensive risk assessment, proper documentation, and patient confidentiality.
14. Perform and evaluate effective dental auxiliary tasks that including; placement of pit and fissure sealants, alginate impressions; pouring, separating, and trimming of study models.

15. Demonstrate competent radiographic techniques in understanding when there is a need to expose a patient and be able to: developing, evaluating, and interpret intraoral and extraoral images.
16. Perform dietary counseling with an emphasis on oral health.
17. Demonstrate knowledge of the proper techniques in the care of osseointegrated dental implants and care of a dental prosthetic for patient populations that require this competency.
18. Demonstrate the accepted methods for the prevention of medical emergencies and value the dental hygiene role in implementing life support methods articulated by the American Heart Association standards in preventing and managing emergencies.

**ADED221C : Clinical Dental Hygiene IV**

Practical application of dental hygiene theories and techniques with emphasis on individual patients' oral health needs and the further development of oral prophylactic and radiographic techniques, including the preparation of diagnostic aids and patient education. Students will gain experience through work in their on-campus clinical assignments. All students enrolled in ADED 221C will be charged a $500 per semester clinical surcharge.

**Credits** 4

**Lab/Practicum/Clinical Hours** 12

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Current CPR certification
- NHTI health clearance

ADED240C
ADED212C
ADED242C
ADED244C
ADED247C
ADED248C

**Corequisite Courses**

ADED225C
ADED243C

**Learning Outcomes**

Student Learning Outcomes

1. Demonstrate effective verbal and nonverbal communication techniques when providing dental hygiene care.
2. Apply effective interview techniques to question a parent, child, women, and elders for information using open-ended questioning.
3. Employ proper infection control protocol to prevent disease transmission before, during, and after the provision of dental hygiene services.
4. Describe the necessary modifications to dental hygiene treatment based on a risk assessment of the patient's health history, special needs, ASA classification, psychological status, and medications.
5. Describe and document significant findings in the patient record using precise, descriptive terms.
6. Demonstrate total patient care scenario through ideal dental hygiene care planning, intervention, and evaluation of a periodontal case study that includes a comprehensive analysis of the patient's periodontium using medical history findings, assessment, and radiographic data.
7. Recognize a patient's risk factors for oral disease that requires intervention and use of therapeutic topical agents for disease management that include fluoride, antimicrobial agents, and local delivery/controlled release agents.
8. Demonstrate the correct use of the dental instrumentation for the detection of deposits, probe measurements, and removal of calculus deposits with the proper use of fulcrums and consideration of tooth irregularities without trauma to hard or soft tissues.
9. Apply the principles of appropriate instrument sharpening technique to maintain the original shape and effectiveness of the instrument in patient care.
10. Demonstrate the effective removal of extrinsic stain with mechanical polishing techniques using the selective polishing theory of indications and contraindications of the use of mechanical polishing.
11. Apply pain and anxiety management strategies that include the application of topical anesthetics and the administration of block and infiltration anesthesia that helps mitigate local and systemic complications due to the injection of local anesthetic solutions, including the causes, symptoms, treatment, and prevention.
12. Critically evaluate the effectiveness of clinical dental hygiene interventions that align with patient goals and self-care assessment based on clinical assessment findings during the process of follow-up patient care.
13. Apply the principles of professional and ethical behavior when providing patient care to include comprehensive risk assessment, proper documentation, and patient confidentiality.
14. Perform and evaluate effective dental auxiliary tasks that including; placement of pit and fissure sealants, alginate impressions; pouring, separating, and trimming of study models.
15. Demonstrate competent radiographic techniques in understanding when there is a need to expose a patient and be able to: developing, evaluating, and interpret intraoral and extraoral films.

16. Perform dietary counseling with an emphasis on oral health.
17. Demonstrate knowledge of the proper techniques in the care of osseointegrated dental implants and care of a dental prosthetic for patient populations that require this competency.
18. Demonstrate the accepted methods for the prevention of medical emergencies and value the dental hygiene role in implementing life support methods articulated by the American Heart Association standards in preventing and managing emergencies.
19. Understand the New Hampshire Child Protection Act and the dental hygiene practitioner's responsibilities related to the signs of suspected child/elder abuse and neglect.

**ADED225C : Dental Hygiene Community Clinic**

Involves students with the practical application of dental hygiene theories and clinical techniques, with emphasis on the oral health needs of community patient populations in alternative settings. Students gain exposure through extended campus community experiences.

**Credits** 1
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 0
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Current CPR
- Current NHTI medical clearance

ADED103C
ADED114C
**Corequisite Courses**
ADED212C
ADED221C
ADED227C
ADED242C
ADED243C
ADED242C
**Learning Outcomes**

Student Learning Outcomes

1. Prepare and present appropriate oral health presentation clinically, in the classroom, or in an alternative setting to a targeted population.
2. Manage and discuss the ethical issues facing dental hygiene practice in a rapidly changing environment wen treating targeted populations.
3. Contribute to improving the knowledge, skills, and values of the dental hygiene profession.
4. Provide educational services using appropriate interpersonal communication skills, and educational strategies to promote optimal health.
5. Initiate and assume responsibility for health promotion and disease prevention activities for diverse populations in a variety of settings.
6. Systematically collect, correlate, critically analyze, and record data on the general, oral, and psychosocial health status of a variety of clients using methods consistent with medico-legal-ethical principles.
7. Formulate a comprehensive dental hygiene care plan that is evidence-based and patient centered.
8. Provide specialized care which includes educational, preventive, and therapeutic services designed to assist the patient in achieving and maintaining oral health goals.
9. Critically evaluate the effectiveness of implemented educational preventive, and therapeutic service and make modifications if necessary.
10. Provide dental hygiene care while maintaining a demeanor of professional and ethical behaviors.
11. Employ proper infection control protocol to prevent the transmission of disease.
12. Demonstrate effective verbal and nonverbal communication techniques when treating the target population.
13. Apply the principles of record management for thorough, accurate, and legible documentation.
14. Asses, plan, implement and evaluate effective dental hygiene strategies and interventions. (6.1-6.15)

**ADED227C : Dental Ethics and Jurisprudence**

A study of the ethical and legal issues involved in dental care delivery as well as office management procedures.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

Student Learning Outcomes

1. Assess personal goals in relation to the ethical standards of the dental hygiene profession.
2. Develop the skills necessary for identifying ethical dilemmas, and ethical decision making in dental hygiene.
3. Apply governance of state and federal laws to the practice of dental hygiene.
4. Explain the concept of risk management within the practice of dental hygiene and compose protocols to minimize risk.
5. escribe the basic structure and functions of the American Dental Hygienist's Association.
6. Identify and analyze relevant education, experience, and skills to effectively write a resume and interview for employment as a dental hygienist.
7. Compare and contrast various dental practice settings and management models.

**ADED239C : Concepts of Risk Management**

This course will orient the student to management of a medical condition/emergency, and dental record documentation. Risk management and legal aspects of dentistry as related to emergency care are also included.
**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ADED110C
**Learning Outcomes**

Student Learning Outcomes

1. Describe major areas of risk management to include communication, accurate and complete documentation, informed consent as well as legal aspects of dental assisting to maintain high standards of clinical excellence.
2. Perform treatment modifications for patients with medical and/or physical challenges including mobility, cognition, hearing, vision, and self-care.
3. Identify signs and symptoms of medical diseases and provide the proper treatment to patients in clinical practice.
4. Identify a medical emergency based on the signs and symptoms exhibited by the patient and effectively manage the situation utilizing a team approach to provide appropriate emergency treatment and referral to the Emergency Medical Service.

**ADED240C : Advanced Periodontology**

Expands the student's clinical development and knowledge of current periodontal therapies. Advanced principles of periodontology for the dental hygienist covers concepts including the role of the dental hygienist in identifying appropriate surgical modalities for treatment of periodontal diseases and providing post-surgical specialized periodontal maintenance care. Discussions are coordinated with experience in a clinical setting.

**Credits** 1

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED112C
ADED103C
ADED114C
ADED126C

**Corequisite Courses**

ADED212C
ADED242C
ADED244C
ADED247C
ADED248C

**ADED242C : Community Dental Health I**

Introduces the history and principles of community dental health and healthcare delivery systems. Topics include strategies and methods to prevent oral disease, educational and program planning, oral health promotion, the development of public policy, epidemiology, research methods, and implementation of community efforts to enlighten the public on oral health and wellness. Students to plan, implement, and evaluate a community dental hygiene service-learning project.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED103C
ADED112C
ADED114C
ADED126C
ADED162C

**Corequisite Courses**

ADED212C
ADED240C
ADED244C
ADED247C
ADED248C
ADED249C

**Learning Outcomes**

Student Learning Outcomes

1. Identify and describe the principles of community health as it relates to oral health and the dental professional.
2. Discuss the importance of the federal and state government in community health.
3. Describe the role of dental professionals and community health organizations in oral health advocacy and public policy.
4. Advocate the role of the dental hygienist, in activities related to the prevention and control of dental diseases, general and oral health education, and promotion of general and oral health.
5. Integrate critical thinking skills and comprehensive problem-solving to identify oral health care strategies that promote patient health and wellness.
6. Describe various research principles, including ethical considerations and study designs, used in epidemiological research.
7. Identify epidemiology, trends, etiology, risk factors, and common dental indices to measure oral diseases and conditions such as caries, periodontal diseases, and oral cancer.
8. Assess the need, plan, implement, and evaluate a service learning program for a targeted population.
9. Develop an appreciation for self-evaluation and professional growth through life-long learning.
10. Apply professional code of ethics, values, skills, and knowledge in all professional endeavors.
11. Assess the community's oral health needs and the quality and availability of resources and services.
12. Initiate an interprofessional collaborative approach with all patients when developing and implementing community dental health programs that are specialized, preventive services, culturally sensitive, and promote health and wellness to all populations.

**ADED243C : Community Dental Health II**

Addresses issues surrounding the access to care in alternative settings with dental hygiene practitioners, current trends in community dental health, cultural competency in healthcare delivery, dental healthcare financing and reimbursement systems, international healthcare, and preventive strategies to improve oral health. Students will evaluate scholarly healthcare literature and evidence-based research, research designs, the importance of the research process, and basic biostatistical measurements.

**Credits** 1

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED212C
ADED242C
ADED240C

**Corequisite Courses**

ADED221C
ADED225C
ADED227C
ADED246C

**Learning Outcomes**

Student Learning Outcomes

1. Integrate evidence-base decision making to evaluate emerging technology and treatment modalities to integrate into community dental health.
2. Initiate and assume responsibility for health promotion and disease prevention activities for diverse populations in a variety of settings.
3. Assess the community's oral health needs and the quality, availability of resources and services.
4. Advocate for effective oral health care for underserved populations.
5. Evaluate reimbursement mechanisms and their impact on the patient's access to oral health care.
6. Access professional and social networks to pursue professional goals.
7. Develop a foundational knowledge of funding mechanisms and financial management in oral health programming.
8. Comprehend the career roles of the dental hygienist in healthcare promotion and disease prevention in alternative and community settings.
9. Initiate an interprofessional collaborative approach with all patients when developing and implementing community dental health programs that are specialized, culturally sensitive, and promote health and wellness to all populations.
10. Apply professional code of ethics, values, skills, and knowledge in all professional endeavors.
11. Prepare dental hygiene students to make ethical and evidence-based decisions by acquiring, analyzing and documenting information utilizing current scientific research studies and biostatistics.

**ADED244C : Pain Management for the Dental Hygienist I**

This course is designed to prepare student dental hygienists for the safe and effective administration of local anesthesia nerve blocks and infiltrations. The course includes classroom, laboratory, and clinical instruction. Course topics include the psychology of pain management, patient assessment and treatment planning, anesthesia techniques, complications, pharmacology of anesthetic agents, emergency precautions and management, ethical considerations, and a review of anatomy and physiology in relation to the administration of anesthetic agents. Upon successful completion of this course, and graduation, participants will have completed the educational requirements for a local anesthesia permit for the state New Hampshire.

**Credits** 2

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED103C

ADED114C

**Corequisite Courses**

ADED212C

ADED240C

ADED242C

ADED247C

ADED248C

**Learning Outcomes**

Student Learning Outcomes

1. Describe the fundamentals of nerve impulse generation and transmission, and the effects of local anesthesia upon impulse conduction.
2. Discuss the concepts and methods to help in the management of pain, anxiety, and fear in a variety of dental settings.
3. Describe and discuss the importance of the anatomical landmarks, bones, muscles, blood vessels and nerves associated with each type and location of local anesthetic injection.
4. Differentiate and discuss the clinical application between topical anesthesia, infiltrations, field bock, and nerve block.
5. Describe and discuss the clinical applications of pharmacology with the commonly used dental anesthetics including chemical structure, classification, potency, toxicity, mechanisms of action and metabolism of each.
6. Describe and discuss the clinical indications and contraindications of local anesthetic use during patient care.
7. Conduct a patient assessment identifying conditions that influence the selection of a local anesthetic drug, the use of local anesthetics and vasoconstrictors.
8. Identify and describe potential drug interactions and adverse effects with the use of local anesthetics, vasoconstrictor, preservative or other components of the anesthetic solution.
9. Evaluate the patient medical history and physical status to determine the armamentarium, treatment modifications and potential for emergency situations in the administration of local anesthesia.
10. Recognize and manage local and systemic complications due to the injection or local anesthetic solutions, including the causes, symptoms, treatment and prevention.
11. Describe the procedure technique for each type of injection, including correct site for needle penetration and solution deposition, as well as the rationale for the selection of the appropriate local anesthetic.
12. Describe and demonstrate effective communication in proper patient management and techniques for the administration each injection taught within this course.
13. Demonstrate proper handling and infection control technique of the aspirating syringe during and after treatment, including needle recapping, syringe disassembly and cartridge and needle disposal.
14. Discuss ethical and legal considerations when administering local anesthesia in the clinical practice of dental hygiene.

**ADED246C : Pain Management for the Dental Hygienist II**

This course is designed to provide didactic and lab instruction in nitrous oxide/oxygen analgesia in accordance with American Dental Association Guidelines. The dental hygiene student will acquire comprehensive knowledge and skills necessary to safely and effectively administer nitrous oxide and oxygen sedation with local anesthesia injections. On completion of this course and graduation from the Dental Hygiene program, students will have completed the educational requirements for nitrous oxide administration and monitoring for certification by the state of N.H. All students enrolled in this course will be charged a pain management supplies fee.

**Credits** 1

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED212C

ADED244C

**Learning Outcomes**

Student Learning Outcomes

1. Explain the physiological and psychological aspects of fear and anxiety.
2. Formulate concepts and methods to help in the management of pain, anxiety and fear in a variety of dental settings.
3. Describe the states of consciousness and the levels of anesthesia.
4. Evaluate the patient's medical history and physical status to determine the armamentarium, treatment modifications and potential for emergency situations in the administration of local anesthesia and nitrous oxide and oxygen sedation.
5. Summarize the pharmacokinetic and pharmacodynamics of nitrous oxide on the human body.
6. Identify the advantages/disadvantages and indications/contraindication of nitrous oxide and oxygen sedation.
7. Summarize the importance of anatomy and physiology of the respiratory, circulatory, and central nervous systems in nitrous oxide and oxygen sedation.
8. Explain effects and sensations the patient is likely to experience as well as providing verbal and non-verbal reassurance during the nitrous oxide and oxygen sedation and the injection process.
9. Accurately document information regarding local anesthesia and nitrous oxide and oxygen sedation in the patient's record.
10. Proficiently demonstrate effective techniques for administration and monitoring for signs and symptoms of nitrous oxide and oxygen sedation.
11. Summarize potential biohazards associated with chronic exposure to nitrous oxide.
12. Demonstrate knowledge of nitrous oxide abuse, and the psychological effects of nitrous oxide abuse.
13. Demonstrate knowledge of the management and complications related to nitrous oxide and oxygen sedation.
14. Demonstrate the proper maintenance of N2O-O2 equipment to include infection control procedures, common malfunction, required maintenance, appropriate correction, precautions for safe use.
15. Demonstrate the steps in the administration and monitoring N2O-O2 sedation including: a) patient assessment, indications, contraindications, and potential adverse reaction, b) preparation, care planning and consent, c) observation and monitoring for response to signs and symptoms, d) recovery period, e) recording accurate percentage of N2O and additional documentation, and f) recovery period.
16. Discuss national and state laws and statues in the legal and ethical of practice administrating and monitoring of N2O-O2 sedation.

**ADED247C : Dental Hygiene Science - Pharmacology**

Emphasizes the study of drug origins, properties, dosages, and therapeutic effects. Specific consideration is given to those drugs used in dentistry and anesthesiology.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL202C

ADED136C

**Corequisite Courses**

ADED212C

ADED242C

ADED244C

ADED248C

**Learning Outcomes**

Student Learning Outcomes

1. Describe the general principles of pharmacology, including drug characteristics, basic mechanisms of action and adverse reactions, methods of administration, and interactions of each classification of drugs.
2. Describe the pharmacology of agents used primarily for nondental indications, which may influence dental treatment either directly or indirectly.
3. Describe the pharmacology and identify the drugs with recognized use of routine clinical dentistry for premedication, and the control of pain, infections, and disease.
4. Identify the components of a prescription and correctly use the symbols and terminology used in prescription.

**ADED248C : Dental Hygiene Science - Oral Pathology**

Oral pathology includes the study of diseases affecting the oral cavity, manifestations of inflammation, degenerative changes, neoplastic disease, and anomalies. Oral pathology prepares the student to detect deviations from normal in the assessment of a client's systemic and oral health status and to make appropriate decisions regarding referral and treatment when needed.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL196C

BIOL202C

ADED136C

**ADED249C : Pain Management**

This course is designed to prepare student dental hygienists for the safe and effective administration of local anesthesia, and the administration and monitoring of nitrous oxide/oxygen sedation. Course topics include the psychology of pain management, patient assessment and treatment planning, local anesthesia and sedation techniques, complications, concerns and contraindication, pharmacology of anesthetic and sedation agents, emergency precautions and management, ethical considerations, and a review of anatomy and physiology in relation to the administration of local anesthesia and nitrous oxide/oxygen sedation. Upon successful completion of this course, and graduation, participants will have completed the educational requirements for the administration of local anesthesia and nitrous oxide sedation for the state New Hampshire.

**Credits** 3

**Lab/Practicum/Clinical Hours** 1

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED112C
ADED103C
ADED114C
ADED126C
ADED162C

**Corequisite Courses**

ADED240C
ADED212C
ADED247C
ADED248C
ADED242C

**Learning Outcomes**

Learning Outcomes

Outcomes will be assessed through self-study modules, quizzes, exams, and a project on local anesthesia. All course outcomes are linked to the course goal listed above. Upon Satisfactory completion of didactic and laboratory local anesthesia curriculum the dental hygiene student will be able to:

**Learning outcomes for the administration of local anesthesia:**

1. Describe the fundamentals of nerve impulse generation and transmission, and the effects of local anesthesia upon impulse conduction.
2. Discuss the concepts and methods to help in the management of pain, anxiety, and fear in a variety of dental settings.
3. Describe and discuss the importance of the anatomical landmarks, bones, muscles, blood vessels and nerves associated with each type and location of local anesthetic injection.
4. Differentiate and discuss the clinical application between topical anesthesia, infiltrations, field bock, and nerve block.
5. Describe and discuss the clinical applications of pharmacology with the commonly used dental anesthetics including chemical structure, classification, potency, toxicity, mechanisms of action and metabolism of each.
6. Describe and discuss the clinical indications and contraindications of local anesthetic use during patient care.
7. Conduct a patient assessment identifying conditions that influence the selection of a local anesthetic drug, the use of local anesthetics and vasoconstrictors.
8. Identify and describe potential drug interactions and adverse effects with the use of local anesthetics, vasoconstrictor, preservative or other components of the anesthetic solution.
9. Evaluate the patient medical history and physical status to determine the armamentarium, treatment modifications and potential for emergency situations in the administration of local anesthesia.
10. Recognize and manage local and systemic complications due to the injection or local anesthetic solutions, including the causes, symptoms, treatment and prevention.
11. Describe the procedure technique for each type of injection, including correct site for needle penetration and solution deposition, as well as the rationale for the selection of the appropriate local anesthetic.

12. Describe and demonstrate effective communication in proper patient management and techniques for the administration each injection taught within this course.
13. Demonstrate proper handling and infection control technique of the aspirating syringe during and after treatment, including needle recapping, syringe disassembly and cartridge and needle disposal.
14. Discuss ethical and legal considerations when administering local anesthesia in the clinical practice of dental hygiene.

**Learning outcomes for the administration of nitrous oxide/oxygen sedation:**

1. Explain the physiological and psychological aspects of fear and anxiety in dentistry.
2. Formulate concepts and methods to help in the management of pain, anxiety and fear in a variety of dental settings.
3. Describe the states of consciousness and the levels of anesthesia including pharmacokinetic and pharmacodynamics of nitrous oxide on the human body.
4. Evaluate the patient's medical history and physical status to determine the armamentarium, treatment modifications and potential for emergency situations in the administration of local anesthesia and nitrous oxide and oxygen sedation.
5. Summarize the importance of anatomy and physiology of the respiratory, circulatory, and central nervous systems in nitrous oxide and oxygen sedation.
6. Proficiently demonstrate effective techniques for administration and monitoring for signs and symptoms of nitrous oxide and oxygen sedation.
7. Demonstrate the proper maintenance of N2O-O2 equipment to include infection control procedures, common malfunction, required maintenance, appropriate correction, precautions for safe use.
8. Demonstrate the steps in the administration and monitoring N2O-O2 sedation including:
    1. Patient assessment, indications, contraindications, and potential adverse reaction
    2. Preparation, care planning and consent
    3. Observation and monitoring for response to signs and symptoms
    4. Recovery period
    5. Recording accurate percentage of N2O and additional documentation
    6. Recovery period
    7. Recording accurate percentage of N2O and additional documentation

**ADED275C : Dental Assisting Theory II**

Introduces the dental advanced functions to dental assisting students. Includes instruction in basic instrumentation concepts, removal of coronal cement, application of pit and fissure sealants, suture removal, coronal polishing, expanded orthodontic functions, and the monitoring of nitrous oxide sedation. Preclinical skills will be introduced on mannequins and competency skills on patients. Advanced Dentrix computer applications will also be included. (Prerequisites: ADED 105C, ADED 110C, ADED 161C, ADED 175C, ADED 191C.)

**Credits** 2

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED105C
ADED110C
ADED161C
ADED175C
ADED191C

**Learning Outcomes**

Student Learning Outcomes

1. Provide a patient with a tray or varnish fluoride treatment.
2. Demonstrate the ability to anticipate the needs of a dentist during a restorative procedure.
3. Maintain a chain of asepsis when cleaning prosthetic appliance.
4. Use a sturdy and safe fulcrum during instrumentation.
5. Sit in the proper position to effectively treat a specified sextant of a patient's mouth.
6. Explain the theory behind selective polishing.
7. Demonstrate the placement of sealants.
8. Demonstrate the safe monitoring of nitrous oxide.
9. Identify specialty practice instruments.
10. Demonstrate placement of a rubber dam and explain the reasons for utilization.
11. Fabricate and finish provisional coverage.
12. Remove and account for sutures.
13. Describe the symptoms and treatment of alveolitis.
14. Demonstrate the use of the intraoral camera.
15. Demonstrate expanded orthodontic duties procedures.
16. Describe the expanded duties qualifications for the traditional dental assistant, Certified Dental Assistant (CDA), and Graduate Dental Assistant of a CODA accredited dental assisting program.

Course Goals

1. Prepare the dental assisting students to perform the more advanced skills now legally delegated to the CODA program graduate assistant by the New Hampshire State Practice Act.
2. Students will learn to utilize instruments correctly in order to prevent harm to a patient and themselves.
3. Promote value of a well-trained CODA dental assisting program graduate.

**ADED298C : Dental Assisting Clinical Experience III**

Expanded opportunities in chairside assisting to encompass all dental specialties including orthodontics, surgery, endodontics, pedodontics, and prosthodontics. A weekly seminar is held to evaluate the individual clinical experiences. All students enrolled in ADED 298C will be charged a clinical surcharge per semester.

**Credits** 4

**Lab/Practicum/Clinical Hours** 9

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

up-to-date CPR and clinical clearance with current health and liability insurance, and DANB Radiation Health and Safety certificate

ADED196C

ADED275C

**Learning Outcomes**

Student Learning Outcomes

1. Perform expanded duties as per the laws and rules of the New Hampshire Board of Dental Examiners.
2. Demonstrate the ability to anticipate the needs of a dentist during a restorative procedure.
3. Maintain a chain of asepsis when cleaning prosthetic appliances.
4. Use a sturdy and safe fulcrum during instrumentation.
5. Sit in the proper position to effectively treat a specified sextant of a patient' mouth.
6. Identify specialty practice instruments.
7. Assist with the placement and removal of a rubber dam.
8. Perform an initial preliminary oral inspection and charting.
9. Demonstrate the use of an intraoral camera.
10. Assist with the treatment of alveolitis.

**AGGP101C : Introduction to Game Design and Creation with Programming**

Introduces the student to game design with a focus on core programming concepts and common game mechanics. No prior knowledge of game development is assumed. Several hands-on game programming assignments demonstrate real-world implementations of abstract concepts. A research paper on the game industry and development topics is assigned. Each student is required to create a small game project during the last several weeks of the course.

**Credits** 3

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 2

**Prerequisite or Corequisite**

CPET 107C, or with permission of program coordinator. In addition to listed prerequisites, students must earn grades of C or higher in each major field course and AGGP prerequisite to progress in the program.

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

CPET107C

**Corequisite Courses**

CPET107C

**AGGP103C : Introduction to Content Development**

Gain practical experience in developing content using applications, techniques, and standards used by the game industry. This course includes an introductory overview of image editing and manipulation, sprites, tiles, and tile-based worlds. Course material is reinforced with hands-on assignments and the creation of a portfolio. Students who do not intend to enter the AGGP program should consider enrolling in VRTS 193C.
**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Working knowledge of current desktop operating systems

**AGGP131C : Introduction to 2-D and 3-D Game Development**

This course focuses on the fundamental aspects of programming, development, and design for games using 2-D gameplay. Other topics explored include an introduction to 3-D programming, single-system multiplayer programming, multi-platform programming, and support for data originating from level editors. The coursework is structured with several hands-on projects, classroom presentations, a team project, and a final public presentation.
**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGGP101C
AGGP103C
CPET107C

**AGGP140C : Digital Art Modeling and Animation**

An introduction to modeling and animation for game programmers to provide a common understanding to work with artists and designers in an effective manner. Topics include modeling, material creation, basic lighting, and an introduction to skeletal animation. Models will be created and then used to understand animation and asset pipelines using current industry tools and engines. Course topics are applied through practical hands on assignments.
**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGGP103C

**AGGP225C : 3-D Game Engine Application Development**

Use of a commercially available game engine or framework. The majority of the work in the class will be hands-on using these technologies. A common practice within the industry is team development of applications using licensed game engine technology. Students will understand how to use the engine's interwoven mesh of different systems, which include user input, networking, and rendering. Game modification, also known as "modding," and source control will be covered.
**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGGP131C
AGGP140C
CPET125C

**AGGP231C : Application Development and Software Prototyping**

Current application development can target multiple platforms across a range of devices such as phones, tablets, smart devices, consoles, and personal computers. Students will study current technologies for cross-platform development and deployment. Several intense hands-on software prototype projects will be required where students will design a concept, build a proof of concept, and conduct a postmortem review.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGGP131C
AGGP140C
CPET125C

**AGGP247C : Math and Physics for Game Programmers**

Math and physics play key roles in game programming. Effective use of math is needed for code design, data structures utilization, using design patterns, developing artificial intelligence, using scripting engines, controlling 3D pipelines, and texture-mapping development. Math is also needed to implement the physics utilized in Newton's laws and concepts of collisions and reactions. Programmed applications that use math and physics in game development will form the foundation for this hands-on course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
both AGGP math electives
AGGP101C
CPET125C

**AGGP291C : Project Definition and Portfolio Specifications**

Students begin the construction of a professional industry portfolio. Assignments given to support an effective portfolio include collecting and polishing potential portfolio pieces, crafting resumes and cover letters, and learning job search networking techniques. An exemplary individual project is required in addition to other assignments. A study of game theory and game projects will be used to define a team capstone project to be undertaken in AGGP 294C.

Students enrolling in AGGP 291C come with the expectation that they will directly enroll in AGGP 294C the next semester. Students who do not take AGGP 294C in the next semester after taking AGGP 291C must re-take AGGP 291C before enrolling in AGGP 294C. Students who have passed AGGP 291C but are required to re-take the course should be aware that the cost of the course may not be covered by financial aid and should consult with the Financial Aid Office prior to registration.

**Credits** 2
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
completion of all AGGP major courses in the first year of the curriculum
**Corequisites**
the student must be enrolled or have already taken all AGGP major courses for the Fall semester of the second year curriculum or have permission of program coordinator

**AGGP292C : Portfolio Development**

AGGP 292C builds on the work started in AGGP 291C. The lab in this course is devoted to a major portfolio piece or for students to be available for an internship off-campus. Students are expected to prepare a presentation of their work as part of this course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGGP291C

**AGGP294C : Animation and Graphic Game Programming Capstone Project**

Students will be working on campus in team projects or off campus on internships. Students will be creating projects based on the specifications developed in AGGP 291C. The lab portion is devoted to student project development. All work will be supervised by an NHTI instructor and students are expected to work at an industry performance level. Final team presentations of the work accomplished are part of this course.

**Credits** 4
**Lab/Practicum/Clinical Hours** 5
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGGP291C

**AGRI110C : Sustainable Agriculture I**

Students will learn about agricultural disease and pest identification and management, ratios and proportions for mixing fertilizers and additives, soil and water chemistry, niche market identification, and agricultural adaptation to climate change in New England, as well as local and federal regulations and an introduction to resources for farmers. Lecture format will include formal lectures, guest speakers, and field trips. Labs will include in-lab research, experiments, and on- and off-campus fieldwork. Students will choose an area of specialization based on their market niche to begin the development of their portfolio.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify sustainable management strategies for common crop pathogens and pests.
- Prepare soils for planting using sustainable methods.
- Calculate fertilizer use, additive use, and land area.
- Research and apply sustainable practices to all aspects of agricultural production and management on a small farm.
- Explain the potential impacts of climate change on agriculture world-wide and on the local scale.
- Describe the regulations controlling the student's niche market.

**AGRI112C : Practical Applications for Sustainable Agriculture I**

This 8-week course will take place at a local farm using sustainable agriculture practices. Students will participate in all levels of farm operation from seed selection and ordering to pest, soil and water management, and transplanting crops. Focus areas will include soil analysis, financial and regulatory record keeping, greenhouse set up, chemical use and safety, and equipment selection and operation.

**Credits** 2
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Evaluate the appropriate plants for various growing conditions, size of operation, and likely pests.
- Plant seedlings in working greenhouse and fields.
- Create a farm portfolio and track planting records, soil test results, field applications, licenses and cost expenditures.
- Apply appropriate chemical safety techniques.
- Demonstrate proper care and operation of farm equipment.

**AGRI115C : Practical Applications for Sustainable Agriculture II**

This course will take place at a local farm using sustainable agriculture practices. Students will be involved in harvesting, crop rotation and direct sowing, pest management, soil health and watering. Students will also gain practical knowledge about bringing a product to market, food safety and contamination, food and crop loss, health and safety regulations and documentation. Students will build a portfolio that can be adapted and used when they work in the field. The portfolio will contain all necessary licenses, certifications and financial documentation needed for all agricultural businesses.

**Credits** 2
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
AGRI112C
**Learning Outcomes**

- Identify the appropriate timing and methods of harvesting numerous crops.
- Research replanting, crop rotation, and end-of-season field dressing.
- Develop methods for extending the growing season and adding profit.
- Complete farm portfolio establishing total seasonal profit, planting dates, harvesting dates, and planning for the following season.

**ANTH101C : Introduction to Cultural Anthropology**

This course is an introduction to the perspectives, methods, and ideas of cultural anthropology and will analyze human diversity and similarities among people throughout the world, both western and non-western, through cross-cultural comparison. Topics include culture and society; ethnographic research; ethnocentrism and cultural relativism; how societies adapt to their environment; different forms of marriage and social relationships; male, female, and other forms of gender; the social functions of religion; and the processes of social-cultural change.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ANTH210C : Native American Studies I**

A study of Indigenous North American cultures from ancient times to the 21st century. Native American cultures and traditions are studied, including lifeways, religion, ceremonies, arts, sovereignty, government, and social organizations. The course first focuses on ancient Mesoamerica. The study then proceeds to an in-depth review of the peoples and nations of North American culture areas, including the Northeast, Southeast, and the Great Plains, as well as the impact of settler colonialism.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ARET101C : AutoCAD 2-D**

This is an introductory course in computer-aided design (CAD) for beginning students. Topics include drawing setup, line drawing, text placement, orthographic drawing, basic editing, and dimensions. This hands-on course focuses on the most common basic functions necessary to complete 2-D drawings including move, mirror, copy, offset, trace, OSNAP, and distance. Projects incorporate basic techniques of drawing and CAD. This course is part of the CAD Certificate program. Students are expected to be able to read and interpret architectural/engineering graphics.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ARET102C : AutoCAD 3-D**

This course introduces students to architectural 3-D CAD applications, 3-D manipulation of entities, and the creation and control of views in 3-D space through isometric and perspective projections. Topics include 3-D drawing, coordinate systems, viewing, rendering, modeling, and output options. On completion, students will be able to prepare basic architectural 3-D drawings and renderings. This course is part of the CAD Certificate program.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ARET101C

**ARET103C : Architectural Graphics and Sketching**

The first semester is devoted to the basic ways of representing architectural ideas graphically through the development of sketching and computer-aided-drawing (CAD) skills. Architectural line techniques, lettering styles, geometric construction, principles of projection, and drawing expression are the areas of early concentration. Architectural design issues are studied regarding residential planning and siting. The student produces floor plans, foundation plans, site plans, elevations, building sections, wall sections, and details. An introductory structural analysis for foundation loading is explored. Production of drawings by sketching and CAD demonstrates the student's ability to perform.
**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
ARET120C
**Corequisites**

- CAD certificate and Industrial Design Technology students taking this course are not be required to register for ARET 120C.
- For ARET and CVET students, this course is integrated with ARET 120C; therefore, it is recommend that they are taken together.

**ARET104C : Architectural Design Studio I**

The student studies the architectural design for an institutional building designated for public use. The terrain is sloping and provides for a two-story sloped roof structure that employs current construction methods. The student begins study through the use of sketch-to-scale drawings. With an outline of design criteria and project guidelines, the student develops preliminary presentation drawings for floor plans, elevations, and 3-D views. As the student comes to know and appreciate the design, the emphasis shifts to a more in-depth understanding of the technology of construction. The student prepares construction documents for floor plans, elevations, building sections, wall sections, and details. The preparation of preliminary drawings and construction documents include sketching to scale and drawings produced by CAD software. The student demonstrates competency by studying, discussing, and producing these drawings and presenting them to the class as a way of working on relevant soft skills.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ARET103C
ARET120C

**Corequisites**

For ARET and CVET students, this course is integrated with ARET 192C; therefore, it is recommend that they are taken together.

**ARET120C : Materials and Methods of Construction**

A survey of the materials used in building construction, the methods used in assembling these materials into structures, and the forces acting on structures. Included are the characteristics and properties of each material and their relative cost. Materials and methods studied include site work, concrete, masonry, metals, wood and plastics, thermal and moisture protection, doors and windows, and finishes.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisites**

- For ARET and CVET students, this course is integrated with ARET 103C; therefore, it is recommended that they are taken together.

**ARET150C : Statics and Strength of Materials**

A study of forces and the effect of forces on structural members in a state of equilibrium. It is the study of internal stresses and deformations that result when structural members are subjected to external forces through loading. While lectures and some labs deal mainly with the theory of force analysis and force systems solutions, lab projects involve the application of various stress and strain measuring instruments on many materials used in construction.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH124C
PHYS133C

**ARET160C : Introduction to Geographic Information Systems**

An introduction to geographic information systems (GIS), global positioning systems (GPS), and ESRI's ArcGIS. Topics will include basic GIS concepts; the structure and availability of GIS data; the N.H. GIS database; creation of maps; editing and creation of GIS data; the use of GPS to collect information for use in GIS; and GIS processing and analysis. The course will combine lectures, hands-on exercises, and an individual student project over the course of the semester.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ARET192C : Revit Architecture**

Revit®, a CAD building modeler based on parametric technology, automatically updates edits and changes made in one place across the project parameters. The course focuses on building a foundation for the basic elements in the software.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students are expected to be able to read and interpret architectural/engineering graphics to register for this course.

**Corequisites**
For ARET and CVET students, this course is integrated with ARET 104C; therefore, it is recommend that they are taken together.

**ARET194C : Microstation**

This is an introductory course in Computer-Aided Drafting (CAD) for beginning students using Microstation V8 software. Topics include drawing set-up, line drawing, text placement, basic editing and dimensions. The course structure focuses on the most common basic functions necessary to complete drawings including move, mirror, copy, offset, distance and more. Projects incorporate basic techniques of drawing and computer-aiding drafting. Note: students are expected to be able to read and interpret architectural/engineering graphics to register for this course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ARET195C : BIM Technologies**

Building Information Modeling (BIM) is a workflow for designing, evaluating, constructing, fabricating, and operating buildings. As BIM technology is developing this workflow is beginning to touch all aspects of the building industry. Understanding the role of BIM is critical to working in the building industry. The BIM model gives a building project a rich asset the entire team can use to deliver a better product to the building owners. Learn how BIM and BIM-related tools are used (and will be used in the future) in all phases of the building process from initial conceptual design to facilities management.

Students will learn how to use BIM models in multiple phases through the construction process, including performing energy and lighting analysis, construction simulations and interference reporting, quantity take- offs for construction cost estimating, and connection to an external database for building maintenance.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ARET192C

**ARET202C : Architectural Design Studio II**

Emphasis is placed on an architectural design solution for a multi-story addition to existing buildings and preparation of construction documents for an institutional building. The student will study a multistory steel- or concrete-framed and masonry-enclosed structure. Floor plans, elevations, sections, and details using materials typically used in construction today are sketched to scale and produced by computer-aided design (CAD) AutoDesk software. Lectures relating to the basics of circulation, egress requirements, structural steel framing, masonry, codes, metal pan stairs, barrier-free design, handicap code requirements, fire protection, acoustics, glazing, curtain-wall systems, roofing and building energy conservation, and sustainable strategies supplement studio work. Students will study sustainable strategies and energy utilization through the use of energy-modeling software.
**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ARET103C
ARET104C
**Corequisite Courses**
CVET240C

**ARET250C : Environmental Systems**

A survey of the environmental control methods and support systems used in contemporary buildings. Emphasis is placed on the fundamentals of each system and design of simple systems, and how they relate to energy utilization and conservation in building design. Students use an energy-modeling software to study the design of a building. Economic comparisons and cost/benefit ratios are also studied. This course is not required of students in Architectural Engineering Technology: Civil Focus program.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PHYS135C
**Corequisites**

- This course is integrated with ARET 297C; therefore, it is recommend that they are taken together.

**ARET270C : Construction Management**

Deals with the business phase of a construction project, from working drawings and specifications to final completion of the structure. The architect/engineer's role and contractor's role in coordinating project activities are discussed. Also covered are cost control (estimating) and contractual arrangements, including recent innovations of the industry. The impacts of green, sustainability, and energy conservation issues on construction management are studied. Guest lectures and a field trip to an ongoing construction project will supplement classroom lectures.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ARET202C
CVET201C
ENGL125C

**Corequisites**

- This course is integrated with ARET 297C; therefore, it is recommend that they are taken together.

**ARET297C : Architectural Design Studio III**

The student chooses a project for the term to design from a collection of instructor-approved projects requiring real site considerations. By discussing the relevant design criteria with the instructor and selection of a hypothetical client outside of class, the student develops and refines the program of space requirements and acquires an appreciation of the in-depth functionality of architecture, especially space adjacency requirements. The study includes an analysis of a site, structure, codes, circulation, material usage, and sustainability and energy considerations. Schematic and preliminary designs, with an emphasis on sketching for study purposes, presentations drawings and construction documents are produced by CAD AutoDesk software. Students build a study and final model and are required to submit a progress report. An emphasis is placed on a thorough coordination of the work, application of current technology, and application of the knowledge gained in the ARET program.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ARET202C
CVET220C
CVET240C
ENGL125C

**Corequisites**

- This course is integrated with ARET 250C and ARET 270C; therefore, it is recommend that they are taken together.

**ASL104C : American Sign Language for Beginners**

Introduces students to basic knowledge and skills of American Sign Language. Students will achieve the beginning levels of fluency in communicating through the use of ASL.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Identify key linguistic rules of ASL (Topic and OSV).
- Implement basic ASL and gesture in conversation.
- Identify general social/cultural rules of communication among ASL users.
- Implement limited fingerspelling and numbers.

**ASL105C : Advanced American Sign Language**

Teaches students the advanced skills and knowledge of American Sign Language. Students will achieve fluency in communicating through the use of ASL.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ASL104C
**Learning Outcomes**

- Identify key linguistic rules of ASL (Topic and OSV) implement basic ASL and gesture in conversation.
- Identify general social/cultural rules of communication among ASL users.
- Implement fingerspelling and numbers.
- Demonstrate advanced ASL fluency.

**BIOL100C : Introduction to Biology with Lab**

An introductory course in biology intended to satisfy the biology admission requirement for NHTI health-related degree and professional certificate programs and Natural Science Department degrees and diploma programs. Topics include scientific method and measurement, chemistry, cell structure and function, energy transformation, cell reproduction, genetics and evolution. Laboratory exercises parallel lecture topics to introduce and enhance the concepts of biology. Students are expected to write a lab report on an experiment using the scientific method. (For institutional credit only; does not count toward graduation requirements but is calculated into GPA; not intended for transfer.)

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Explain the meaning of and describe the value of biology.
2. Physically demonstrate proper laboratory techniques and skills.
3. Evaluate the relationship between science and society.
4. Apply the scientific method.
5. Define the cell theory and describe the structures and main functions of cells.
6. Examine evidence of evolution.
7. Discuss evolutionary theory and mechanisms for evolution.

**BIOL111C : General Biology I**

Designed to provide the student with the basic principles of biology, including scientific method, cell structure, cellular biochemistry and energy transformations, and genetics. Labs are used to develop skills in scientific thought and common procedures used in biological experimentation. With BIOL 112C, intended to provide a foundation for further study in life sciences.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Algebra I with a grade of C or higher; high school-level Biology and Chemistry with labs with grades of C or higher
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Define the cell theory and describe the structures and main functions of cells.
4. Compare and contrast inorganic and organic molecules as they relate to the structure and function of living things.
5. Examine mechanisms of energy transformations.
6. Evaluate Mendelian and modern genetics.
7. Explain the principles of molecular biology as they apply to biotechnology.

**BIOL112C : General Biology II**

A continuation of BIOL 111C. Includes a survey of the taxonomic groupings of life forms and the principles of evolution and ecology.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
BIOL111C
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Identify the principles of taxonomy.
4. Describe characteristics of major groups within each of the biological kingdoms.
5. Examine evidence of evolution and diversity of plant and animal life.
6. Discuss evolutionary theory and controversies surrounding the theory.
7. Evaluate evolutionary trends in the development of selected physiological systems.

**BIOL115C : Introduction to Ecology**

Designed to give non-science majors the opportunity to learn about the interactions between the physical and biological components of the environment. The lecture will provide a broad introduction to the organismal, population, community, and ecosystem levels of ecological interaction. Instructional methods include readings, lecture/discussion, in-class applications, field observations, and field research. The lab portion will provide students with practical experience in ecological methods and the design, conduct, and analysis of ecological studies. Lab exercises are designed to correspond with major lecture topics. Exercises include lab and field studies. Student should come prepared to be outside for most labs.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- High school biology with lab or BIOL 100C
- High school chemistry with lab or CHEM 100C
- High school algebra I or MATH 092C

BIOL100C
CHEM100C
MATH092C

**Learning Outcomes**

Upon completion of this course, students will:

1. Explain fundamental principles of ecology.
2. Apply principles of ecology to field observations.
3. Design and conduct field-based ecological research.
4. Describe connections between the environment and human societies and how each affects the other.

**BIOL116C : Field Ornithology**

This course introduces the student to the biology of birds and the methods of modern field studies, identification, life histories, ecology, and behavior of birds, with an emphasis on local species. The course involves a major field component (observing and identifying birds in their natural habitats) complemented by investigations into aspects of bird biology and ecology, such as habitat use, bird morphology; flight, song, nesting and reproductive behavior; and migration. No previous experience with birds is expected. Lecture and lab may include demonstrations, discussion, and field trips.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Recommended Prerequisites**

high school Biology

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will:

1. Explain the evolutionary origins, diversity and taxonomic system for classifying birds groups and species.
2. Identify numerous species of birds in New Hampshire and describe their songs, appearance, and behaviors.
3. Describe the morphological and anatomical features of birds, and distinguish these as adaptations for particular environments.
4. Examine foraging behavior, physiology, senses, navigation, and migration as adaptations for particular environments.
5. Compare and contrast the behavioral ecology of reproduction, courtship, mating systems, nest building and parental care.
6. Indicate the ecological role of birds, threats to biodiversity, and human efforts to conserve bird species.

**BIOL117C : Introduction to Plant Biology**

An introduction to the structure and physiology of plants at the molecular, cellular, and organismal levels; survey of major plant groups and their evolutionary relationships; and the relationships of plants to humans and other organisms.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- High school biology with lab or BIOL 100C

BIOL100C

**Learning Outcomes**

Upon completion of this course, students will:

1. Explain the classification of plants and differentiate between biomes.
2. Identify the structure and function of plant stems, roots, cells, tissues, and organelles.
3. Compare and contrast monocot, dicot, ferns, gymnosperms, bryophytes, seed and seedless plants, and other woody plants.
4. Define diffusion, osmosis, and explain how plants can transport and communicate between cells.
5. Describe photosynthesis and respiration by plants.
6. Evaluate the role of fungi and soil type for plant growth.

**BIOL120C : Human Biology**

A brief summary of human anatomical structure and physiological systems designed to provide students with the knowledge and perspective necessary to work in their chosen fields.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Recommended Prerequisites**

high school Biology

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Define the cell theory and describe the structures and main functions of cells.
4. Compare and contrast inorganic and organic molecules as they relate to the structure and function of living things.
5. Explain the organization of body systems, anatomical features, and functional processes in health and disease.
6. Describe the complementary nature of structure and function, homeostasis and homeostatic mechanisms, and interactions of the human body with its environment.

**BIOL122C : Basic Pathophysiology**

Designed to provide the student with an understanding of the various mechanisms by which human diseases develop. Includes a survey of common disorders involving each of the major body systems.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either BIOL120C (or higher) or BIOL 195C, plus BIOL 196C.

BIOL120C
BIOL195C
BIOL196C

**Learning Outcomes**

Upon completion of this course, students will:

1. Explain the inflammatory and immune responses.
2. Differentiate between the types and characteristics of microorganisms responsible for human infectious diseases.
3. Describe the mechanisms by which deviations from normal health occur, including but not limited to: infectious agents, carcinogens, genetic abnormalities, and mechanical injury.

**BIOL123C : The Biology of Human Reproduction**

Intended to give an appreciation for the importance of the following areas of reproduction: male and female anatomy and development, sexual differentiation, puberty, menstruation, parturition, lactation, assisted reproductive technologies, birth control methods, and menopause. (High school Biology recommended)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**

High school biology

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will:

1. Discuss general chemistry and biochemistry as they pertain to the body.
2. Describe human cell structure and general cellular processes.
3. Examine the anatomy and physiology of the male and female reproductive systems.
4. Identify birth control methods and sexually transmitted diseases.
5. Explain reproductive technologies.

**BIOL125C : Human Genetics and Society**

An introduction to genetics for students not majoring in the sciences. The student will be introduced to the basic principles of Mendelian and molecular genetics and will apply these principles to human genetic traits. Causes and treatments of common inherited diseases will be discussed as well as genetic technologies and their applications (recombinant DNA technology, genetic engineering, *in vitro* fertilization). The associated ethical and social issues will also be examined. Lab component to complement lecture.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Recommended Prerequisites**
high school Biology
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Evaluate classical and modern genetics.
2. Explain the principles of molecular biology as they apply to humans and biotechnology.
3. Analyze the social, ethical, and cultural implications of human genetic principles and biotechnology and how they apply to individuals and society .

**BIOL129C : Introduction to Sports Nutrition**

an introduction to the basic nutritional needs of those involved in individual and team sports. General nutrition topics will be interspersed with specific requirements and recommended intakes for athletes at all levels and ages. A variety of sporting activities, including those involving both endurance and strength athletes, will be covered. (Course is intended for non-science majors).

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
high school Biology
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply the scientific method.
2. Explain the basic concepts of diet planning.
3. Describe the classification of, normal metabolism of, and recommended intakes and appropriate food sources of each of the following major nutrient classes: carbohydrates, lipids, proteins, vitamins, minerals, and water.
4. Determine recommendations and appropriate intakes of the above nutrients as they relate to a variety of athletic activities.
5. Evaluate weight management techniques, including the role of diet and exercise for the loss, gain and maintenance of body mass.
6. Research and analyze popular ergogenic aids.
7. Assess recommendations and special considerations for dietary intakes and physical activity throughout the human lifespan.

**BIOL159C : Personal Nutrition**

An introductory course, including laboratory, for the individual interested in nutrition as a tool for personal health promotion and disease prevention. Incorporates basic principles of nutrition with discussions of contemporary issues. Laboratory exercises allow for exploration of lecture topics and will include the scientific method, diet analysis and nutritional and lifestyle risk analysis. (Course is intended for non-science majors).

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Recommended Prerequisites**

high school Biology recommended

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will:

1. Apply the scientific method.
2. Employ basic concepts of diet planning and evaluate personal dietary habits.
3. Describe the classification of, digestion of, normal metabolism of, and recommended intakes and appropriate food sources of each of the following major nutrient classes: carbohydrates, lipids, proteins, vitamins, minerals, and water.
4. Evaluate weight management techniques, including the role of diet and exercise for the loss, gain and maintenance of body mass.
5. Explain the development of, risk factors for, and prevention and treatment of diabetes, cardiovascular disease, and cancer.
6. Analyze safe food handling practices.

**BIOL195C : Anatomy and Physiology I**

An introduction to the structure and function of the human body. Includes elementary cytophysiology, histology, and anatomy and physiology of the integumentary system, skeletal system, muscular system, nervous system, and special senses. Lab work parallels lecture topics and includes microscopy, study of human anatomical models, dissection of preserved animals, and physiological experimentation.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- High school biology with lab or BIOL100C
- High school chemistry with lab or CHEM 100C

**Learning Outcomes**

Upon completion of this course, students will:

1. Compare and contrast inorganic and organic molecules as they relate to the structure and function of living things.
2. Define the cell theory and describe the structures and main functions of cells.
3. Examine the four main histology types of the human body.
4. Describe the structure (at all levels of organization), physiology, and homeostatic mechanisms (both intra- and intersystem) of each of the following systems: integumentary, skeletal, muscular, and nervous.
5. Demonstrate proper care and use of the compound light microscope.

**BIOL196C : Anatomy and Physiology II**

A continuation of BIOL 195C. Includes anatomy and physiology of the endocrine system, circulatory system, immune system, respiratory system, digestive system, excretory system, and reproductive system. Other topics covered include nutrition and metabolism, acid/base balance, fluid and electrolyte balance, and genetics. Lab work parallels lecture topics and includes microscopy, study of human anatomical models, dissection of preserved animals, and physiological experimentation.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL195C

**Learning Outcomes**

Upon completion of this course, students will:

1. Describe the structure (at all levels of organization), physiology, and homeostatic mechanisms (both intra- and intersystem) of each of the following systems: endocrine, cardiovascular, lymphatics/immune, respiratory, digestive, urinary, reproductive.
2. Examine the metabolic pathways for the production of energy within the human body.
3. Compare and contrast the basic classes of nutrients.
4. Discuss mechanisms for fluid, electrolyte, and acid-base maintenance.
5. Demonstrate proper care and use of the compound light microscope.

**BIOL202C : Microbiology**

Lectures focus on three major areas: basic concepts of microbiology, including morphology and physiology of prokaryotes, eukaryotes, and viruses; host resistance to disease and immunology; and epidemiology of selected diseases caused by bacteria, viruses, fungi, protozoa, and parasitic worms. Labs focus on three major areas: basic skills such as staining, microscopy, and isolation techniques; bacterial physiology as is pertinent to identification of bacterial species; and control of microorganisms via chemotherapeutic agents, physical means, and chemical disinfectants.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either BIOL112C or BIOL196C.

BIOL112C
BIOL196C

**Learning Outcomes**

Upon completion of this course, students will:

1. Examine microorganisms and their physiological properties, normal human flora, sources of pathogens, interference and destruction of microorganisms, methods of transfers of pathogens, immunization, and body response to the invasion of foreign substances.
2. Apply etiology to the study of disease progression.
3. Demonstrate proper laboratory techniques and skills.

**BIOL211C : Genetics**

A lab course intended to enhance a student's knowledge of basic genetics and to provide the foundation necessary for further studies in molecular biology, cell biology, evolution, systematics, and behavior. Topics covered will include Mendelian genetics, molecular genetics, immunogenetics, genetics of cancer, and population genetics.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take BIOL112C or BIOL196C, plus MATH124C.

BIOL112C
BIOL196C
MATH124C

**Learning Outcomes**

Upon completion of this course, students will:

1. Evaluate classical genetics, modern genetics, and population genetics.
2. Explain the principles of molecular biology, the physical and chemical nature of genetic material, patterns of inheritance of traits, and basic approaches of recombinant DNA technology.
3. Demonstrate proper laboratory techniques and skills.

**BIOL212C : Ecology**

Investigations into the biological and physical factors affecting the distribution, abundance, and adaptations of organisms. Interrelationships at the population, community, and ecosystem levels will be studied.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Recommended Prerequisites**

MATH 251C

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take BIOL112C and MATH124C (or higher-level math course).

BIOL112C
BIOL196C
MATH124C

**Learning Outcomes**

Upon completion of this course, students will:

1. Explain the relevance of ecology to human societies.
2. Describe the physical environment of an ecosystem.
3. Distinguish between biotic and abiotic factors and assess the flow of energy through the various trophic levels and cycling of nutrients and chemicals in an ecosystem.
4. Define the properties and dynamics of populations.
5. Evaluate the structure of an ecological community and the interactions between its members.
6. Collect and analyze data typical of current ecosystem research.

**BIOL215C : Freshwater Ecology**

Enhances students' understanding of ecology and introduces them to the biological, chemical, and physical properties of lakes, streams, and wetlands as they relate to the structure and function of freshwater ecosystems. Students will gain an understanding of freshwater environmental concerns and experience in water quality assessment. The course will also cover topics in sustainability, management, and rehabilitation of natural aquatic environments in relation to human impact.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take BIOL111C or BIOL115C.

BIOL111C
BIOL115C

**Learning Outcomes**

Upon completion of this course, students will:

1. Describe freshwater ecological principles in stream, lake, and wetland ecosystems.
2. Explain how watershed scale processes affect aquatic ecosystem structures and functions.
3. Evaluate temporal and spatial changes that occur in aquatic environments.
4. Define ways that humans affect aquatic ecosystems and how these changes affect society.
5. Collect and analyze data typical of current aquatic ecosystem research.

**BIOL222C : Pathophysiology**

Provides the Allied Health student with an understanding of disease processes by building on the student's knowledge of normal anatomy and physiology. Common disorders of major body systems are discussed relative to the mechanisms by which they develop and their effects on homeostasis.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL196C

**Learning Outcomes**

Upon completion of this course, students will:

1. Define factors affecting the frequency and incidence of disease.
2. Describe the inflammatory and immune responses and the mechanisms of prevention and control of disease.
3. Distinguish types and characteristics of microorganisms responsible for human infectious diseases.
4. Evaluate the mechanisms by which deviations from normal health occur, including but not limited to: infectious agents, carcinogens, genetic abnormalities, mechanical injury.
5. Compare characteristics of specific pathologies of human body systems as discussed in class, particularly as those characteristics relate to deviations from homeostasis.

**BIOL229C : Nutrition in Exercise and Sports**

Introduces the student to nutrition as it relates to the improvement or optimization of physical performance. Dietary interventions for strength and endurance exercise training and sporting event participation will be thoroughly investigated. Special emphasis will be placed on weight management: the reduction, maintenance, and gain of body mass. (Course is intended for science majors).

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either BIOL159C or BIOL195C.

BIOL195C
BIOL159C

**Learning Outcomes**

Upon completion of this course, students will:

1. Employ basic concepts of diet planning and evaluate personal dietary habits.
2. Describe the classification of, normal metabolism of, and recommended intakes and appropriate food sources of each of the following major nutrient classes as they relate to endurance and strength training: carbohydrates, lipids, proteins, vitamins, minerals, and water.
3. Analyze weight management techniques, including the role of diet and exercise for the loss, gain and maintenance of body mass.
4. Explain the metabolism of macronutrients during aerobic and anaerobic activities and the role of micronutrients in these energy pathways.
5. Research and analyze popular ergogenic aids.

**BIOL239C : Public Health Nutrition**

Provide students with the foundation and core competencies of public health nutrition. This includes the skills, knowledge, and tools used in assessment, community intervention, and evidence-based approaches to promote health and prevent diseases. This course engages students in critical thinking and productive discussion around public health nutrition and health promotion. The course addresses major public policy initiatives related to public health nutrition, health promotion, and disease prevention nationally and globally. This course requires students to be proficient in writing.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**

ENGL 101C

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either BIOL129C or BIOL159C or BIOL259.

BIOL129C
BIOL159C
BIOL259C

**Learning Outcomes**

Upon completion of this course, students will:

1. Evaluate domestic and international public health nutrition programs.
2. Identify the social determinants of health and equity issues involved in optimal nutrition and exercise.
3. Define nutritional epidemiology and describe the different types of epidemiological research.
4. Analyze nutrition recommendations made by individuals and organizations at the local and national level.
5. Describe the legislative process, including the key stakeholders and current policies that have an impact on public health and nutrition policy at the federal, state and local levels.
6. Discuss public health nutrition messaging and the role of media in childhood obesity and how the food industries and polices influence food choices.

**BIOL259C : Normal and Therapeutic Nutrition**

An introductory course in normal and therapeutic nutrition designed for students in Allied Health or Health Sciences programs. Focuses on the application of basic principles of nutrition to health promotion and disease prevention, as well as the role of nutritional intervention as a therapeutic tool in specific pathologies. Includes discussion of contemporary issues in nutrition.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Recommended Prerequisites**
It is recommended that students NOT take BIOL 159C prior to taking this course.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
BIOL195C
**Learning Outcomes**
Upon completion of this course, students will:

1. Employ basic concepts of diet planning and evaluate personal dietary habits.
2. Describe the classification of, digestion of, normal metabolism of, and recommended intakes and appropriate food sources of each of the following major nutrient classes: carbohydrates, lipids, proteins, vitamins, minerals, and water.
3. Explain the development of, risk factors for, and prevention and treatment of diabetes, cardiovascular disease, and cancer.
4. Evaluate weight management techniques, including the role of diet and exercise for the loss, gain and maintenance of body mass.
5. Assess dietary recommendations for individuals with diseases of the upper and lower GI tract, kidney, and liver.

**BIOL260C : Cell Biology**

For biology majors, focuses on eukaryotic cells. General topics include the structure and function of principal cellular components, energy metabolism, signal transduction, apoptosis, the cell cycle, gene expression, and an introduction to cancer biology. Lab experiments include modern cell research techniques such as ELISA, gel electrophoresis, and animal cell culture.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either BIOL112C or BIOL196C.

BIOL112C
BIOL196C
**Learning Outcomes**
Upon completion of this course, students will:

1. Define the cell theory and describe the structures and main functions of cells.
2. Examine energy metabolism and signal transduction pathways.
3. Describe the cell cycle, gene expression, and gene regulation.
4. Demonstrate proper laboratory techniques and skills.

**BIOL279C : Life Cycle Nutrition**

Focuses on nutritional needs of the growing, developing human from conception to old age, with particular emphasis on the nutritional needs of infants, children, adolescents, adults, women, and aging adults.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either BIOL159C or BIOL259C.

BIOL159C
BIOL259C
**Learning Outcomes**
Upon completion of this course, students will:

1. Employ basic concepts of diet planning and evaluate personal dietary habits.
2. Evaluate nutrient needs for the healthy, nonpregnant woman, and potential nutritional barriers to becoming pregnant.
3. Describe nutritional needs and dietary planning for the pregnant woman; the lactating woman; infants, toddler, and preschoolers; school-aged children and adolescents.
4. Explain dietary considerations, impact on chronic diseases, and body weight issues in the adult and elderly populations.

**BIOL290C : Senior Capstone Project and Seminar**

Serves as the capstone course for the Biology Program. The student will demonstrate the application of the knowledge gained throughout the program. This will be achieved either by independent study on a topic chosen by the student with guidance from a faculty member or through participation in a field internship with an approved industry partner. Independent study will involve the investigation of all sides of a current biological issue. The student will turn in a written paper and make a presentation of his/her project to all interested students and faculty in a student seminar.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
all science and MATH courses with grades of C or higher and approval of the department chair; only offered in the final semester of the Biology program
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply and/or critique the scientific method.
2. Demonstrate proper laboratory, field, and/or data management techniques and skills.
3. Complete research and use peer-reviewed sources of literature.
4. Present research to the community.

**BIPE101C : Introduction to International Code Council Codes**

International Code Council (ICC) building codes largely guide architecture, engineering, and construction industries to build safer and healthy built environment. Building codes continuously evolve in response to tragic incidents, technological advancements, and changing environmental dynamics. The scope and complexity of the building codes require practitioners, reviewers, and enforcers to remain well informed of the relevant building codes. Especially when federal, state, and local interpretations, adoptions, and enforcement vary. A brief history of the code development explores the formation of various building codes with regards to the occupants' safety, health, well-being, and environmental issues.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BIPE105C : Construction Document Reading**

Introduces the fundamentals of reading construction documents for residential and commercial projects and drawing conventions. The course focuses on residential construction documents including the survey, off-site and site improvements; the structure, plumbing, mechanical, electrical systems; foundations, and below-grade construction and introduces commercial construction documents reading and applicable codes.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BIPE110C : Plan Review**

Highlights aspects of building planning review, fire protection systems review, means of egress, fire-resistance-rated construction, and interior finishes review. Some of the topics include international building code plan review record, components of fire-rated construction, fire detection and fire suppression systems, and ADA-based design requirements. The critical aspects of plan review process forms the basis of this course.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
BIPE101C
BIPE105C

**BIPE115C : State Construction Law**

Surveys state construction laws from legal, practical, and professional dimensions. The topics include RSAs regarding structure of laws and rules, land use laws, fire code, building code, conflicting and complimenting RSA and building code, and other state laws/agencies including licensing of contractors/architects/engineers, food service, ADA, and case laws. This course will enhance the student's understanding of construction problems from a building inspector's perspective by familiarizing them with the critical aspects of construction law, its enforcement, and impacts on the construction industry and project costs.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BIPE120C : Legal Aspects of Enforcement**

Provides insight into the local government law, state and federal legislative laws, administration and enforcement, administrative and constitutional laws, property law concepts, liability for intentional wrongdoing, negligent wrongdoing, civil rights actions, and the role of the witness. Discussions particularly focus on the issues of misfeasance, malfeasance, nonfeasance, latches, preemption, sovereign immunity, injunctive relief, appeals process, and indemnification.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BIPE125C : Building Inspector Skills (Capstone)**

Highlights the essential roles, skills, and responsibilities of a building inspector including careful inspections and reviews to ensure construction complies with all applicable national and local codes, zoning regulations, and contract specifications. Major topics include safe buildings, approaches to inspection, getting along, customer service, doing the right thing, and communication.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS101C : Introduction to Business**

An introduction to the general concepts of business, including organization, forms of ownership, finance, management, marketing, production, and the relationship between business and society. The current business climate and attitudes will also be examined through the use of business publications and articles.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS152C : Foundations of Leadership**

Students will examine the outlook, skills, and behavior essential to successful leadership. Topics include leadership theory, motivation, group dynamics, communication, management, status, power and politics, and organization culture and ethics. Students will develop an approach to the leadership style that works for them while at the same time exploring techniques to develop leadership skills in others. The focus of the course is to bridge the distance between leadership theory and management practice.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS170C : Principles of Marketing**

An introductory course presenting such topics as the seven managerial functions of marketing, problem-solving, decision-making, marketing research, ethics in marketing, new product development, price determination, marketing channels, and advertising.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS174C : Principles of Sales**

A study of the selling process as it relates to training professional sales people and the basic elements of the persuasion process. A systematic approach will be used to develop techniques to adjust to individual styles. Students will study the tasks of the sales manager and techniques that are used to hire, train, and compensate the sales force.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
BUS170C

**BUS221C : Healthcare Management in the U.S.**

Examines healthcare trends within the U.S. The focus will be on the evolving nature of healthcare and current debates. Students will explore such topics as: history of healthcare, hospital reorganization, care delivery settings, administrative and caregiver role changes, reimbursement, managed care, and governmental interventions.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS225C : Business Law I**

The study of the fundamental principles of law as they apply in the business world. The course examines legal rights and remedies and contracts. Students will gain a detailed understanding of the law of torts and contracts and will learn business law through related textbook readings and online research. This course emphasizes the relationship of business law to an individual's personal and occupational life. Applications of the laws as they affect the individual in a moral society are featured.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS240C : Small Business Management**

Serves as the capstone experience for the Business Administration program through an integrated examination of formation, finance, marketing, operations, and the supply chain as applied to the small business. Conventional text assignments and assessments are supplemented with practical application of concepts and theory as teams of students operate a business via a web-based simulation.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Note: Students must take BUS 270 or BUS 273; it is not required that they take both.
ACCT101C
BUS101C
BUS170C
BUS270C
BUS273C

**BUS245C : Organizational Behavior**

Helps students to develop a more complete understanding of the human dimensions of management. Emphasis is placed on the allocation of theory to real-world problems as well as the development of interpersonal skills. Topics include such issues as motivation, leadership, group dynamics, and interpersonal communication.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
BUS101C
BUS270C

**BUS255C : Personal Financial Planning**

Provides an effective learning experience in personal finance. Emphasis is on helping students make sound financial decisions in the areas of budgeting, insurance, taxes, credit, investment, real estate, and retirement planning.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ACCT101C
BUS101C

**BUS270C : Principles of Management**

Provides an understanding and appreciation of organizational structures and the role of the manager within these structures, with emphasis on the influence of the social sciences on current management theory.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**BUS273C : Human Resource Management**

A study of human resource management including the evolution of the personnel process, organizational models, leadership patterns, and issues touching on planning, assessment, staffing, training, development, and environmental issues. Emphasis is placed on the application of theory and practice so students will gain a useful understanding of human resource management whether they seek careers in that field or in other disciplines.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
BUS101C
BUS170C
HSTM101C

**BUS294C : Senior Internship**

This is a capstone course engages students in individually supervised employment within an area relating to their program, requiring applications of theory and principles and skills acquired from the program in a real-world working environment. Periodic conferences between the site supervisor and NHTI internship coordinators are scheduled to monitor and evaluate student progress. Students also submit documentation of their tasks. This course is limited to seniors and requires the approval of the program coordinator.
**Credits** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CHEM100C : Introductory Chemistry**

Intended to satisfy the chemistry admission requirement for NHTI health-related degree and certificate programs. Consideration will be given to fundamental atomic theory, chemical arithmetic, kinetic theory, solution chemistry, acids, bases and salts, and introductory organic chemistry. Lab included. Proficiency with the mathematical operations of high school Algebra I or MATH 092C strongly recommended. (For institutional credit only; does not count toward graduation requirements but is calculated into GPA; not intended for transfer.)

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Employ dimensional analysis to solve mathematical chemical problems.
4. Use the periodic table of the elements to predict properties and trends of elements.
5. Explain physical and chemical properties of matter, chemical bonds, and reactions.
6. Explain how energy changes occur in chemical reactions and systems.

**CHEM103C : General Chemistry I**

Fundamental laws and concepts of chemistry, including elements, atomic structure, the periodic table, chemical bonding, compounds, chemical equations, and stoichiometry. Laboratories reinforce concepts presented in lectures and develop skills in scientific thought and common procedures used in chemical experimentation. With CHEM 104C, intended to provide a foundation for further study in life sciences and physical sciences.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- High school chemistry with lab

Mathematics elective (MATH 124C or higher level)

**Corequisite Courses**

Mathematics elective (MATH 124C or higher level)

**Learning Outcomes**

Upon completion of this course, students will:

1. Demonstrate proper laboratory techniques and skills.
2. Employ mathematical concepts to manipulate chemical data.
3. Use the periodic table of the elements.
4. Explain physical and chemical properties of matter, chemical bonds, and reactions.
5. Relate the first law of thermodynamics to chemical behaviors and interactions.

**CHEM104C : General Chemistry II**

Fundamental laws and concepts of chemistry, including elements, atomic structure, the periodic table, chemical bonding, compounds, chemical equations, and stoichiometry. Laboratories reinforce concepts presented in lectures and develop skills in scientific thought and common procedures used in chemical experimentation. With CHEM 103C, intended to provide a foundation for further study in life sciences and physical sciences.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Recommended Prerequisites**

high school Chemistry with lab with a grade of C or higher

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

CHEM103C

**Learning Outcomes**

Upon completion of this course, students will:

1. Demonstrate proper laboratory techniques and skills.
2. Employ mathematical concepts to manipulate chemical data.
3. Compare and contrast the characteristics and behaviors of states of matter, solutions, acids, bases, buffers, and salts.
4. Describe laws of thermodynamics, gas laws, enthalpy and entropy, and equilibrium constants.
5. Connect chemical principles to human endeavors.

**CHEM105C : Chemistry**

Introductory and cursory course in which the fundamental principles of chemistry are developed. Included are topics in atomic structure, chemical bonding, electronic configuration, the Periodic Table, stoichiometry, solutions, gases, and acid-base chemistry. Appropriate lab experiments will complement the lectures. This course is not meant as a substitute for either CHEM 103C or CHEM 104C. High school chemistry with lab strongly recommended.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Recommended Prerequisites**

- High school chemistry with lab with strongly recommended.

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- The MATH124C pre- and corequisite can be any higher-level MATH course, excluding MATH130C, MATH151C, MATH215C, and PHIL112C.

MATH124C

**Corequisite Courses**

MATH124C

**Corequisites**

- The MATH124C pre- and corequisite can be any higher-level MATH course, excluding MATH130C, MATH151C, MATH215C, and PHIL112C.

**Learning Outcomes**

Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Employ mathematical concepts to manipulate chemical data.
4. Use the periodic table of the elements.
5. Explain physical and chemical properties of matter, chemical bonds, and reactions.
6. Compare and contrast the characteristics and behaviors of states of matter, solutions, acids, bases, buffers, and salts.
7. Connect chemical principles to human endeavors.

**CHEM110C : Introduction to Biochemistry**

Designed to provide Allied Health students with the basic principles of the chemistry of living processes. Includes the study of macromolecules, metabolic pathways, energy transformations, and enzyme action.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
high school Chemistry with lab or permission of the department chair
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply the scientific method.
2. Describe structures, functions, and metabolism of the major classes of biomolecules.
3. Compare and contrast the types of reactions most commonly seen in biological systems.
4. Evaluate the role of water in living systems.
5. Examine mechanisms of energy transformations.

**CHEM115C : Brewing: The Science Behind Beer**

Explores the most basic and more complex chemical reactions that take place during the production of beer, as well as discusses the microbiology and how it impacts the brewing process from beginning to end. Reactions that affect each stage of the process are discussed as well as the mechanisms that are utilized to control the properties of the finished product. There is also a focus on the importance of hygiene throughout the brewing process. Students taking this class must be at least 21 years of age. A valid ID must be presented to the instructor at the first class for confirmation.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Evaluate the brewing process and the microorganisms involved.
2. Analyze the properties of water for brewing.
3. Identify the effects of oxidization on beer and brewing.
4. Describe and employ contamination prevention methods and aseptic technique for brewing and beer storage.

**CHEM120C : Introduction to Forensic Science**

An overview of the multidisciplinary field of the forensic sciences. This course combines classroom lecture and lab analysis of samples from hypothetical criminal investigations to demonstrate the role of science and the forensic scientist in the criminal justice system.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
high school Chemistry with lab with a grade of C or higher, or permission of the department chair
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply the scientific method.
2. Evaluate types of physical evidence and methods for collection and preservation.
3. Explain methods of chemical and biological analyses.
4. Demonstrate proper laboratory techniques and skills.

**CHEM125C : Introduction to General, Organic, and Biochemistry**

Designed for students who need an introductory chemistry course that covers the fundamentals across inorganic, organic, and biological chemistry. This course focuses on the chemistry and chemical processes that operate in living systems. Topics will include physical and chemical properties of matter, chemical bonding, solutions, acids and bases, the properties and naming of organic compounds, metabolic pathways, and energy production. Appropriate lab experiments will complement the lectures.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

high school Chemistry with lab or permission of the department chair

**Learning Outcomes**

Upon completion of this course, students will:

1. Use the periodic table of the elements.
2. Explain physical and chemical properties of matter, chemical bonds, and reactions.
3. Discuss the principles of organic nomenclature and stereoisomerism.
4. Describe structures, functions, and metabolism of the major classes of biomolecules.
5. Compare and contrast the types of reactions most commonly seen in biological systems.

**CHEM205C : Organic Chemistry**

An introduction to the nomenclature, structure, and reactions of organic compounds.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either CHEM104C or CHEM105C.

CHEM104C
CHEM105C

**Learning Outcomes**

Upon completion of this course, students will:

1. Apply the scientific method.
2. Explain the principles of organic nomenclature, chemical bonding, reactions, and stereoisomerism.
3. Describe the properties and naming of functional groups.
4. Demonstrate proper laboratory techniques and skills.

**CHIN130C : Mandarin Chinese I**

An introductory course for students with no background in the language. Students will learn to speak and understand standard Mandarin and read and write simplified Chinese characters. Students will develop speaking and listening skills through audiovisual media, interactive activities, and pair dialogue practice. Reading skills are developed through graded reading activities. Character writing practice and composing short pieces will develop writing skills. A strong emphasis on grammar provides the necessary framework to communicate clearly and effectively. Short lectures and the reading and sharing of current event news will develop an understanding of Chinese culture, past and present.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify features of everyday life and culture in multiple countries where the language is spoken.
- Orally communicate short messages and ask questions on a variety of everyday topics with novice-level pronunciation.
- Meet the demands of practical writing situations at a novice level, using basic vocabulary and grammatical structures.
- Identify key words, aural cognates, and formulaic expressions that are highly contextualized.

**COMM 205C : Communications Internship**

This course prepares students for an advanced study of communications at the bachelor degree level and will serve as the summative experience for students enrolled in the Communications degree program. The course is designed to help students synthesize the learning and skills acquired in their concentration with reality-based application through an on-site internship. Career planning may be strengthened by mentoring relationships developed through the internship experience. Pre-approval of the internship site and intended project by the program coordinator is required before placement; approved placement is expected prior to the semester start.

**Credits** 5
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Minimum grade of B- must be achieved to register for this course.
ENGL101C
COMM135C
COMM120C
COMM227C

**COMM120C : Communication**

Focuses on the application of communication principles and theories, enabling students to develop public speaking, interpersonal, intrapersonal, and group communication skills. Through an in-depth look at self concept, and verbal and nonverbal language and listening skills, students gain an increased awareness of the way they perceive themselves and others as well as the cultural and ethical implications of behavior. Coursework includes speeches, exercises, and writing assignments. (Students who have received credit for this course cannot also receive credit for COMM 120MC, ENGL 120C, ENGL 120MC.)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**COMM120MC : Communication: Mindful**

Focuses on the application of communication principles and theories. Students develop public speaking, interpersonal, intrapersonal, and group communication skills. Through an in-depth look at self concept, and verbal and nonverbal language and listening skills, students gain an increased awareness of the way they perceive themselves and others as well as the cultural and ethical implications of behavior. Coursework includes speeches, exercises and writing assignments. Sections identified as MC (Communicating Mindfully) feature the study of mindfulness and incorporate mindfulness meditation as an instructional method while exploring aspects of contemplative neuroscience and emotional intelligence as they relate to effective communication. (Students who have received credit for this course cannot also receive credit for COMM 120C, ENGL 120MC ENGL 120C.)
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**COMM125C : Communication and the Literature of Science and Technology**

Built around the theme of science and technology, this course focuses on improving communication skills. Areas of study include critical reading, critical thinking, public speaking, interpersonal communication, and writing. Topics vary and could include any of the following: physical and technical sciences, natural and health sciences, or social sciences. (Students who have received credit for this course cannot also receive credit for ENGL 125.)
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**COMM135C : Introduction to Media Studies**

Focuses on the nature, development, and effects of various media in relation to culture and society. Students gain an understanding of print and electronic media, public relations, advertising, media policy and law, global communications, and media ethics. Coursework includes presentations, exercises, and writing assignments. This course does not satisfy NHTI's Humanities or English Literature requirements.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
Successful completion of ENGL 101C strongly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**COMM201C : Interpersonal Communication**

Focuses on the application of interpersonal communication principles and theories. Students will develop skills in perceiving self and others, nonverbal communication, emotions, relationships, and managing conflict. Students will also demonstrate an increased awareness of the cultural and ethical implications of interpersonal behavior. Coursework includes a variety of exercises and writing assignments, as well as a case study presentation.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
COMM120C

**COMM202C : Intercultural Communication**

Focuses on the application of intercultural communication principles and theories. Students will develop skills in understanding the importance and challenges of intercultural communication, the components of human communication and competence, family roles in other cultures, religion and values in other cultures, cultural history, values and identity in other cultures, verbal and nonverbal messages in other cultures, and managing intercultural differences. Coursework includes a variety of exercises and writing assignments, as well as research papers.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
COMM120C

**COMM203C : Advanced Public Speaking**

Focuses on the application of public speaking principles and theories. Students will develop skills in the essential elements of public speaking, managing apprehension, the 10-step process for preparing and presenting a speech, listening guidelines, and criticism of speeches. Students will also demonstrate an increased awareness of the cultural and ethical implications of public speaking. Coursework includes a variety of writing assignments, presentations, and speeches.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
COMM120C

**COMM204C : Communications Capstone**

Consists of students developing a multi-media case study to integrate and apply learning from their communications courses in a comprehensive manner. Students will evaluate and apply their personal, professional, and ethical growth and critical thinking skills in the study of communication by analyzing a public relations crisis in an organization. They will formulate conclusions, recommendations, ethical implications, and applications for future scenarios for the crisis in the organization.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Completion of all courses in the Communications degree or enrollment in the capstone during the final semester

**COMM220C : Sports Communications**

Provides the student with an appreciation of the unique dynamics associated with the sports communication field. Students better understand the expectations associated with developing a sports story, a sports news release, and/or a sports opinion piece via traditional print media or electronic media – radio, television, and/or the internet. A review of journalistic ethics is included. Students gain first-hand experience with regard to producing television and radio broadcasts of live sporting events.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
SPTS 101C
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**COMM227C : Professional Communication**

Focuses on the specific tools for communicating in complex, professional environments. Students develop digital, social, and visual media skills; learn interpersonal, cultural, team, leadership, and ethical skills; learn a three-step process for composing business correspondence, letters, articles, e-mails, instant messages, blogs, tweets, and webpages; develop skills in researching, planning, and writing reports and proposals; write employment messages, letters, and resumes; develop and deliver oral presentations, a group presentation with a PowerPoint, and an impromptu speech; and develop questionnaires and conduct interviews. This course does not satisfy NHTI's Humanities or English Literature requirements.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
Successful completion of ENGL 101 strongly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**COMM294MC : Communicating Mindfully Capstone**

Reviews and builds upon key elements of mindful communication students have been studying throughout their degree program. Students practice applying mindful communication skills in the workplace and reflect on those experiences to improve interactions with colleagues, customers, clients, and others. In addition, students work in small groups in which each partner has a different major than the other (when possible). Through online discussion posts, students practice mindful communication techniques practice attending to others, confirming understanding, and providing feedback that is respectful, insightful, and useful. Students are encouraged and given the opportunity to engage in regular contemplative practices such as mindfulness meditation.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101MC
ENGL102MC
COMM120MC
**Corequisite Courses**
IST294C
**Corequisites**
corequisite is for IT majors only

**CPET107C : Introduction to Programming with C++**

Introduces the student to program design using the language C++. No prior knowledge of programming is assumed. Focuses on effective structured design of code with variables, decisions, loops, functions, arrays, and introduction of pointers. Use of professional programming design approaches and coding style will be used in lab assignments. Completion of this course provides the programming design skills to continue on with the study of the language C++ or other computer languages.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Students must earn a grade of C- or higher in each CPET and ELET course listed as a prerequisite to a subsequent CPET course.
**Corequisite Courses**
Mathematics elective (MATH 124C or higher level)
**Corequisites**
Permission of the department chair

**CPET125C : Data Structures**

Introduces students to abstract data types, object-oriented programming, and algorithm analysis. Students will use procedural and object-oriented techniques to program stacks, queues, linked lists, hash tables, and binary trees. Asymptotic (Big O) notation will be used to analyze data structures and sort algorithms. The effective use of C++ topics such as pointers, operator overloading, and templates will be covered. Students will write programs in C++ and Java.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C

**CPET215C : Integrated Circuits and Interfacing**

For CPET and other NON-EET majors. Supplements ELET 115C with basic linear and interface electronics. Topics covered include simple power supplies, op-amps, stepper motors, A/D and D/A conversion, and interfacing a computer bus. Advanced digital topics such as synchronous logic, programmable logic devices and digital signal processing will also be covered. The labs demonstrate real world implementation of otherwise abstract academic concepts. Fluency with the use of test equipment and debugging skills will also be stressed in the lab environment.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Recommended Prerequisites**
It is strongly recommend the student having previously taken or to be concurrently taking ELET 144C.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
ELET101C
ELET115C
**Corequisite Courses**
CPET107C
ELET101C
ELET115C

**CPET222C : Data Communications and internetworking**

Provides the student knowledge and skills in a wide range of topics covering data communications, packet transmission, and the internet. Data communications subtopics include transmission media, serial communications, error detection and correction schemes, data security, and signal processing required for long-distance communications. Packet transmission subtopics include local area networks, hardware addressing, LAN building blocks, and wide area networks. internetworking subtopics include TCP/IP communication stack, ISO 7-layer communication stack, network addressing, internet protocol, address resolution protocol, internet control message protocol, IP routing protocols, transport control protocol, user datagram protocol, and client-server API.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
CPET125C
**Corequisite Courses**
CPET240C
CPET252C

**CPET240C : Programming for Windows Operating Systems**

The Microsoft Windows API and Microsoft.Net Framework will be covered from Windows Applications to full utilization of the internet. Microsoft Visual Studio.Net with its integrated development environment will be studied and utilized. Topics include Windows services, DLLs, accessing databases using ADO.NET, programming for the internet using ASP.NET, .NET assemblies, and advanced features of programming languages used to access the Widows API and .NET platform. Experience will be gained using extensive hands-on lab assignments.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
CPET125C

**CPET252C : Networking and Internet Technologies**

Provides the student knowledge and skills in a diverse range of topics including structured query language, client-server programming, selected internet applications, and LAMP. SQL subtopics include relational database concepts, the SQL language and relational database design. Client server programming is studied in C++ using socket APIs and Java using socket classes. Selected internet applications include domain name system, hypertext transfer protocol, and file transfer protocol. LAMP topics include a Linux overview, Apache web server configuration, dynamic web pages using PHP, and MySQL relational database. Each student is also required to define, implement, demonstrate, and present a networking project.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
CPET125C

**CPET260C : Computer Real-Time Interfacing**

Focuses on interfacing computers to the outside world. The course content focuses on practical real-time and multithreaded programming techniques used in interfacing with computer inputs and outputs. The course is divided into two major parts: A programmable logic controller industrial computer using the language relay ladder logic (Boolean algebra-based) is used to teach the fundamentals of real time control; the second part covers multithreading programming techniques and issues including resource sharing, deadlock, critical sections, mutexes, and events. A final project is presented to the class.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
**Corequisite Courses**
CPET125C

**CPET301C : Computer Project Definition**

A first phase to CPET 303C. During this course, a student selects a project that is either provided by an industrial sponsor or chosen by the student. The selections are made with the guidance and approval of the instructor. The student will meet with the sponsor to initiate the project and then will write a specification to define the project.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
ELET101C
ELET115C
CPET125C
**Corequisite Courses**
CPET240C
CPET260C

**CPET303C : Computer Project**

The student will complete the project defined in CPET 301C while maintaining logbook to provide the advisor with progress reports. A formal oral presentation describing the project and a demonstration is required.
**Credits** 3
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET301C
CPET240C
CPET260C
ELET144C
**Corequisite Courses**
CPET222C
CPET252C

**CRMJ101C : Introduction to Criminal Justice**

Presents the history, development, and current status of the criminal justice system in the U.S. and the challenges it faces. When appropriate, the opportunity is taken to visit relevant agencies.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ121C : Criminal Procedure**

Analyzes the constitutional issues in the U.S. that have direct bearing on the role and policies of criminal justice agencies. Application of these issues as they relate to investigation, arrest, pretrial, and appeal will be emphasized. The course is a combination of the case law and lecture method.
**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ123C : Criminal Law**

Combines an examination of the historical origins and development of criminal law as a form of social control. It will include the general principles of constitutional and statutory factors as they pertain to criminal liability, defenses to criminal charges, and sentences. The final emphasis is placed on the substantive aspect of criminal law and how it differs from civil law.
**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ150C : Criminology**

A detailed analysis of the development of criminological theory, embracing the contributing disciplines of biology, psychology, sociology, political science, and integrated theory combining those disciplines. Attention is also paid to the offender/victim relationship.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ205C : Police Administration and Operations**

Covers the principles of police organization, administration, community policing, and the selection, training, promotion, and socialization of officers. It deals with the conflicting roles that the police and individual officers face in today's society as part of the justice system. It also examines issues involving the influence of research, police deviance, minorities, the use of force, and the general hazards of police work.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ210C : Juvenile Justice Administration**

Theories, causation, and prevention programs are studied. Rehabilitative theories and treatment programs of public institutions and public and private agencies are included. Case studies are made available to the student for analysis. Adolescent behavior, peer pressure, and the role of the family will be examined.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ215C : Corrections Operations**

A study of correctional processes and services, standards, personnel, and principles of management. Includes the allocation of resources, training and staffing, the role of sentencing and work release programs, special programs, and the use of outside contracts.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ225C : Drug Abuse and the Law**

In the first part, the historical use of the major drug groups (including alcohol) will be reviewed. In the second part, the reaction of the criminal justice system to illegal involvement with drugs and alcohol and methods of treating substance abusers will be reviewed.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ230C : Justice and the Community**

Deals with the interaction of the various components of the justice system with the community. It involves an analysis of the way the work of police departments, courts, correctional institutions, and community corrections agencies appear to the public. The image of the justice system in the media is examined; specific attention is paid to the issues of the young, minorities, and community organizations.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ270C : Internship**

Offers the student the opportunity to put learned theory to practical application. The student is responsible for seeking out the agency placement with the assistance of the course instructor. The internship requires the completion of a mandatory minimum number of hours. A log is kept and the final grade is based on a combination of the log, supervising agency assessment, and final analytical report.
**Credits** 3
**Lab/Practicum/Clinical Hours** 9
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CRMJ275C : Senior Project**

Through ongoing and individualized contact with the supervising instructor, the student develops a topic pre-approved through a prospectus. The student may develop any topic raised in any major class and is not limited by category. Empirical studies, surveys, and literature reviews are among the acceptable categories of research. The final grade is determined by a review of the final product and the extent to which the student has followed the course guidelines.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**CVET201C : Civil CAD**

This course is an introduction to the use of computer aided drawing and design software for the civil engineering discipline. Areas of application of the software within engineering include mapping, topography, site development, and subdivision. Within the field of highway design the student applies civil design software to detail roadway alignment and create final drawings of plan, profile, and cross section. Laboratory time is typically for the student to generate designs and drawings with the support of the instructor.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ARET104C

**Corequisites**

- This course is integrated with CVET 220C and CVET 297C; therefore, for CVET students, it is recommend this course is taken at the same time as CVET 220C.

**CVET202C : Soil Mechanics and Foundation Design**

This course deals with the fundamentals of soil mechanics. Topics covered include moisture-density relations, mechanical and chemical gradation properties, basic shear strength theory, permeability, and compression. Lecture topics will be supplemented by field observations and lab work. On completion of this course, students will understand the essential elements of soil mechanics theory such that it may parlay into practical applications.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ARET150C
CVET220C

**CVET220C : Surveying**

Familiarizes students with the equipment, procedures, and methodology of modern surveying practice. Includes measurement of distance, elevation, angle, and direction “in the field” with manual and electronic equipment. The methods of topographic, construction, and route surveying are also studied. The student is taught to use software programs to aid in data collection, manipulation, and map making.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH124C

**Corequisites**

- This course is integrated with CVET 201C and CVET 297C; therefore, for CVET students, it is recommend this course is taken at the same time as CVET 201C and before CVET 297C.

**CVET235C : Reinforced Concrete Design**

Learn the fundamentals of design and analysis of steel reinforced concrete structures including beams, floor and roof slab systems, columns, foundation footings, and structural walls. Design sketches based on calculations and in accordance with the latest American Concrete Institute (ACI) building code requirements are prepared. Also a major lab project including designing, building, and testing a reinforced concrete beam is done by student teams.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

CVET240C

**CVET240C : Timber and Steel Design**

The study of structural steel and timber that involves the design and analysis of beams with regard to bending, shear, and deflection. Columns are studied with respect to axial and eccentric loading. Miscellaneous structural elements such as beam-bearing plates, column base plates, and welded and bolted connections are also designed. The student is taught to make calculations manually then with the aid of computer software. The lab time (2 hours per week) is dedicated to activities during which the student is fully involved in the design, analysis, construction, and testing of timber and steel beams, columns, connections, bracing systems, load packages, and simple frames. The observations and results are documented through calculations, drawings, photos, and computer-aided design.
**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ARET120C
ARET150C

**CVET245C : Hydrology/Drainage Design**

This entry-level course teaches students the basics of stormwater drainage. They will learn how to delineate a watershed, apply runoff calculations to the watershed, and determine peak design flows. These design flows will then be used to instruct students in the basics of hydraulics as it pertains to stormwater flow. They will learn how storm drainage systems are planned and what components make up a drainage system. They will leave the course understanding stormwater flow in culverts, how to determine if a culvert is flowing with inlet or outlet control, and how to use nomographs in the selection of a particular culvert. Students will apply this knowledge to basic open channel flow and learn about erosion and sediment control.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CVET220C

**CVET297C : Highway Design**

This course focuses on the highway design process, beginning with transportation requirements and soil mechanics and continuing with highway location, site planning, geometric design, and pavement design. The knowledge gained equips students for project work. The course culminates with the preparation (using CAD) and presentation of final engineering drawings of a section of roadway. This project is evaluated with respect to alignment, safety, aesthetic impact, construction cost, and professional quality. Labs involve the use of a soil testing lab, and visits to nearby road construction sites will be scheduled.
**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- For CVET students, CVET 201C and CVET 220C are integrated with CVET 297C and should be completed prior to taking CVET 297C.

CVET220C

**DCOM105C : Digital Communications**

Provides an introduction to digital communications covering key digital platforms such as websites, search engines, social media, email, and mobile applications. Using research spanning the digital communications industry, students create a marketing plan focused on the digital landscape. Students will learn to understand how digital marketing influences consumer behavior and the importance for businesses of optimizing their approaches to utilizing the internet.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DCOM130C : E-commerce, Websites, and Blogging**

Students create a functional website with a blog and e-commerce modules. The course covers basic website design, e-commerce management, and blogging techniques. Students will examine the multidimensional functions of websites and the importance of optimizing websites for ROI.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DCOM150C : Social Media Strategy**

Students create and implement a social media marketing plan. Topics addressed include determining and matching social media tactics with the appropriate marketing target, and developing a strategic approach to engage each market segment using several social media channels.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DCOM210C : Search Engine Optimization**

Introduces a strategic approach to search engine marketing, keyword research, algorithms, competitive analysis, link building, local and geo search, and SEO tools. Through online platforms, applications, and tracking methods, students develop the vocabulary of industry professionals. Students will learn to understand how search engines influence consumer behavior and the importance for businesses of optimizing their strategic approach.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
DCOM 105C strongly recommended
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DCOM230C : Email and Mobile Promotion and Marketing**

Provides an introduction to email and mobile marketing. Topics include email communication, creating an email, automation, spam, metrics, mobile sites, loyalty programs, mobile search, and analyzing the user journey. Students learn how email and mobile marketing influences consumer behavior and the importance of optimizing the business approach.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
DCOM 105C strongly recommended
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DCOM250C : Digital Analytics**

Provides an introduction to theory and strategy in data and analytics. Students examine the foundations to optimize their online approach. Students will obtain certifications in Google Analytics, Google Adwords, and Hubspot; these professional certifications can be utilized throughout their profession to solve real-world challenges.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
MATH 251C and DCOM 210C strongly recommended
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DGMS201C : Principles of Sonography**

An introduction to principles of sonography and ultrasound with emphasis on physical principles, instrumentation, and terminology. Lab sessions will offer hands-on learning techniques.
**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DGMS221C : Sonographic Physics**

Study of the sonographic and physical principles involved in ultrasound and state-of-the-art equipment technology.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS201C

**DGMS233C : Seminars in Sonography**

Sessions will be used for sonography case presentations by students and preparation for registry exams.
**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS297C
DGMS241C

**DGMS241C : Principles of Vascular Ultrasound**

Study of physical and doppler principles utilized in the ultrasound study of vascular structures. Lab sessions will introduce students to scanning techniques used in vascular studies.
**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS201C
DGMS221C

**DGMS265C : Sonographic Anatomy and Pathology I**

Study of gross, sagittal, and cross-sectional anatomy of the abdomen and the pathological changes and disease processes that are found in ultrasound examination of the abdominal region.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DGMS266C : Sonographic Anatomy and Pathology II**

A continuation of DGMS 265C with an introduction of small parts anatomy and an in-depth study of pathologic changes and disease processes found in relation to these structures.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS201C
DGMS265C

**DGMS275C : Sonographic Principles of OB/GYN I**

In-depth sonographic study of the anatomy of female reproductive organs and associated pathological changes with introduction to first trimester fetal development.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DGMS277C : Sonographic Principles of OB/GYN II**

A continuation of DGMS 276C, with emphasis on the continuing sonographic process of fetal development and associated pathologic conditions.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS201C
DGMS275C

**DGMS291C : DMS Clinical Procedures I**

Two days per week of observation and direct hands-on experience in the campus lab designed to familiarize students with working procedures in an ultrasound lab. Basic examination techniques will be performed. Students will work with each other and faculty on ultrasound equipment, simulators, and computer applications.
**Credits** 4
**Lab/Practicum/Clinical Hours** 12
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**DGMS296C : DMS Clinic II**

Three days per week of clinical experience at selected clinical sites. Students will gain continued scanning experience. All students enrolled in DGMS 296C will be charged a $500 per semester clinical surcharge.
**Credits** 6
**Lab/Practicum/Clinical Hours** 24
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS201C
DGMS265C
DGMS275C
DGMS291C

**DGMS297C : DMS Clinic III**

Four 8-hour days per week at selected clinical sites for a 10-week period with emphasis on expanded roles in the ultrasound studies. Students will develop intermediate level skills and recognition of pathology will be stressed. All students enrolled will be charged a $500 per semester clinical surcharge.
**Credits** 5
**Lab/Practicum/Clinical Hours** 21
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS221C
DGMS266C
DGMS277C
DGMS296C

**DGMS298C : DMS Clinic IV**

Four days per week of final experience to strengthen scanning and interpretation skills in preparation for challenging registry exams and entry into the sonography field. All students enrolled will be charged a $500 per semester clinical surcharge.
**Credits** 8
**Lab/Practicum/Clinical Hours** 32
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
DGMS241C
DGMS297C

**ECE101C : Growth and Development of the Young Child**

Major theories and research findings in the physical, cognitive, language, and social/emotional domains of development of young children from conception through age 8 are the focus of this course. The work of Piaget, Erikson, Montessori, Vygotsky, and Dewey are emphasized. Students use tools to observe and record the development of young children in early-care settings as they explore domains and theories. Emphasis is on understanding children's development in the moment and the power of observations. An NHTI ECE lab fee is assessed for all students taking ECE 101C. Students will be expected to carry out 2 hours per week of observation and practice in a childcare setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECE130C : Out-of-School Basics**

Provides students the tools to plan and implement developmentally appropriate curriculum designed for out-of-school learning spaces that serve children aged kindergarten through grade 5. Topics include growth and development; learning environments and curriculum development; observation and assessment of children and youth; relationships and interactions; family, school, and community relationships; safety and wellness; professional development and leadership. Students learn the importance of supporting equity and inclusion while providing quality out-of-school time programming for children. The framework course curriculum is aligned with the National Afterschool Association's ten course competencies for afterschool and positive youth development professionals, and with the New Hampshire Afterschool
Credential. Students are expected to complete 2 hours/week of observation and practice hours in a before- and/or afterschool program.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECE143C : Teaching and Learning - STEAM**

With emergent curriculum as the overarching approach to curriculum development, this course focuses on designing, implementing, and evaluating appropriate activities and environments for children in preschool and kindergarten with a focus on blocks, math, science, woodworking, and technology with literacy and art concepts integrated into each area. Emphasis is on the concrete, practical application of different philosophies, theories, and current research manifested in early childhood education curriculum models.

Students reflect together as they explore the cycle of inquiry and project work for developing, implementing, and assessing curriculum. Emphasis is on planning stimulating, age-appropriate classroom and outdoor learning environments that encourage child-initiated discovery and act as a tool in behavior management. These environments are child- and family-friendly, barrier free, and inclusionary, and meet state regulatory requirements. Students learn about and apply successful attributes of documentation panels that make children's learning visible.

An NHTI ECE lab fee is assessed for all students taking this course. Students are expected to complete 2 hours per week of observation and practice in a preschool or kindergarten setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECE155C : Using Children's Literature to Support Young Children's Language and Literacy Development**

High-quality children's books are used as a vehicle for supporting and applying current research on the acquisition of language and reading. This course provides an overview of exemplary authors and illustrators of children's literature from birth to age 8. Students become familiar with Caldecott Award-winning books and the artistic techniques used to create these books. Poetry, multicultural books, and bibliotherapy as applied to early childhood education are studied. Students learn how to use children's literature to highlight the literacy elements of characterization, plot, setting, and theme. They learn how to teach domains of language (phonology, semantics, syntax, morphology, and pragmatics) through shared storybook reading. Additionally, students explore the teacher's role in promoting family literacy. An NHTI ECE Lab fee is assessed for all students taking this course. Students are expected to carry out 2 hours per week of observation and practice in a childcare setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECE167C : Positive Behavior Guidance and Supporting Young Children with Challenging Behaviors**

By exploring theories of behavior management and functions in behavior, the role of positive behavioral supports in preparing young children to become competent and cooperative individuals with a strong social and emotional foundation is emphasized. Developmentally appropriate methods of guiding individual and group needs are shared as approaches to preventing disruptive behaviors in the classroom. Techniques for dealing with more challenging and explosive behaviors using functional assessment, identifying replacement skills, and creating and implementing behavior intervention plans are used. Partnering with families in developing these plans is emphasized. A study of the "Social Emotional Supports for Early Learning: Pyramid Model" give students tools for universal, primary, secondary, and tertiary prevention of challenging behaviors. They understand when and how to reach out for support in the community in dealing with issues beyond their expertise. An NHTI ECE lab fee is assessed for all students taking ECE 167C. Students are expected to carry out 2 hours per week of observation and practice in a childcare setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ECE101C

**ECE188C : Health, Safety, and Nutrition in Early Childhood Education**

Offers an introduction to major issues affecting the health and safety of young children in early childhood settings. Nutrition and policy considerations about medication administration, infectious disease control, sick child care, universal precautions and liability, and health record keeping are discussed. Health regulations, best practices, and education for the prevention of child sexual abuse are highlighted. Students learn to integrate curriculum for young children related to health, safety, and nutrition into the overall program. Students complete the Health and Safety training certifications required by N.H. child care licensing. An NHTI ECE lab fee is assessed for all students taking this course. Students are expected to complete 2 hours per week of observation and practice in a childcare setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECE195C : Child and Family Study Practicum I**

The student will work this practicum in an approved human service setting under the supervision of an approved professional. Periodic conferences between the supervisor and practicum coordinator are planned to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience.

**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSV111C
HSV242C
MHTH187C
PSYC105C
PSYC283C

**ECE215C : Infant/Toddler Development and Programming**

A study of important influences on infant and toddler development supported by research on brain development during the first three years of life. Emphasis is on the role and responsibilities of families, child care teachers, and specialists in creating high-quality supportive environments. Sensitivity to attachment and the importance of observation and communication skills to nurture positive family, caregiver, and child relationships through the roles of primary caregiving, transitions, and continuity of care are highlighted as students learn to design responsive programs for infants and toddlers and their families. An NHTI ECE lab fee is assessed for all students taking this course. Students are expected to complete 2 hours per week of observation and practice in an infant or toddler setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ECE101C

**ECE225C : Autism Spectrum Disorder**

Examines the neurological underpinnings and behavioral characteristics of children from birth to age 8 with autism spectrum disorders. It focuses on an overview of the strengths and challenges of child-centered, developmental, research-based interventions used in natural environments. The centrality of the family is emphasized. Students shadow an interventionist working with a young child with autism for a minimum of 10 hours.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ECE101C

**ECE242C : Child, Family, and Community**

Provides an overview of families and family systems (including Bronfenbrenner's Bioecological Theory) with emphasis on developing effective models of teacher/program/family partnerships. Students will identify their own biases as a precursor to exploring issues of power and privilege in society. Cultural dilemmas and their impact on early care and education will be identified as students begin to evaluate their own cultural competence. Students will learn how to identify and strengthen protective factors that empower families and reduce the risk of child abuse. Students will research various crises encountered by families and identify an action plan to positively address the crisis. Community resources will be identified and involved. Service learning is a component of this course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ECE101C

**ECE262C : Leadership and Administration of Child Care Programs**

A survey of organization and management of early childhood programs and/or child care centers for the practicing professional. Emphasis is on learning how to plan, organize, manage, and evaluate programs and facilities for children. Specific skills addressed include licensing procedures, hiring, motivating, and evaluating staff and parent involvement. Financial record-keeping to inform program management decisions are based on an understanding of Excel computer program use. Leadership and visioning skills are taught, and evidence of implementation is required. Students are required to spend 10 hours job shadowing and making practical connections to weekly content. This course meets the requirements for director certification from the state of New Hampshire and accreditation by the National Association for the Education of Young Children.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECE270C : Teaching Young Children with Exceptionalities**

Broadens students' awareness of the theoretical and legal foundations for programs serving young children (infancy through age 8) with a range of special educational needs. Students examine the causes, symptoms, social consequences, and behavior characteristics of children with exceptionalities. Students learn how to develop curriculum modification/accommodation strategies in all domains of development in an inclusive classroom setting or other natural environment including the use of appropriate assistive technologies and how to create a supportive environment for children learning to use these technologies. Emphasis is on collaboratively working with a child's classroom teacher, interventionist, and the child's family to understand the benefit of working together on behalf of the child. Students develop an understanding of child and family needs and develop a resource file of state, local, and national supports.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ECE101C

**ECE275C : Practicum 1 - Observation, Interpretation, Assessment, and Portfolio Documentation**

Students work in NHTI-approved early childhood education settings for children in infant/toddler care, preschool, or kindergarten under the supervision of early childhood mentor teachers. Students conduct an in-depth child study that includes documenting, interpreting, and assessing child observations. Students create, manage, and use portfolio documentation to generate invitations that support a child's individuals goals (set by the student, mentor teacher, and family of the child). Students summarize, in narrative form, a child's growth in developmental domains. All of this is used to plan and carry out two parent conferences. NHTI ECE faculty schedule site visits to review and evaluate student progress. If on-site visits are not applicable, videos of practicum students in action are required. The student will complete a total of 105 hours of field experience.

**Credits** 4
**Lab/Practicum/Clinical Hours** 7
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
all 100-level ECE courses; a 2.5 minimum GPA in major field courses; permission of the ECE practicum coordinator; and submission of all required documents.
**Corequisite Courses**
ECE155C

**ECE276C : Practicum 2 - Exploring Teaching: Implementing Responsive Emergent Curriculum**

Students work in NHTI-approved early childhood education settings for children in infant/toddler care, preschool, or kindergarten under the supervision of early childhood mentors. NHTI faculty support students as they explore the characteristics of a responsive child-centered emergent curriculum projects. Students document and reflect on their experiences with children, families, and professional partners as they develop their skills in connecting theory to practice. Students have opportunities to help children develop an age-appropriate social competency through a class meeting and including the teaching team in follow-up, supportive guidance. Students assume lead teaching responsibilities and require flexibility in scheduling to allow for two full days at the site. NHTI ECE faculty schedule site visits to review and evaluate student progress. If on-site visits are not applicable, videos of practicum students are required. Service learning is a component of this course. The student will complete a total of 105 hours of field experience. Students must earn a C or higher in this practicum to graduate from the degree program.

**Credits** 4
**Lab/Practicum/Clinical Hours** 7
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
all 100 level ECE courses, a C or higher in ECE 275C; a 2.5 GPA in major field courses; permission of the ECE practicum coordinator; and submission of all required documents
**Corequisite Courses**
ECE242C
ECE270C
ECE290C

**ECE282C : Preschool Special Education Practicum**

Students work in NHTI-approved community-based settings with preschool children with special needs under the supervision of mentors. Students conduct in-depth observations of preschoolers with special needs using a variety of tools and observe, document, and create portfolios of a child's development as it compares to IEP goals. They participate in IEP meetings and suggest and implement appropriate activity-based interventions that are part of a child's IEP. NHTI program faculty schedule site visits to review and evaluate student progress. The student will complete a total of 105 hours of field experience. Students must earn a C or higher in this practicum to graduate from the degree program.

**Credits** 4

**Lab/Practicum/Clinical Hours** 7

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

all first-year courses, 2.5 GPA in major field courses, permission of the practicum coordinator, and submission of all required documents

**ECE283C : Early Intervention Practicum**

Provides students with a supervised opportunity to develop skills and demonstrate competencies necessary in early intervention/home visiting in natural settings (child care, homes, public schools). Supervisors provide guidance and support needed to enhance students' development as early intervention paraeducators or home visiting specialists. Through participation in an IFSP or IEP team, students learn how to partner with families in the education of their children. Identifying biases to support families of varying race, culture, and socio-economic status is examined. Students demonstrate their ability to create a culturally competent resource binder that includes games, activities, and outings to be shared with a family to support the child's development. Students complete a total of 105 hours of field experience. Students must earn a C or higher in this practicum to graduate from the degree program.

**Credits** 4

**Lab/Practicum/Clinical Hours** 7

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

all other courses in either the Young Children with Autism and Exceptionalities Certificate or first year courses in the Early Care and Education for Young Children with Disabilities Degree with a GPA of 2.5 or higher in major field courses

**ECE290C : Early Childhood Leadership Seminar**

Explores the role of the early childhood professional in the workplace. Topics discussed include leadership, working in a team, and professional ethics. Students develop a resume and create a professional portfolio for interview purposes. Emphasis is placed on the role of ongoing professional development activities and involvement in the early childhood field through participation in boards and meetings around topics specific to the field. Students should plan on attending professional development opportunities as defined by the instructor.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Additional requirements may be necessary based on major program; contact Academic Advising for details.
ECE275C
ECE282C
**Corequisite Courses**
ECE242C
ECE270C
ECE276C
ECE215C
ECE242C
ECE283C
**Corequisites**
Additional requirements may be necessary based on major program; contact Academic Advising for details.

**ECE298C : Child and Family Study Practicum II**

The student continues field experience work in an approved human service setting under the supervision of an approved professional. Skills, knowledge, and personal characteristics are built on and integrated into the learning and supervision of this course, as well as second year coursework including criminology and elective options that fit the students' field work. Students submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student completes a total of 125 hours of field experience.

**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSV111C
HSV195C
HSV242C
MHTH187C
PSYC105C
PSYC283C

**ECON101C : Macroeconomics**

Concerned with the behavior of the economy as a whole, particularly macroeconomics and fluctuations in economic activities. Basic elements of economic reasoning are applied to the public policy issues of unemployment, inflation, and economic growth. A brief survey of the history of economic ideas is followed by a study of the consequences for national policy of the changing institutional structure of the U.S. economy and of the conflicts inherent in, and generated by, competition and private enterprise. Analytic tools are used to evaluate monetary and fiscal policies and to understand current macroeconomic controversies.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ECON102C : Microeconomics**

An investigation into the functioning and politics of the U.S. economy from the vantage of the marketplace, emphasizing microeconomics, wage bargaining, taxation, and the distribution of wealth and income. Topics include the theories of demand and production and the determination of prices and quantities for commodities and factors of production in competitive and noncompetitive markets.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU101C : Introduction to Exceptionalities**

Introduces the exceptionalities and related topics in the field of special education including definitions, prevalence, assessment, and intervention. It includes discussion of strategies for facilitating students' independence, learning, social connections, and self-advocacy skills. Curriculum emphasizes the philosophical and practical applications of valuing students' abilities and diversity and collaborating with educators and families. It will explore curriculum modifications and accommodations, problem-solving strategies, and transition issues. Ten hours of field work are required in this course. A $25 fee will be assessed to all students to cover the cost of clinical practice.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU104C : Foundations of Education**

Investigates the philosophical, historical, and social/cultural character of education in the U.S. It is intended to be an examination of how schools function organizationally. Discussions will include the role of education, system philosophy, and trends that have shaped contemporary education; field observations are included. This course is a concentration requirement for both Special Education and Education Associate Degree programs. It is intended to be the first in a series of learning experiences for those interested in careers as teachers. Ten hours of classroom observation required. A $25 fee will be assessed to all students to cover the cost of clinical practice.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU200C : Supporting Students with Challenging Behaviors**

This course will focus on the knowledge and skills necessary for supporting students with challenging behaviors in various learning environments, using the framework of positive behavioral supports. Students will gain knowledge of the basic assumptions about the context, function, and role of behavior. Students will learn to use a variety of positive behavior intervention techniques to control targeted behavior, support learning, and maintain the attention of students. Ten hours of field observation required. A $25 fee will be assessed to all students to cover the cost of clinical practice.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU201C : Legal and Ethical Issues in Education**

Predicated on legislative requirements such as the Individuals with Disabilities Education Act, this course considers theories and issues in the context of inclusive instructional settings. Students will develop an understanding of the various legal and ethical requirements as well as effective instructional strategies for curriculum adaptation and delivery within the context of federal and N.H. state special education and education laws and procedures.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
EDU104C

**EDU203C : Teaching Strategies for Diverse Learners**

Focuses on practical instructional strategies for designing developmentally appropriate and challenging learning experiences based on the unique needs of individual learners. Students use differentiated instruction and universal design for learning as frameworks for designing lessons that meet the needs of diverse learners. Methods for adapting instruction and supporting students through modifications, accommodations, and assistive technology are explored. Students will collect a repertoire of evidence-based strategies for identifying and addressing the reading, writing, math, and study skills of students with disabilities. Through field experience, students have the opportunity to observe in the classroom and gain practical experience planning, delivering, adapting, and reflecting on a series of individualized lessons. Ten hours of field work are required. Ten hours of field observation required. A $25 fee will be assessed to all students to cover the cost of clinical practice.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU204C : Instructional Technology**

Presents the theory and strategies for effective integration of technology resources and technology-based methods of instruction and assistive technology designed for students with disabilities. A background of mediated instruction will be provided along with a review of the qualities and benefits of technology options, including assistive technology, available to instructional settings. Opportunities to apply instructional delivery using common forms of media, multimedia, computers, and specialized programs for students with disabilities will be integral to this course, in addition to contemplation of future issues of integration of technology and matters of time and place of the learning experience.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
EDU104C

**EDU208C : Content Literacy**

Focuses on methods for integrating explicit instruction of effective reading comprehension strategies into content area teaching. Before, during, and after reading strategies that will help students to comprehend challenging content area reading material will be introduced and practiced. Mentor texts will be used to demonstrate text structure and make the connection between reading and writing in the content areas. Students will learn strategies for motivating and engaging students with reading, modeling effective reading and writing strategies, guiding comprehension, facilitating metacognitive discussions, and teaching vocabulary and study skills. Methods for assessing and developing skills in reading, writing, listening, and speaking will be explored. Methods for differentiating and accommodating for struggling readers and writers including the use of assistive technology will also be explored.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
EDU104C

**EDU209C : Curriculum and Assessment**

Focuses on designing appropriately challenging learning experiences based on curriculum standards and individual needs. Students will learn strategies for direct and indirect instruction, supporting self-directed and collaborative learning, and promoting critical thinking and problem solving through questioning. Classroom management strategies that promote student engagement and a positive learning climate will be explored. Students will learn how to select, design, conduct, interpret, and use the results of formative and summative assessments. Use of the common core state standards in the planning, instruction, and evaluation process will be examined. 10 hours of classroom observation are required. A $25 fee will be assessed to all students to cover the cost of clinical practice.
**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
EDU101C
EDU104C

**EDU210C : Cross-Cultural Education Seminar**

Offers candidates a professional forum for researching, reviewing, and discussing socio-cultural contexts and topics in language teaching and education. In the course candidates will develop a broad-based understanding of cross-cultural education and discover appropriate practices and techniques for the multi-cultural classroom. The course is a requirement for all Education candidates.
**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU211C : Reading and Language Development**

Focuses on assessing and addressing student literacy skills. Students will learn about the language development process and demonstrate their ability to use a variety of assessments to identify the language skills and needs of individual learners. Using data driven, collaborative decision making, students will plan appropriate interventions. Research-based methods for teaching phonics, vocabulary, spelling, fluency, reading comprehension, and writing will be explored. Students will learn how to guide readers and writers in developing effective strategies for reading, writing, speaking, and listening. Authentic, evidence-based, differentiated instruction linked to the common core standards will be emphasized.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
EDU104C

**EDU220C : Field Experience in Education**

Practical experience in a learning environment. The student spends a minimum of 45 hours per semester in a supervised assigned learning environment and participates in a weekly seminar. In the instructional environment, students will work with individuals and groups and develop and deliver an instructional unit. This is a concentration requirement for the Associate in Science in Education program.

**Credits** 3
**Lab/Practicum/Clinical Hours** 6
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
interview and permission of the department chair

**EDU221C**

Consider assessment in two simple realms: for learning and of learning. The focus of this course is assessment for learning; otherwise on developing an assessment model where teachers and students envision and use assessments as an intricate part of the learning experience; not simply as tools to grade or evaluate, but as instruments to provide and receive feedback, and measure milestone accomplishments, on vital knowledge and skills directly linked to a CTE student's chosen pathways.

This course addresses two general themes around assessment. The first is to develop a coherent vision around selecting, establishing and adjusting assessments that clearly link to learning goals. This vision establishes a platform for students, through participation in assessments, to develop a body of evidence whereby they can quantify their knowledge, skills and abilities. The second major theme is using assessment data effectively. This includes, for example, teachers providing explicit and actionable performance feedback for students (and their stakeholders). In this environment, teachers empower students to better reflect on their performance and in doing so, to know exactly where they "are" so they know where they need to focus their energies to meet learning targets. In addition, assessment data is also leveraged to help teachers plan and adjust (including on-the-fly) instructional decisions to better serve students' learning needs.

Ultimately a student's body of evidence -their performance on all types of valid assessments -is used by the teachers and student to determine whether a student has exceeded, met or not-yet met learning targets along their chosen pathway. This body of evidence takes on many forms, but as a whole represents a quantifiable level of learning. The following modules will provide a framework to design an assessment system that works for CTE.

**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU222C : Language, Reading, and Literacy in ESOL**

Designed to assist student educators in constructing a favorable learning environment for their English language learners with regard to reading and literacy in the content area. Appropriate literacy strategies, instruction and assessments will be evaluated, and various aspects of first and second language acquisition will be examined. All aspects of second language development will be considered such as phonemic awareness, vocabulary, fluency, comprehension, and writing. Approaches for assisting young and older learners with reading comprehension will be addressed, and students will learn to adjust language instruction to meet the developmental literacy needs of the language learners from various socio-cultural, educational, and linguistic backgrounds.

Students will have weekly opportunities to work as one-on-one content tutors with English language learning needs to develop an understanding of language-learning needs and to increase educator effectiveness in improving student skills. Assessing and tracking English language learner progress will be explored. There will be a 20-hour service learning component wherein students will support ESOL learners and their community. This course is required for those in the TECP: ESOL Certification programs. Others must have permission from the TECP director or the director of cross-cultural education. A $25 fee will be assessed to all students to cover the cost of clinical practice.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU224C : Using Research-Based Practices to Develop Effective Instructional Strategies in CTE**

The focus of this course is student learning and effective instruction. Throughout this course, the concepts of Universal Design for Learning, expert teachers and expert learners, research, theories, mindsets, and best practices in instructional approaches that increase student learning and achievement are examined. The goal of this course is to develop an understanding of how learners grow and develop and to design appropriately challenging, meaningful, and impactful learning experiences for all of the learners in the classroom.
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU225C : Paraprofessional Portfolio Seminar**

As a pathway to paraeducator certification, paraeducators may complete a portfolio demonstrating the knowledge and skills competencies in the areas of math, reading, and writing, and the ability to assist in math, reading, and writing instruction. This course guides students in the preparation and completion of the required portfolio evidence through participation in a series of seminars and completing evidence to be presented in a final portfolio.
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**EDU230C : Essentials of Career and Technical Curriculum and Instruction**

Explores the history, philosophy, principles, organization, and operation of career and technical education in the U.S. Students will develop a functional understanding of the role and responsibilities of a professional career and technical educator. This course will provide the participant with the foundation and skills needed to design, implement, and manage a curriculum in career and technical education. Identification of resources and occupational analysis, derivation of content, formulation of objectives, defining measurable learning outcomes, and the selection and development of activities and evaluation methods will be explored.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ELET101C : Circuit Analysis I**

Covers basic electric circuit theory, the nature of electricity, resistance, current and voltage. Detailed coverage of topics includes direct current, alternating current, Ohm's law, series circuits, parallel circuits, and energy and power relationships. This course also covers DC circuit analysis techniques including mesh and nodal analysis, and network theorems such as Norton's, Thevenin's, and maximum power transfer. The transient response of capacitors and inductors are discussed when a DC voltage is applied using the circuit and analysis techniques. Additional topics include the discussion of alternating waveform characteristics and analysis of sinusoidal alternating waveforms. Lab experiments are designed to reinforce the classroom work.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Recommended Prerequisites**

It is strongly recommend that students have previously taken or are concurrently taking ELET 115C.

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH124C

**Corequisites**

MATH 124C or permission of the department chair. Students must earn a grade of C- or higher in each CPET and ELET course listed as a prerequisite to a subsequent CPET course.

**ELET102C : Circuit Analysis II**

A continuation of ELET 101C; covers AC circuit analysis techniques including mesh and nodal analysis, and network theorems such as Norton's, Thevenin's, and maximum power transfer. Treatment is given to circuits containing dependent and independent sources of voltage and current. Resonance and basic filters are covered in detail as well as magnetism. Additional topics covered include transformers and three-phase circuits. Lab experiments are designed to reinforce the classroom work.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ELET101C

ENGL101C

MATH124C

**ELET110C : Electronics I**

This is a study of the physical behavior of electronic devices. Emphasis is on analysis and application of electronic circuits utilizing semiconductor diodes, operational amplifiers, and transistors. Topics covered include rectification, clipping and clamping circuits, regulated power supplies, basic op-amps, biasing of transistors, and simplified AC modeling of transistor circuits. Engineering design automation tools are used to reinforce the theory through electronic analysis simulations. Lab experimentation reinforces classroom theory with practical work.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ELET101C

**ELET115C : Digital Fundamentals**

Open to all majors; designed for students with little or no electronics skills. Topics covered include basic logic gates; base 2, 10, and 16 number systems; BCD, Gray and ASCII codes, Boolean algebra, Karnaugh maps, flip-flops, counters, programmable logic devices, and other related digital devices. Hands-on lab experiments are an integral part of this course. The labs demonstrate real-world implementation of otherwise abstract academic concepts and provide valuable experience in breadboarding, testing, and debugging circuits.
**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MATH124C

**ELET144C : Embedded Microsystems**

Personal computers are used to host an integrated hardware/software development system for applications with embedded Microcontrollers. A system-level approach to the specification, decomposition, hardware/software development, and system integration for the implementation of embedded systems is covered through lecture and lab experiments. Topics covered include microprocessor architecture, instruction sets, interfacing, and real-time programming techniques in assembly language. Lab exercises consist of system-level development in serial and parallel data transfer, data acquisition, and analog input and output signal processing.
**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
ELET101C
ELET115C

**ELET210C : Electronics II**

A continuation of ELET 110C covering more advanced electronics topics with a variety of applications. The non-ideal characteristics of op-amps and other electronic devices will be discussed with applications emphasizing offset, gain, and linearity. Other topics may include but are not limited to sensors, pulse width modulations, Bode plots, SCRs, TRIACs, and optoelectronics. EDA tools are used to reinforce the theory with electronic analysis simulations.
**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ELET110C
ELET102C

**ELET215C : Advanced Digital Electronics**

Advanced topics in digital electronics including the internal structure of logic families, complex digital circuits, synchronous logic, A/D and D/A conversion, timing diagrams, computer bus systems, programmable logic devices (PLD), and complex circuit debugging. The topic of digital interfacing is also covered. This includes interfacing various logic families to each other as well as interfacing logic to various I/O loads, such as inductive loads and 120VAC loads.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
CPET107C
ELET110C
ELET115C
ELET144C

**ELET251C : Advanced Topics in Electronics**

Introduces students to advanced applications in electronics. Topics covered include but are not limited to an introduction to electronic communication theory including digital communications, fiber optics, programmable logic controllers, and human-machine interface. Lab exercises are used to reinforce classroom theory.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ELET115C
ELET144C
ELET210C

**ELET305C : Design Project Preparation**

Contains the background material and preparation necessary for ELET 306C and consists of three integrated learning objectives, which are studied concurrently. Objective one will be to document, design, and build a team project that will use a typical industry project management process to complete a project assigned by the instructor. Product design documents will be created to guide this objective. Objective two covers the mechanics of designing and fabricating printed circuit boards. This includes the use of EDA tools. The tools used include but are not limited to schematic capture and printed circuit board layout. Printed circuit boards will be fabricated that encompass both traditional through-hole components and modern surface-mount technologies. An overview of industry standards of workmanship and safety are included.

In objective three, the student selects a senior project to be completed in ELET 306C, obtains approval for that project, and develops a detailed project definition. Much latitude is given in selecting a project. Projects may be undertaken individually or as teams. They may be internal or collaborative with industry. The project may involve developing a specific circuit or a more general exposure in an appropriate industrial environment. Ultimately, the project must meet the requirements outlined in ELET 306C and receive final approval from the instructor. The definition will serve as a guideline for the next phase of the senior project.
**Credits** 3
**Lab/Practicum/Clinical Hours** 5
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ELET102C
ELET110C
ELET115C
ENGL125C
ENGL120C
**Corequisite Courses**
ELET144C
ELET210C

**ELET306C : Senior Design Project**

The culmination of two years of theoretical study in the electronics engineering field; is intended to exercise and enhance the student's practical competency in that field. When combined with ELET 305C, it prepares each student to each student be involved with design, development, implementation, and testing of a curriculum-related design as required by the project definition developed by the student in ELET 305C. An accurate record of time invested is to be kept, all work is to be documented in a logbook, and regular progress reports are to be submitted. As the project nears completion, a technical write-up will be required as well as a formal presentation of the project.
**Credits** 4
**Lab/Practicum/Clinical Hours** 5
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ELET144C
ELET210C
ELET305C
**Corequisite Courses**
ELET215C

**ENGL101C : English Composition**

Required of all first-year students and designed to teach students to write clear, vigorous prose, this course takes students through all stages of the writing process. Essay topics range from personal narratives to logical arguments. All students learn the resources of the NHTI library and write at least one documented research paper. Students who have received credit for this course cannot also receive credit for ENGL 101FC, ENGL 101XC, GST 100C, or GST 102C.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL101FC : English Composition—FYE**

Meets the same objectives as ENGL 101C and embeds topics typically covered in a first-year experience course such as career and major research, priority management, and study skills such as note-taking, test-taking, and critical thinking. Students who have received credit for ENGL 101FC cannot also receive credit for ENGL 101C, ENGL 101XC, GST 100C, or GST 102C.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Placement testing or permission of academic advisor accepted

**ENGL101MC : English Composition: Mindful**

Designed to teach students to write clear, vigorous prose. This course takes students through all stages of the writing process. Essay topics range from personal narratives to logical arguments. All students learn the resources of the NHTI library and write at least one documented research paper. Features the study of mindfulness and incorporates mindfulness meditation as an instructional method while exploring aspects of emotional intelligence as they relate to effective communication. Students who have received credit for this course cannot also receive credit for ENGL 101C, ENGL 101FC, or ENGL 101XC.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL101XC : English Composition—Corequisite**

Designed for students who need practice in foundational skills while engaging college-level reading and writing skills. Weekly lab sessions will reinforce skills and topics directly related to lecture topics. The course takes students through all stages of the writing process. Essay topics range from personal narratives to logical arguments. All students learn the resources of the NHTI library and write at least one documented research paper. Students who have received credit for this course cannot also receive credit for ENGL 101C or ENGL 101FC.

**Credits** 5
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL102C : Introduction to Literature**

An introductory survey exposing the student to representative works from the major genre forms: fiction, poetry, and drama. Students who have received credit for this course cannot also receive credit for ENGL 102C-FYE and ENGL 102MC.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL102C-FYE : Introduction to Literature: Hero's Journey**

Introduces students to representative works from major genres, such as fiction, poetry, and drama and the concept of the "hero's journey." Through reading, writing, discussion, and presentation students analyze texts to understand the role of literature in culture. Using the framework of the literature, students will examine and plan their own journey through college and beyond. Students who have received credit for this course cannot also receive credit for ENGL 102C and ENGL 102MC.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
ENGL 101C recommended
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL102MC : Introduction to Literature: Mindful**

Introduces students to representative works from major genres such as fiction, poetry, and drama. Through reading, writing, and class discussion, students analyze texts to understand the role of literature in culture. This course features the study of mindfulness and incorporates mindfulness meditation as an instructional method while also exploring aspects of emotional intelligence as they relate to effective communication. Students who have received credit for this course cannot also receive credit for ENGL 102C and ENGL 102C-FYE.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL110C : Introduction to the Theatre**

Provides a broad survey of the basic components of theatre. Students study theatre from different perspectives. They examine plays, the history of theatre as an art, acting, technical theatre, theatre's impact on society, and important practitioners in the field. Plays are unique in all of literature because they're only finished in performance in front of an audience. To understand how plays come to their complete realization, the class will see several productions both on and off campus. The student will be responsible for the cost of one ticket for an off-campus production.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL120C : Communication**

Focuses on the application of communication principles and theories, enabling students to develop public speaking, interpersonal, intrapersonal, and group communication skills. Through an in-depth look at self concept, and verbal and nonverbal language and listening skills, students gain an increased awareness of the way they perceive themselves and others as well as the cultural and ethical implications of behavior. Coursework includes speeches, exercises, and writing assignments. (Students who have received credit for this course cannot also receive credit for ENGL 120MC or COMM 120C or COMM 120MC.)
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL120MC : Communication: Mindful**

Focuses on the application of communication principles and theories. Students develop public speaking, interpersonal, intrapersonal, and group communication skills. Through an in-depth look at self concept, and verbal and nonverbal language and listening skills, students gain an increased awareness of the way they perceive themselves and others as well as the cultural and ethical implications of behavior. Coursework includes speeches, exercises and writing assignments. Sections identified as MC (Communicating Mindfully) feature the study of mindfulness and incorporate mindfulness meditation as an instructional method while exploring aspects of contemplative neuroscience and emotional intelligence as they relate to effective communication. (Students who have received credit for this course cannot also receive credit for for ENGL 120C, COMM 120MC OR COMM 120C.)
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL121C : Introduction to Film**

The art, history, technology, and theory of the narrative motion picture from the silent period to the present.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL125C : Communication and the Literature of Science and Technology**

Built around the theme of science and technology, this course focuses on improving communication skills. Areas of study include critical reading, critical thinking, public speaking, interpersonal communication, and writing. Topics vary and could include any of the following: physical and technical sciences, natural and health sciences, or social sciences. (Students who have received credit for this course cannot also receive credit for COMM 125.)
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL150C : Introduction to Drama**

An introductory survey involving the study of drama as literature and performance beginning with the Greeks and continuing through Shakespeare to the present.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL160C : Introduction to Poetry**

Designed to make students aware of the aesthetic value of poetry and develop their critical skills as readers. Included is an in-depth study of the various genres and structural elements of poetry. Genres considered are sonnet, ode, elegy, ballad, epic, dramatic monologue, and open form. Structural elements surveyed include imagery, sound, rhythm, rhyme, tone, and diction.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL201C : English Composition II**

Aiming at higher levels of writing competencies, this class focuses on analysis, argument, and research. It addresses issues of style and structure, from the sentence level to the whole essay, and incorporates peer review and critique. Students are required to collect and evaluate information, to analyze subjects from a variety of critical perspectives, and to use logic to present and defend conclusions. Students compose essays of varying lengths, including shorter reflections and more sustained arguments. Individual instructors may offer the course based on a theme.
**Credits** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Students must pass all prerequisite courses with a grade of C or higher.
ENGL101C

**ENGL221AC : Images of Light**

Utilizing viewings, lectures, and class discussion and emphasizing film theory, criticism, and history, this course explores the creative and dynamic interrelationships of filmmaking, particularly between the director and the director of photography between the vision of a film and its realization.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221BC : Films of 1962**

An examination of the year 1962 in film, arguably the best year in international filmmaking. Utilizing film viewing, lectures, projects, and discussions, the course will explore not only how and why international filmmaking reached its apogee in 1962 but also the lasting effects of these films and the filmmakers. Films screened include *Jules et Jim; Eclipse; Through a Glass Darkly; Viridiana; Yojimbo; Last Year at Marienbad; Cleo From Five to Seven; Manchurian Candidate; To Kill a Mockingbird; Lolita; Ride the High Country; Miracle Worker; Man Who Shot Liberty Valance;* and *Lawrence of Arabia*.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221C : Film Genres and Directors**

Offers students an advanced, focused examination of the art, history, and theory of a body of narrative films, which may be related by genre, filmmaker, country, style, movement, theme, and/or culture and ideology. Uses viewing, lectures, and class discussion and emphasizes film theory, criticism, and history. This course may be repeated for credit as topics change, providing student earned a grade of C or better.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221CC : American Independent Cinema**

An independent film is one that has been funded independently of a major studio; typically the monies come from limited partnerships, personal loans, presales, private investors, or credit cards. The late 1980s and 1990s saw a tremendous emergence of U.S. independent cinema, as a variety of eccentric and challenging filmmakers and evolving film styles came to America. This course will focus on American independent film directors, the process of conception, funding to creation, and distribution of their initial film. With several directors we will explore their achievements and studio flops.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221DC : The Modern Classics**

Utilizing viewings, lectures, class discussions, presentations and emphasizing film theory, criticism, and history, this course explores the audacity, range, depth, and stylistic experimentation of the newest wave of filmmaking (the influences on films since the 1994 release of Quentin Tarantino's *Pulp Fiction*) as seen through American and foreign films.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221EC : German Expressionism**

Utilizing viewings, lectures, and class discussion and emphasizing film theory, criticism, and history, this course explores the creative and dynamic interrelationships in Germany of the Expressionist Film movement in the time between the two world wars as well as the reinterpretation of that period prior to reunification. Expressionism and Post-Expressionism as movements will be explored within the context of the times, concentrating on the intensity of the artist's inner world capturing the nightmarish quality of artistic vision. Emphasis will be placed on the mood of Expressionism and how art anticipates history.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221FC : American Cult Cinema**

Allows the student to view, research, and discuss nearly two dozen motion pictures more or less widely regarded as "bad movies" or "cult cinema" in one or more ways. In seeking to determine intelligently what factors might contribute toward cinematic badness, students will consider subject matter, personal and societal prejudices, the effects of the passing of time, the effects of change, stigmatization of particular movie genres and/or directors and/or actors, and a wide variety of other aspects relating to viewer perception of a movie's quality or lack thereof.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221GC : Darkness and Light: Film Noir**

Utilizing viewings, lectures, and class discussion and emphasizing film theory, criticism, and history, this course explores the origins of film noir and examines pre-noir films but also film noir of the classic period as well as those of the post-classic and modern periods.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221HC : Alfred Hitchcock**

An in-depth study of the film techniques and unique storytelling genius of Alfred Hitchcock, including an examination of the influences of other directors and cinematic movements on Hitchcock. This course will trace his career as the "master of suspense" from his early films in England to his American works and includes the star system, character development, storyboards, and the art of the action montage.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL221IC : Stanley Kubrick**

As a director known for controversial films such as *Lolita*, *Dr. Strangelove*, and *A Clockwork Orange*, Stanley Kubrick repeatedly bucked the Hollywood mainstream, emerging as an outsider who resisted the scrutiny of conventional film criticism and biography. This class will study in-depth the film techniques, influences of other directors and cinematic movements, and unique storytelling of Stanley Kubrick.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL240C : Cultural Identity Through Young Adult Fiction**

Students will read, discuss, and evaluate a range of literature written for young adults (grades 8-12). This course will investigate the social and cultural norms presented to teens through the literature written for them. Students will consider whether YA literature is reflective of changing cultural norms or if the shifts in popular literature can shape the collective identity of a generation of teens. In addition to exploration of mass media spin-offs and popular literature fads, students will critically analyze the major contributing authors in modern YA literature and how the common themes teens deal with are handled by those authors. (Prerequisite: ENGL 101C or equivalent with a grade of C or higher, or permission of the department chair)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL248C : British Literature Middle Ages to 1800**

This course traces the development of British literature from the Middle Ages through the early eighteenth century and includes readings in poetry, fiction, essay, and drama. Authors' works will be examined within the cultural, philosophical, and political climate in which they were created.

Effective Fall 2024: this is a CCSNH Access course and will display on transcripts, count as credits attempted, and count towards the cumulative grade point average for all seven colleges: Great Bay, Lakes Region, Manchester, Nashua, NHTI, River Valley, and White Mountains. Students cannot receive credit for more than one of the CCSNH Access courses or equivalents and the most recent course on the college transcript will be used in the cumulative grade point average (CGPA) calculation. For graduation residency purposes, only Access courses owned by the campus where the student is matriculated will be used to meet the requirements.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL249C : British Literature, 1800 to Present**

This course traces the development of British literature from the late eighteenth century to the present. The poetry, fiction, essays, and dramas of several major authors of the Romantic, Victorian, and Modern periods will be studied. Authors' works will be examined within the cultural, philosophical, and political climate in which they were created.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL251C : Contemporary Drama**

A seminar focused on major European and American drama since the 19th century. Through reading, discussion, and lecture regarding the works of major writers, students are exposed to contemporary issues in the development of the dramatic art.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL258C : American Literature, Origins to Civil War**

Surveys the works of American literature from its pre-Colonial influences through the Civil War, emphasizing themes that have contributed to the development of an American consciousness. By reading closely and analyzing critically, students explore these works from various literary periods and movements in relation to their cultural, social, historical, political, and aesthetic contexts.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
ENGL 101 recommended
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL259C : American Literature, Civil War to Present**

Covers American literature from 1865 to the present. It is designed for English majors and others interested in the character and history of U.S. literature. Students read representative major, as well as minor, writers from various literary periods and movements. Readings will be set in an historical and cultural context.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
ENGL101C recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL260C : The Novel**

A genre class designed for advanced students; selects from a wide range of representative texts in this essential literary form. Students will read approximately eight works of fiction. Selections may be drawn from any period of literature from the 18th-century origin of the form up to the present and may incorporate both texts written in English as well as English translations of non-English texts. Readings will be set in their historical and cultural contexts and will display the wide range of texts covered by the word Novel.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL272C : Modern Short Fiction**

A study of fiction focusing on elements and themes of the short story art form in stories written in the past 150 years. Through close reading, lectures, and discussions, stories are placed in the contexts of literary trends and periods. Biographical information may also be studied to gain a better understanding of the unique styles and perspectives of individual authors.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL285C : Literature, Technology, and Culture**

Examines the cultural implications of science and technology in the modern world. Students study a range of essays and fictional works in traditional literature, science, and science fiction, which may include such works as *Frankenstein* and *Brave New World*.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL286C : Introduction to Linguistics**

Focuses on linguistics, the scientific study of language. Students explore the properties of language and linguistic challenges faced by English language learners. The course will expand on the subfields within the linguistics: phonetics and phonology, morphology and syntax, and semantics and pragmatics. Concepts relevant to teaching English will be taught: pronunciation, grammar, and vocabulary. Language variation and written discourse will also be addressed as well as how to apply this knowledge to the English language classroom. Linguistic principles and features of both English and other languages will be examined to promote familiarity with the language experiences of English language learners. A native speaker of a world language will act as a "grammar text" as we decipher an unknown grammar in a field methods format. This course is required for those in the TECP: ESOL Conversion program. Others must have permission from the director of TECP or the director of cross-cultural education.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL287C : Women in Literature**

Images and roles of women in literature are traced from historical to contemporary times through a study of selected works in fiction, poetry and drama.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL288C : Shakespeare**

Shakespeare exposes students to the works of the playwright, with emphasis on his plays. Students study the major genres (tragedy, comedy, history, and romance), which give them ways to analyze and interpret drama and its elements. The course introduces students to the social and cultural characteristics of the Early Modern Period and to the biography of the author. No previous knowledge of Shakespeare is assumed.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
ENGL 101C recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL291AC : Contemporary Latin American Literature**

Images and examples of Latin American culture in literature are traced from historical to contemporary times with an emphasis on 20th century contemporary works through a study of selected works in fiction, poetry, film, and drama.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ENGL295AC : Creative Writing: Fiction**

Designed for writers interested in learning about creative writing. Students will present and critique their own original work and the work of their classmates as well as examine published works. Additionally, students will explore the various elements of drama, fiction, or poetry or mixed genre, depending on the focus of the specific course. Information on preparing a manuscript for submission and publication may also be included.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory-level literature course is highly recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL295BC : Creative Writing: Poetry**

Designed for writers interested in learning about the craft of poetry writing. Students will present original work to their teacher and classmates for discussion and critique as well as examine published works. Additionally, the students will explore the various elements of poetry. Students will be expected to spend the majority of their time writing and revising original works. Information on preparing a manuscript for submission and publication may also be included.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
ENGL 102C or ENGL 160C is recommended.
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL295CC : Creative Writing: Nonfiction**

Provides an introduction to the art and craft of writing creative nonfiction, an approach to “telling the truth” that many tools of fiction writing and journalism. Students will read, write, critique, and analyze pieces demonstrating the different styles in this genre: memoir, essay, and literary journalism. In addition, this course will include lectures, workshops, and peer editing. Students will experiment with the basic techniques of journalism, such as researching, reporting, and interviewing. The goal is to help students write stories that give meaning to experience, in a way that touches others.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENGL295DC : Playwriting**

Illuminates and guides students through the art and craft of writing for performance. This course explores the fundamental principles needed to build a realistic play that is intended to be produced on the stage. Though the course is built around the construction of plays, the principles, writing exercises, readings, and other assignments serve as a solid base for any form of dialogue-driven writing. The class will culminate in the writing and staged-readings of 10-minute plays and performance texts. Students are expected to attend, at their own expense, one live theater production to be specified. Students receiving credit for this course cannot also receive credit for THTR 220C.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ENGL101C

**ENVS101C : Fundamentals of Environmental Science**

Provides an introduction to the structure, function, and interactions of atmospheric, terrestrial, and aquatic systems, as well as the impact of the human population on such systems. Topics will include basic scientific concepts and methods for understanding human population growth and their impact on the environment, including cycles of carbon, water, and other materials, weather and climate, and sustainability of natural resources, in particular water and energy. The course will evaluate natural environmental processes, as well as human impacts to these processes, using case studies and real data to demonstrate the role of science in solving pressing environmental problems. High school Biology and Chemistry are recommended.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Explain the physical and chemical properties of water, carbon, nitrogen, and phosphorus.
4. Identify terrestrial biomes and characteristics of populations present in each.
5. Discuss human impact and species extinction.
6. Describe renewable and non-renewable energy sources.
7. Evaluate waste management techniques, mining methods, and sustainable solutions.

**ENVS220C : Introduction to Soil Science**

Introduces students to the study, management, and conservation of soils as natural bodies, both as a media for plant growth and as a part of a larger ecosystem. Students will learn to identify soil types in natural and disturbed communities. This course will present the concept of soil science such as composition, chemical, physical and biological properties, classification and mapping, soil water, soil conservation, management practices, and soil fertility and productivity. The world's soils are being greatly impacted by environmental impacts such as climate change, water pollution, deforestation, and development. The quality of the soil determines the capacity of land to support natural ecosystems and human society. This course will provide an introduction to the soil types found in northern New England and how those soil types will determine our capacity to grow food.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will:

1. Demonstrate proper laboratory techniques and skills.
2. Describe the classification system of soils.
3. Explain the fundamental physical, chemical, and biological properties of soils and their effects on plant growth and the environment.
4. Discuss the principles of soil conservation and soil development processes.

**ENVS250C : Agroecology**

Introduces the discipline of agroecology from an ecological perspective. An emphasis will be placed on relevant ecological theory within the context of production agriculture. Students will examine and measure the interactions between plants, animals, soil, and climate as well as the impact that human engagement has on these components. Students will research and present the history and consequences of modern industrial agricultural systems and the need for more sustainable management practices that consider ecological interactions.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL111C

**Learning Outcomes**

Upon completion of this course, students will:

1. Describe biological and sociological systems used in the development of sustainable food production strategies.
2. Explain agriculture concepts and their basis in natural ecosystem functioning.
3. Analyze current popular models of agroecology.
4. Discuss the challenges and opportunities encountered when developing and managing sustainable urban and small farm agricultural systems.

**ENVS290C : Senior Capstone Project and Seminar**

Serves as the capstone course for the Environmental Sciences program, in which the student will demonstrate the application of the knowledge gained throughout the program. This will be achieved either by independent study investigating all sides of a current environmental issue selected by the student with guidance from his/her program advisor or through participation in a field internship with an approved industry partner. The student will submit a written paper and make an oral presentation to all interested students, faculty, and industry partners in a seminar format.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- All major courses in ARET, BIOL, CHEM, ENVS, GEOL, INDL, and MATH
- Permission of department chair of Natural Sciences

**Corequisite Courses**
ARET160C
GEOL101C
PHIL242C
BIOL215C
**Learning Outcomes**
Upon completion of this course, students will:

1. Apply and/or critique the scientific method.
2. Demonstrate proper laboratory, field, and/or data management techniques and skills.
3. Complete research and use peer-reviewed sources of literature.
4. Present research to the community.

**ESOL101C : Basic Writing**

Focuses on developing writing skills at the paragraph level. Students have opportunities to develop writing skills through a learning process that integrates reading, writing, and grammar practice. In learning and practicing a variety of writing tasks, students gain increasing competence in expressing themselves in appropriate written English in an academic context. The developmental process also encourages cultural learning. The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA. (Enrollment in this course is dependent on placement using multiple measures.)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Enrollment in this course is dependent on placement using multiple measures.

**ESOL201C : Academic Writing**

Prepares students for English composition and other academic writing at the college level. It focuses on developing writing skills at the essay level. Students will move from writing structured paragraphs to organizing, drafting, and revising complete essays. Course content includes introduction to patterns of essay organization such as the comparison and contrast, cause and effect, and process analysis. Grammar and complex sentence structures will be reviewed as needed. The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Students can take ESOL101C or receive permission of the ESOL department chair.
ESOL101C

**ESOL204C : American Culture II**

Expands the students' knowledge of the American culture through selected topics of interest. The course not only provides students with essential information about the U.S. but also stimulates cross-cultural exchange. This course provides students with the opportunity to conduct research and then develop and deliver presentations to the class on their findings. Four language skills – reading, writing, speaking, and listening – are addressed in this course. The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**ESOL205C : Reading Comprehension**

Moves learners toward higher proficiency in reading comprehension and cultural literacy by investigating concepts and texts related to many fields of study to include business, science, psychology, politics, and technology. Classes will emphasize a developmental process that integrates reading comprehension, vocabulary expansion, problem solving, critical thinking, and cultural literacy. Readings from journals, newspapers, and works of fiction and non-fiction will be explored in this course. The three institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Students can take ESOL101C or receive permission of the ESOL department chair.
ESOL101C

**FREN121C : French I**

An introduction to basic French language, history, and culture through a balanced four-skills approach to learning through listening, speaking, reading, and writing activities. Multimedia resources, interactive language programs, videos, and the internet will be used. French I is geared toward students who have no previous knowledge of the language.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify features of everyday life and culture in multiple countries where the language is spoken.
- Orally communicate short messages and ask questions on a variety of everyday topics with novice-level pronunciation.
- Meet the demands of practical writing situations at a novice level, using basic vocabulary and grammatical structures.
- Identify key words, aural cognates, and formulaic expressions that are highly contextualized.

**FREN122C : Elementary French II**

A fully integrated intermediate French course that uses a multimedia approach to emphasize near-complete immersion in the French language and to build on the skills outlined in FREN 121C. French II is intended for students who have one or two years of high school French.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

FREN121C

**Learning Outcomes**

- Identify nuanced features of everyday life and culture in multiple countries where the language is spoken.
- Orally communicate and handle a variety of tasks essential to survival in the target-language culture.
- Meet the demands of practical writing situations using discrete sentences, situational vocabulary, varying syntax, and grammatical structures.
- Accurately identify key phrases, sentences, and paragraphs, including aural cognates and a variety of formulaic and quotidien expressions in multiple social contexts.

**GEOG110C : Introduction to Cultural Geography**

Focuses on economic, social, and cultural geography to study the relationships between humans and their natural environment. Students will review the basic physical geography concepts as well as ideas for reviewing and comparing cultural traditions, resources, globalization, and interaction of countries and regions. This class introduces students to the study of people, culture, arts, tourism, regions, and issues facing humanity.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**GEOL101C : Essentials of Geology**

Introduces students to the basic geological principles, including minerals, rock formation, volcanism, weathering, external and internal processes in sculpting and modifying landscapes, geologic time and history, global cycles, and human impacts on geological processes. Environmental resource use and conservation issues are also addressed. Required field trips.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

High school-level Biology with lab and high school-level Chemistry with lab, both with grades of C or higher

**Learning Outcomes**

Upon completion of this course, students will:

1. Discuss the origin, chemical composition, and physical structure of the Earth.
2. Explain the forces that modify Earth's surface to produce the landforms and landscapes in Earth's past and present.
3. Evaluate the interrelationship between geology and our everyday lives including our use of Earth's resources, its impacts and the hazards posed by Earth's internal and surficial processes.
4. Demonstrate proper laboratory techniques and skills.

**GERM115C : Elementary German I**

Designed for beginning German students who are interested and motivated in speaking and learning about the rich German language and culture. It is designed for continued language study, travel, and business purposes. Since a native German speaker will be teaching the course, the emphasis will be in communicative as well as written skills of the living German language. Vocabulary and phonetics studies will be enhanced through visual and auditory means. Dialogue and oral presentations will help students form and develop these skills. For correct usage of the language, a strong grammar foundation will be given through multiple reading, speaking, writing, and listening practices. Current German topics will also be discussed and there will be German guest speakers.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify features of everyday life and culture in multiple countries where the language is spoken.
- Orally communicate short messages and ask questions on a variety of everyday topics with novice-level pronunciation.
- Meet the demands of practical writing situations at a novice level, using basic vocabulary and grammatical structures.
- Identify key words, aural cognates, and formulaic expressions that are highly contextualized.

**GERN195C : Gerontology Practicum I**

The student will work in an approved gerontological setting under the supervision of an approved professional. Periodic conferences between the supervisor and practicum coordinator are planned evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience.
**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSV111C
HSV242C
MHTH187C
PSYC105C
PSYC283C

**GERN298C : Gerontology Practicum II**

Students will continue their field experience work in an approved gerontological setting under the supervision of an approved professional. Skills, knowledge, and personal characteristics are built on and integrated into the learning and supervision of this course, as well as second-year coursework including ethics, individual counseling, and conflict resolution. Periodic conferences between the supervisor and practicum coordinator are planned to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience.

The student will complete a total of 125 hours of field experience. The student will also complete an interview with the practicum advisor the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department chair by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.
**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
GERN195C

**GNDR105C : Gender, Power, and Privilege**

Analyzes the social construction of difference with a focus on gender and examines conditions and institutions involved with dynamics of power and privilege in contemporary society in the U.S. Oppression, social justice, diversity, culture, and problems of system inequality are studied with attention given to identity, discrimination, and social change. Students will become familiar with social group layers that interact with gender, including class, dis/ability, age, appearance, weight, religion, race, and ethnicity. Development of critical thinking skills related to such categories of difference will be studied with an eye both to the larger culture and to individual's personal lives.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**GST100C : College Success Seminar**

Introduces students to the foundations of college success and to the academic environment of NHTI. Academic advising, self-assessment and the development of a career portfolio help students to identify and achieve academic and professional goals and support lifelong learning. This course is required for all General Studies majors except for those enrolled in GST102C: Study Strategies. Please see the General Studies department head for the Waiver Policy for this course.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**GST101C : Assessment of Prior Learning**

Required for all General Studies majors who wish to apply for experiential learning credit. It will assist students in defining career objectives and preparing proposals for experiential learning credit. It will include advising and in-class writing sessions.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**GST102C : Study Strategies**

Through the presentation of topics ranging from reading and study strategies to stress management, students become better equipped to adjust to the college experience and increase their chances of academic success. Individual periodic conferencing is also a key element of the course. It is open to all students and required for some AGS students. Waivers from this course can be granted for students transferring two or more college-level classes with grades of B- or better. This course fulfills the GST 100C course requirement for all General Studies and Associate in Arts majors. This course may not be taken as an elective to meet graduation requirements.
**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HIST104C : Western Civilization: Antiquity to 1650**

The first of a two-course sequence about Western civilization. Study of history addresses the goals of being an educated person by liberating the learner from a narrowed perspective. Thinking about and understanding the past clearly provides for better alternatives in the present and the future. This course provides opportunities to learn about major historical events and trends from the earliest civilizations up to the Reformation which have shaped the past, present and will impact on the future. Social, political, intellectual, and economic changes will be among the topics explored, as will critical scrutiny of Western tradition.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HIST105C : Western Civilization: 1650 to Present**

Study of Western civilization to address the goals of being an educated person by liberating the learner from a narrowed perspective. Thinking about and understanding the past clearly provides for better alternatives in the present and future. This course provides opportunities to learn about major historical events and trends since the mid-fifteenth century that have shaped the past, present and will impact on the future. Social, political, intellectual, and economic changes will be among the topics explored, as will critical scrutiny of Western tradition.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HIST120C : United States History to 1870**

Explores the critical historical events that have interacted to shape life in this country from its discovery until 1870. Included will be the discovery of America; colonization; social, political and economic development; the American Revolution; political documents which establish our form of government (Declaration of Independence/Constitution); slavery, the Civil War; and Reconstruction. Major topics are emphasized within a chronological framework and serve as a systematic introduction to U.S. history prior to 1870.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HIST121C : United States History 1870 to Present**

Explores the critical historic events and forces that have interacted to shape life in the U.S. Topics will include the Industrial Revolution, World Wars, the Cold War, the role of the U.S. as a world power, social revolutions, the Great Depression, and the workings of democracy within the republic.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HIST132C : World History II: 1500 to present**

Examines the histories of civilizations in Asia, Africa, Europe, and the Americas from 1500 to present. The interrelationships among these societies, and their political, social, economic, religious, and cultural features will be explored.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HIST221C : New Hampshire History**

A general survey of N.H.'s past, from prehistoric periods to the present. The course will be chronological, with emphasis on immigration and ethnicity, rural development, urban and industrial growth, tourism, environmental changes, and the evolution of government. Students will not simply be exposed to major events and personalities in N.H. history; they will explore ways that people removed from us in time have made their living on the land we call N.H. In addition, students will use state and local resources to better understand the nature of history and ways that the study of history provides a better appreciation of ourselves and the world in which we live.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HLTH101C : Medical Terminology**

Promotes an understanding of the proper use, spelling, pronunciation, and meaning of medical terms. This course emphasizes learner participation through group activities and reading assignments. Basic anatomy and physiology and common pathology of the body systems will also be discussed. Designed for people working in the healthcare environment.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Describe the fundamental structures and functions of the body's organ systems.
2. Explain the construction of medical terms including prefixes, suffixes, root words, and combined forms.
3. Define, identify, pronounce, and spell terminology related to the field of medicine.
4. Apply medical terminology terms, phrases, and abbreviations utilized in medical reports.
5. Use medical references and other resources to research medical terminology.

**HLTH104C : Healthcare Data Content and Delivery Systems**

Introduces the generic components of the content, use, and structure of healthcare data and datasets, how these components relate to primary and secondary record systems, and how to introduce legal and ethical issues applicable to health information. Discussions will include health record content, documentation requirements comparing the various regulatory agency requirements, and an introduction to payment and reimbursement systems. The organization, financing, and delivery of healthcare services in both the hospital and the medical office practice will also be discussed.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Explain the fundamentals of the healthcare delivery system in U.S. and the health information profession.
2. Identify components of the healthcare record.
3. Describe the use, structure, as well as the legal and ethical issues of healthcare data.
4. Discuss documentation requirements and reimbursement systems.

**HLTH120C : Care and Prevention of Athletic Injuries**

Covers basic first aid and the principles and techniques involved in prevention and care of common athletic injuries. Weekly lab sessions will be used to demonstrate and practice special tests, taping and wrapping, and recognition of athletic injuries, and will coincide with material covered during lecture.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Explain the organization of body systems, anatomical features, and functional processes in health and disease.
2. Develop first aid and emergency management techniques.
3. Describe injury evaluation and prevention methods and explain proper rehabilitation sequences.
4. Physically demonstrate treatment methods for common athletic injuries.

**HLTH125C : Coaching Principles I**

Focuses on sport philosophy, sport pedagogy, and sport management for success as a coach at any level. Topics include educational techniques, leadership, planning, legal aspects, successful coaching strategies, practice, and event and game management. Students will explore the principles and foundations of coaching required to develop and successfully administer a sport at any level.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Describe the role and responsibilities associated with the coaching profession.
2. Create practice schedules, plans, and strategies.
3. Evaluate the principles of building teams and athletics programs.
4. Discuss risk management and sportsmanship issues related to coaching teams at all levels.
5. Identify techniques and strategies needed for successful programs in every phase.

**HLTH150C : Introduction to Personal Wellness**

Students in this course evaluate the concept of personal wellness and improve self-selected areas of wellness. Students compare the physical, social, emotional, spiritual, intellectual, and environmental areas of personal wellness to determine factors that affect each. Initial self-assessments provide information reflective of students' levels of wellness, and students then set goals for individual focus during the semester, while also assessing NHTI's current supports for personal wellness areas. The format for the course is group discussion and lab exercises.

**Credits** 1
**Lab/Practicum/Clinical Hours** 1
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Describe the dimensions of personal wellness (physical, social, emotional, spiritual, occupational, environmental, intellectual) and the factors influencing each dimension.
2. Assess one's own level of wellness and explain how this can impact overall quality of life.
3. Examine personal behaviors and evaluate how they impact wellness.
4. Identify and implement strategies to improve personal wellness.

**HLTH152C : Personal Trainer Course**

This course addresses pertinent topics for the fitness professional and bridges the gap between theory and practice through practical hands-on training performed within the classroom and lab portions of the course. Following a structured "read, write, and apply" format, students will attain the knowledge and abilities necessary to competently perform the tasks required of successful fitness professionals. On completion of the course, students should be well prepared to take the National Council on Strength and Fitness NCSF-CPT examination.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will:

1. Explain the organization of body systems, anatomical features, and functional processes in health and disease.
2. Describe the principles of exercise physiology in health and disease states.
3. Assess health screening and evaluation techniques.
4. Explain the basic concepts of diet planning.
5. Evaluate weight management techniques, including the role of diet and exercise for the loss, gain and maintenance of body mass.
6. Discuss exercise considerations, impact on chronic diseases, and body weight issues throughout the human lifespan.

**HMSC101C : Introduction to Homeland Security**

Introduces students to the study of the agencies necessary for the protection of the U.S. and the relationships among them. It will examine the individual and cooperative roles of federal, state, and local law enforcement agencies, as well as the roles of private security agencies and first responders in implementing the Homeland Security Act. (Open to current TSA employees only)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HMSC105C : Intelligence Analysis and Security Management**

Provides an overview of national intelligence community operations and the collection and analysis of information. Students will see how the resulting intelligence products help provide a common operating picture for security management at all levels of government. Students will develop an understanding of the methods for collection and analysis of data to develop intelligence products to support both tactical operations and strategic planning for Homeland Security leaders. (Open to current TSA employees only)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HMSC110C : Transportation and Border Security**

Provides an overview of modern border and transportation security challenges, as well as different methods employed to address these challenges. This course covers a time period from post-Sept. 11, 2001, to the present. The course explores topics associated with border security and security for transportation infrastructure to include seaports, ships, aircraft, airports, trains, train stations, trucks, highways, bridges, rail lines, pipelines, and buses. The course will include an exploration of technological solutions employed to enhance security of borders and transportation systems. Students will be required to discuss the legal, economic, political, and cultural concerns and impacts associated with transportation and border security. The course provides students with a knowledge level understanding of the variety of challenges inherent in transportation and border security. (Open to current TSA employees only)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HSTM101C : Introduction to the Hospitality and Tourism Industry**

Provides an overview of the structure and scope of the travel/tourism and hospitality industries. This course examines the components of the tourism industry: transportation, accommodation, food and beverage, and attractions. Other topics include the history, political, social, and cultural impacts tourism has on local, state, and global environments. A section of the course is devoted to the N.H. tourism environment. Students will review marketing, motivation, and other forces that draw guests to the state. Students will be required to prepare a career-planning outline. A travel fee of $75 will be assessed for all students. The money will be used to defray some of the costs associated with student travel experiences.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**HSTM110C : Introduction to Hotel Operations**

Designed to give an overview of the working components of a hotel and their interrelationships. Students will explore in a descriptive fashion the responsibilities of each hotel department and how and why their interactions are important. Students will examine the difference in operations of various types and sizes of hotels from B&B to full-service hotels.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
**Learning Outcomes**

- Gain a full working knowledge of the organizational chart for a full service lodging property.
- Possess the ability to discern between revenue-generating departments and support departments.
- Understand how all full-service hotel departments work in conjunction with each other.
- Understand the responsibilities of each department (management/associate).
- Have a working knowledge of hospitality terminology.
- Know how to successfully perform a case study.

**HSTM205C : Quality Service Management**

This course examines the techniques and methods in delivering exceptional quality service for external and internal customers. Students will learn the skills and attitudes for service management through observation, video, case studies, and role play. Students will review the processes of total quality management.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
HSTM110C
**Learning Outcomes**

- Define the basics of customer service and identify benefits of excellent customer service.
- Understand the role HR plays in the hiring process.
- Examine the importance of strong communicational skills.
- Understand customer behavior and measure customer satisfaction rates.
- Recognize the needs of guests and develop techniques in dealing with angry customers.
- Develop best practices in managing customer service.

**HSTM225C : Front Office Operations**

A comprehensive study of the front desk operations from a small inn to a full-service hotel. The student will explore front and back office systems. Topics include reservation procedures, registration, auditing, tour groups, check out procedures, room control, maintenance on guest accounts, public relations, and sales.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
HSTM110C
**Learning Outcomes**

- Have knowledge of hospitality terminology.
- Be familiar with property management systems.
- Understand the relationship between the front office, front desk, reservations, PBX, housekeeping and engineering.
- Understand the front desk as an information center for the guest and the associates.
- Understand space release policies and forecast management.
- Know management styles and be familiar with legal issues facing the front desk.

**HSTM230AC : Writing for the Travel Professional**

Travel writing provides some of the most powerful, elegant, and descriptive forms of writing. Travel writing ranges across the whole of the modern world, dealing with issues as varied as environment, culture, history, geographic, and political issues. The first part of the course will review the evolution/history of travel writing. The second part will review current trends in travel writing for many types of media: TV, radio, print advertisements, short stories, and essays. The student will write an article for publication.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
HSTM110C

**HSTM230C**

Introduces students to the history, concepts, marketing, planning, and management of ecotourism activities and development. Students will examine the relationship between natural and cultural resources with a special focus on rural areas, wildlife sanctuaries, forests, mountains, beaches, and island people's way of life for sustainable use in tourism.

**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
HSTM110C

**HSTM245C : Event, Meeting, and Convention Planning**

Gives students the experience in developing an event, meeting, and/or conference program. Students will go through the step-by-step process of pre-planning, budget/agenda preparation, and marketing the event. Other topics include sales, negotiations, and contracts. Students will complete a portfolio to include an agenda, floor plan, budget, and brochure.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
HSTM110C
**Learning Outcomes**

- Understand the scope and magnitude of the MEEC industry.
- Know the various knowledge, skills, and abilities that are necessary to be a successful event professional.
- Know the tasks and activities involved in producing a meeting or event.
- Be familiar with the issues involved in producing a meeting or event.

**HSTM247C : Principles of Wedding Planner Management**

Provides an introduction to the planning and management of weddings. Students will examine all aspects of wedding planning from event coordination to design and planning of weddings, including destination weddings. Key content to be studied includes culture, contracts, timelines, budgets, venues, food and beverage management, ceremonies, music, and correlated issues. Time management skills are key to success in this course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Permission of the program coordinator
**Learning Outcomes**

- Understand the role and scope of wedding consultancy.
- Demonstrate understanding of the political and economic influences on weddings.
- Understand contract negotiations with bride, vendors, and other contracted workers.
- Be familiar with different types of wedding traditions and culture with an understanding of ethnic backgrounds.
- Develop and implement a wedding day timeline and wedding budget.
- Engage the involvement of businesses in the wedding planning process.

**HSTM260C : Hospitality Sales and Marketing**

Focuses on the hospitality markets and products. The student will analyze the organization of the hotel sales and marketing department by looking at the importance of increasing revenue through special market segment, planning itineraries with tour operators, brochure design, and advertisement.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSTM101C
HSTM110C
**Learning Outcomes**

- Understand the role and scope of wedding consultancy.
- Demonstrate understanding of the political and economic influences on weddings.
- Understand contract negotiations with bride, vendors, and other contracted workers.
- Be familiar with different types of wedding traditions and culture with an understanding of ethnic backgrounds.
- Develop and implement a wedding day timeline and wedding budget.
- Engage the involvement of businesses in the wedding planning process.

**HSTM263C : Tour Planning and Cruise Sales**

The first half of the class is devoted to planning, guiding, and escorting tours. Students will develop a tour, budget, and marketing plan. Additional areas covered are group behavior, ethics, and dealing with unexpected disasters. The second half will focus on the cruise industry. Knowledge of cruise lines, destination, amenities, and marketing/sales is examined. Students' understanding of the relationship geography has to identification of cruise ports is also studied. Sales skills and qualifying the client in selecting of cruise is reviewed.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HSTM101C
HSTM110C

**Learning Outcomes**

- Identify the fundamentals of business planning, destination planning, and tour development.
- Identify the relationships that form between tour operators and their clients.
- Examine the relationships of tour components such as transportation, lodging, dining, sightseeing, and attractions.
- List ways tour operators develop destinations.
- Develop and price a tour itinerary.
- List marketing techniques tour operators use to market the tour.
- Understand group tour psychology.
- Understand the history of cruising and the way it affects the vacation of today.
- Identify the classification of ships according to their style.
- Identify the key geographical regions cruise lines travel.
- Understand sales techniques for selling a cruise to a perspective client.

**HSTM269C : Food and Beverage Management**

Students will examine the financial relationship of the food and beverage aspect of the hotel industry. Topics covered are marketing, food purchase controls, production, service, management of bar and beverage, sales techniques, and sanitation.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Gain working knowledge of food and beverage terminology.
- Understand the distinction between restaurant chains, franchises, independents, and private clubs.
- Know the differences between seasonal, noncommercial, and catering operations.
- Understand menu structure in relation to operations
- Understand the sanitation aspect of the industry including: cleaning, sanitizing, and maintaining equipment; refrigeration, and the Health Department's role in equipment sanitation.
- Know the responsibilities of a leader in the hospitality industry in relation to guidelines for supervisors.
- Understand the history of alcoholic beverages, including terminology, fermentation, distillation, and safety.

**HSTM270C : Catering Operations**

Food service can determine the success or failure of any event. This course examines how a conference/event planner designs and implements the food service needs of the event. Students will review menu planning and design, software programs, beverage operations service, and standards training.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HSTM101C
HSTM110C

**Learning Outcomes**

- Understand food functions for a conference, meeting, expo, and event.
- Know catering services procedures and their integration into food service operations.
- Know the market potential of a catering business.
- Understand several catering software systems.
- Identify the components of a catering menu programs.
- List management tools used to set policies and procedures to ensure a consistent standard of purchasing, production, and presentation.
- Define and create quality standards and operating practices for catering services.

**HSTM280C : Senior Travel Seminar**

Addresses current issues in the hospitality and tourism industry through discussion, reports (oral and written), and reading professional literature. Students will examine business ethics and professional development through the use of the case studies. Additional topics include resume preparation and interviewing techniques. Students will complete a capstone project related to their interest in the hospitality and tourism industry.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HSTM110C

**Learning Outcomes**

- Understand literature of the tourism industry.
- Evaluate tourism literature.
- Identify types of resumes.
- Identify tourism areas in which job opportunities are available.
- Describe how personal work habits and attributes affect the work environment.
- Understand ethical responsibility/problems and how they relate to marketing, sales, and public contacts.
- Relate the importance of service to the hospitality industry.
- Maintain personal and professional balance.

**HSV111C : Introduction to Human Service**

Identifies the programs and activities of social and human service. Focuses on the practical problems facing the human service/mental health worker and examines the attitudes and objectives to be attained.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Demonstrate a fundamental knowledge and understanding of Human Services including its definition, description and purpose.
- Identify your potential effectiveness, personally and professionally, working in the human service field.
- Identify and discuss the 12 skills standards of the human service profession.
- Learn and discuss the basic duties and responsibilities of case management.
- Demonstrate a fundamental knowledge of specialized populations and careers in human services.
- Know human service agencies in New Hampshire.
- Understand how a human service professional is able to utilize community resources in the delivery of services.
- Understand the historical development of the human services, social work, counseling, and psychology professions to the present and future of the field.
- Understand professional organizations, the historical aspects of development, and the purpose and structure seen today.
- Understand the ethical responsibilities of human services, social work, and counseling professionals.
- Understand the variety of populations with which human service workers engage.
- Understand cultural diversity and competence.
- Understand disenfranchised individuals, social justice, and change in our society.
- Understand and describe the history of deinstitutionalization and state the effects this had on the mental health movement, community service agencies, families, communities, and society.

**HSV195C : Human Service Practicum I**

The student will work in an approved human service setting under the supervision of an approved professional. Periodic conferences between the supervisor and practicum coordinator are planned to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience.

**Credits** 4

**Lab/Practicum/Clinical Hours** 8

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HSV111C
HSV242C
MHTH187C
PSYC105C
PSYC283C

**Learning Outcomes**

- Understand an educational professional environment and a community learning environment.
- Demonstrate self-awareness in one's work and supervision.
- Discuss the importance of mindfulness in the helping profession.

**HSV221C : Social and Professional Issues in Today's Society**

The student will examine and explore a variety of social and professional issues in today's society relating to the helping field. Skill- and knowledge-based topics necessary for the success of the student's career in today's workplace may include basic human needs in homelessness, poverty, advocacy work, grant writing/proposals/funding, culturally competent counselor standards, and community mental health delivery systems, as well as professional issues and skills that face today's helping professional.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand the history, nature, extent, and causes of poverty and welfare in the United States.
- Understand the reality of class distinctions in this country and the effect on individuals and groups.
- Understand poverty as a condition caused by social and individual factors.
- Understand selective issues such as racism, physical handicaps, emotional/behavioral disorders, domestic violence, child care and educational deficits that are associated with poverty.
- Understand sociality influences of different generations that make up today's population.
- Understand the costs of higher education, housing and children in today's society.
- Understand generational debt.
- Understand the changing characteristics of the aging population.
- Recognize cultural stereotypes concerning aging and their effects.
- Recognize services that exist for aging people.
- Understand major health issues germane to the aging population and how the medical field operates and what other choices may exist.
- Consider the impact from the significant increase of the aging population on our society.

**HSV242C : Ethics and the Professional Helper**

A case-related study of the ethical principles determining the standards of practice in the human service field including mental health and addiction counseling. This course is reserved for the practitioner. Topics taken from the related national code of ethics will be discussed. The issues presented will be roleplayed and resolved according to universal philosophical principles. Philosophy as the foundation of professional practice guides this course. It will meet professional requirements for ethical training.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HSV111C
MHTH187C
ADCL120C

**Learning Outcomes**

- Respond to ethical dilemmas using a decision-making process.
- Communicate a value system with emphasis on how these values are likely to impact counseling practice.
- Identify the different major components of ethical codes for professional counselors.
- Communicate how her/his personal values influence her/his ethical posture.
- Identify the professional organizations for counselors.
- Recognize aspects of cultural competency and work productively with people from diverse cultures.

**HSV298C : Human Service Practicum II**

The student will continue field experience work in an approved human service setting under the supervision of an approved professional. Skills, knowledge, and personal characteristics are built on and integrated into the learning and supervision of this course, as well as second-year coursework including ethics, individual counseling, and conflict resolution. Periodic conferences between the supervisor and practicum coordinator are planned to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience.

The student will also complete an interview with the practicum advisor the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department chair by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.

**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
HSV195C
**Learning Outcomes**

- Understand an educational professional environment and a community learning environment.
- Demonstrate self-awareness in one's work and supervision.
- Discuss the importance of mindfulness in the helping profession.

**INDL101C : STEM in the First-Year Experience**

Introduces new college students to a STEM field through integration with the social sciences and humanities while developing the "habits of mind" and academic skills critical to first-year college success. Through examination of a special topic, students will be challenged to reflect on the behaviors that both improve and impede their learning of specific subject matter and their overall academic progress. (Enrollment limited to first-time college students and transfer students with fewer than 12 credits by permission of authorized academic advisors. Interested students should contact the Advising Center.)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Discuss the essential characteristics of science as a process and the basic assumptions under which scientists work.
- Evaluate the interaction between science and society, including common confusions or misunderstandings regarding science, the scientific method, and the status of scientific results or conclusions.
- Explain the nuances of the course's special topic, including the social, political, and economic effects.
- Describe the ethical issues related to public policy and decisions individuals make about the special topic.
- Develop scientific writing skills.
- Identify and use campus resources.
- Create academic and career plans.
- Use effective self-assessment and self-management techniques.
- Explain the importance of working harmoniously with people of diverse backgrounds.

**INDL120C : Global Public Health Issues**

Provides an introduction to and overview of the key areas of global health by addressing the major determinants of health and how health status is measured to determine the burden of disease in the developing world. Using the perspectives of public health, the course will cover factors associated with the development of health problems and efforts to prevent disease in impoverished areas. Students will explore the role of social communication, politics, religion, economics, education, and culture in contributing to global public health issues and will integrate these factors and values in developing solutions to the widespread public health issues impacting communities worldwide. Students will learn about the magnitude of disease in the developing world (e.g., communicable and non-communicable disease, women and child health, nutrition, and unintentional injuries) and how health is assessed and how health systems effectively work together to improve global health. (This course may be used to meet either an SOCI elective or a Humanities elective but not both.)

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Explain the importance of public health and the interconnectedness of local and global societies.
- Describe the ethical basis of health and well being.
- Evaluate examples of successful efforts that have been done to improve lives and livelihoods.
- Identify mechanisms that impact global health within chosen careers.
- Discuss methods used to measure and assess the health of populations.

**INDS110C : History of Industrial Design**

Topics in history of industrial design from 1750 to 1945, such as collaborations between art and industry, mass production, changing patterns of consumption, advances in material processes, the social and/or technological impact of industrial design, and the social and/or technological impact of industrial design on transportation, healthcare, consumer goods, domestic space, and the workplace.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand major design styles and movements, significant designers, manufacturers, design-related companies, and innovations in technology and material use.
- Understand definitions of industrial design and identify historical antecedents that may have arisen before 1750, as well as more modern, contemporary, and future definitions of the profession.

**INDS150C : Industrial Design Studio 1**

The design process is introduced and practiced as students apply learned fundamental principles to multiple 3-D forms, structures, and products. Students will be introduced to various model-making methods. Students address the historical context of their designs as they practice critical thinking, research, problem solving, and aesthetic refinement. Projects require sketches, models, written reports, and verbal presentations of design concepts.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Exhibit an uncompromising and high professional standard for design and prototyping skills, techniques, tools, materials, and craftsmanship.
- Develop design concepts through sketching, technical drawings, mock-ups and prototyping.
- Build and/or improve time management skills as evidenced by the ability to generate and explore design ideas during and between class meetings and by completing assignments on time.
- Safely and respectively work in and navigate a product development lab.

**INDS180C : Digital Rendering and Modeling**

Computer-aided design (CAD) has become a major part of the product designer's skillset in recent years. This includes digitally constructing 3-D models of designs for manufacturing as well as image creation for marketing review and material visualization. There are many different CAD programs and associated rendering technologies available, and a design firm's decision of what to use often comes down to cost, availability, and the experience of those who will use the program. One option is called Rhinoceros, or just Rhino. It is inexpensive, powerful, and easy to learn. Rhino also communicates directly in many of the same file formats as those CAD packages used by mechanical engineers. This combination of attributes make it a good choice to learn for students looking to enter a design firm or start one of their own.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**INDS225C : User Experience**

Anywhere there is a person using a system, human factors and engineering concepts inevitably apply. The class concerns the design of systems, products, and services to make them easier, safer, and more effective for human use. The course focuses on human factors concepts and is a broad survey of human factors topics important to designers and researchers. This course surveys topics related to the design of products and interfaces ranging from alarm clocks, cell phones, and aircraft cockpits to logos, presentations, and web sites. Design of such systems requires familiarity with human factors and ergonomics, including the physics and perception of color, sound, and touch, as well as familiarity with case studies and contemporary practices in interface design and usability testing. Students will solve a series of design problems individually and in teams.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**INDS230C : Material and Fabrication and Processes**

Students become better designers when they have an intimate knowledge of a range of materials. Students will learn about the properties of natural wood and engineered wood-based materials, investigate the related technical processes, and evaluate how this information is both connected to and influenced by the design process. Students will work with materials directly and master skills needed to manipulate these materials. They will develop projects that allow them to engage in the design and development process and promote creativity, problem-solving, and the correct use of materials. Facility procedures, safety, care, and use of tools and equipment will be stressed.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**INDS232C : Business of Design**

Moving a great idea into a sustainable reality requires a fundamental understanding of business. Successful designers understand that business principles overlap, complement, and enhance design principles. Through a variety of exercises students will learn how to approach a variety of real-world scenarios, understand company expectations, and anticipate employer concerns that will help them transition into an entry-level career opportunity. At the end of the course, students will have a started a portfolio and will understand basic professional practices including interviewing for jobs, pitching ideas, networking, freelancing, licensing, and contracts. Students will also understand basic business vocabulary and the way design thinking skills can be used to identify and execute.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand employer expectations and the interviewing process.
- Understand how the government plays a role in your professional life through IP, taxes, and regulatory.
- Understand the different types of design offices and their basic functionality.
- Develop a resume, portfolio structure, contact list and cover letter.

**INDS240C : Plastics: Materials and Fabrication**

Explores the structures, properties, and behavior of plastics as well as how they can be altered through mechanical working and heat-treating. Consideration is also given to the selection of these materials to meet manufacturing and design criteria. Lab experiments will complement the classroom presentations.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**INDS242C : Manufacturing Techniques**

Introduces students to methods, materials, and manufacturing processes that translate design processes into mass-produced goods. A major component of downstream design activity involves manufacturing issues – the techniques by which materials are selected, manipulated, and then assembled. Consideration is also given to the selection of these materials to meet manufacturing and design criteria. In-class demonstrations of manufacturing techniques and site visits to local manufacturers will complement the classroom presentations.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand the primary methods, materials, and manufacturing processes that translate design processes into mass-produced goods.
- Have the experience of the selection of these materials to meet manufacturing and design criteria.
- Understand the major component of downstream design activity involving manufacturing issues and the techniques by which materials are selected, manipulated, and then assembled.
- Have the experience of the selection of these materials to meet manufacturing and design criteria.

**INDS250C : Industrial Design Studio II**

Students will work in teams and continue to hone the design process by dissecting an existing product, analyze a market segment, and redesign the product to fit the described market. Students integrate their drawing, model making, and material knowledge to design for consumers.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

INDS150C

**Learning Outcomes**

- Identify and define the right questions to ask.
- Demonstrate a deeper understanding of the process of product development and the role the industrial designer plays as a team member.
- Understand the role and expectations of a junior industrial designer.
- Demonstrate improved skill and confidence in design communications through sketching and prototyping.
- Create a robust portfolio by encompassing multiple skill sets obtained in class lecture, discussion, and exercises.
- Define execute user and market research methodologies.
- Gain leadership experience.
- Develop and/or improve time management and project estimation skills while meeting assignment and/or project expectations.

**IST101C : Hardware and Operating Systems**

Presents an in-depth exposure to computer and mobile hardware and operating systems. Students learn the functionality of hardware and software components, as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, including operating systems and software installation. This course prepares students for the CompTIA A+ certification.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**IST102C : PC Applications**

Introduces students to desktop PC applications with an emphasis on topics from a user perspective. Topics include use of an operating system, word processor, spreadsheet, presentation software, internet, and hardware and software considerations. Students may not receive credit for this course, IST 102AC, and IST 102XC.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Use word processing software.
- Use electronic spreadsheet and develop workbooks, formulas and functions, and charts.
- Use presentation program to develop an electronic slide show.

**IST103C : Programming with Raspberry Pi**

Designed for students new to the world of IT. It emphasizes hands-on learning using Raspberry Pi to introduce key IT concepts that appear throughout the Networking and Software Development degree programs. Concepts include computing principles and terminology, the relationship between hardware and software, programming principles, system administration and automation, and an introduction to digital networks.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Describe components of a digital computing system.
- Deploy and configure a Linux server.
- Create an application using Python.
- Use programming principles to solve simple computing challenges.
- Connect devices on a digital network.
- Build and deploy a simple web application.
- Explain the origin and impact of key digital technology trends.
- Design and implement an IT solution to solve a digital communication challenge.

**IST106C : IT Career Topics**

A series of presentations and panel discussions lead by alumni, HR representatives and other industry leaders in the field on important topics in IT specifically regarding careers in IT. The goal of this course is to expose students to a variety of career types that incorporate IT. Students will have a better understanding of what IT career and IT programs they would like to pursue. This course also gives students a chance to get to know one another within the IT programs. Incorporated into this course are also brief assignments that help students plan their college work, learn how to interact with their professors, and learn how to start a resume. The in-person section in the fall semester also includes a field trip; students choose a business they would like to visit in the area.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand variety of career types that incorporate IT.
- Have a working comfort level with other students in the IT major.

**IST110C : IST110C**

This course is no longer being offered. It will be substituted by the Department Chair or Program Coordinator.

**Credits** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**IST115C : Introduction to Blockchains**

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
An introduction to cryptographic digital keys and digital ledgers. Students are exposed and introduced to such topics as mining, trustless consensus, and digital promises such as smart contracts. Students learn how blockchains leverage digital scarcity to create currency-like properties.

**IST120C : Programming Essentials in Python**

Covers all the basics of programming in Python, as well as general computer programming concepts and techniques. The course also familiarizes the student with the object-oriented approach. Students have access to hands-on practice materials, quizzes, and assessments to learn how to utilize the skills and knowledge gained on the course and interact with some real-life programming tasks and situations. The aim of the course is to familiarize students with general computer programming concepts like conditional execution, loops, Python programming language syntax, semantics, and the runtime environment, as well as with general coding techniques and object-oriented programming. This course is aligned towards the PCAP industry certification and once students complete this course they will be ready to take the PCAP –Certified Associate in Python programming. The Python Institute offers students who successfully complete the PCAP | Programming Essentials in Python course a 51% discount on the list price for the PCAP | Python Certified Associate Programmer Certification exam taken at Pearson VUE Testing Centers.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Use variables and variable naming conventions.
- Use operator, along with the rules governing the building of expressions.
- Perform loops (while and for) and how to control their behavior using the break and continue.
- Describe the difference between logical and bitwise operations.
- Create code that passes arguments in different ways and sets default values, along with the mechanisms of returning the function's results.
- Implement try-except instruction, with its applications, and the raise instruction. Demonstrate the use of strings and their specific methods, together with their similarities and differences compared to lists.
- Demonstrate the difference between OOP and the classical, procedural approach.
- Use standard objective features such as: inheritance, abstraction, encapsulation, and polymorphism, along with Python-specific issues like instance vs. class variables, and Python's implementation of inheritance.

**IST140C : Database Design and Management**

Introduces students to the basic concepts used in database design and advanced topics such as structured query language (SQL), data modeling, table creation, normalization, views, forms, queries, and reports. The lab component includes development of business applications using a relational database, MS SQL Server. This is an entry-level course. No prior database knowledge is needed.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand relational database concepts and database terminology.
- Create a relational database.
- Normalize a database.
- Write moderately complex SQL queries that may include sub-query, joins, and builn functions.

**IST146C : Network Support Technician**

Prepares students for the entry-level Cisco Certified Support Technician Network certification and entry-level roles such as network support technician, help desk technician, or IT support specialist. Students learn how networks operate, including the devices, media, and protocols that enable network communication. Students develop key skills in basic troubleshooting, using effective methodologies, and help desk best practices.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**IST154C : Introduction to Networks**

Introduces the architecture, structure, functions, components, and models of the modern internet and computer networks. Configuration of IPv4 and IPv6 addresses is covered. Other topics of discussion include ethernet protocol, media access control, routing principles, subnetting, and variable length subnet masking. By the end of the course, students will be able to build simple LANs that include basic router and switch configurations, successful implementation of IP addressing schemes, and network attack mitigation. A grade of C or higher must be achieved to continue to the next Cisco C2 Course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Configure switches and end devices to provide access to local and remote network resources.
- Explain how physical and data link layer protocols support the operation of Ethernet in a switched network.
- Configure routers to enable end-to-end connectivity between remote devices.
- Create IPv4 and IPv6 addressing schemes and verify network connectivity between devices.
- Explain how the upper layers of the OSI model support network applications.
- Use security best practices to configure a small network.
- Troubleshoot connectivity in a small network.

**IST170C : Introduction to Linux**

This is the first of a two-course series that takes a computer professional knowing nothing about Linux to be a fully capable Linux administrator. Students learn how to install and configure a computer running Linux, perform maintenance tasks with the command line, manage hardware and disks, maintain the file system, and edit text files.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
IST103C
**Learning Outcomes**

- Perform core system administration tasks in a Linux environment.

**IST180C : Cloud Services and Windows Server**

Focuses on the use of the Windows Server operating system in a business environment. Topics include business analysis and matching system needs with an appropriate solution that includes physical, virtual and cloud based servers. Students will also study software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS) solutions and implement these solutions on a cloud provider platform.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Install and configure version(s) of Microsoft Server.
- Set up users, groups, and organization units, and assign the appropriate privileges.
- Configure services such as DNS, DHCP, file, print, and web services.
- Recreate many of the services listed above on a cloud provider platform.
- Understand the benefits of cloud computing versus traditional server environments.
- Understand the differences between software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS).

**IST200C : Spreadsheets**

This course provides training in introductory and advanced topics related to spreadsheet creation, formatting, and printing. Topics include row and column operations, formula creation (including functions), graph creation and printing, database management techniques, and macro design and execution.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Use functions.
- Create and edit charts, heat maps, and pictographs.
- Use filters, data validation, and worksheets.

**IST210C : Object-Oriented Programming**

Begins with an introduction to the Java programming language and then uses both Java and C# programming languages to cover topics such as: arrays, strings, collections, exception handling, and object-oriented programming. Object-oriented programming covers problem conceptualization, class definition, object instantiation, method definition and invocation, the principles and practices of reuse, inheritance, and polymorphism. It also introduces GUIs and event-driven programming.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Know the syntax of Java programming language as well as C# programming language.
- Create, compile, run and debug moderately complex Java applications.
- Use local and online code editors as well as full IDEs to create, debug, and run moderately complex programs.
- Create objects and use inheritance, polymorphism, string class to create simple multithreaded programs.
- Understand and use event handling, AWT, Swing and/or JavaFX to create interfaces.
- Use generics and the collections framework to develop applications, single and multi-dimensional arrays, and exception handling in Java.

**IST215C : Advanced Windows Programming**

Builds on the concepts learned in IST 210 and uses .NET Framework and C# programming language. Besides using object-oriented programming, students learn and use functional programing to design and develop moderately complex applications. Students also learn data structures and algorithms, generics, collections, WPF, UWP, and entity framework. Hands-on labs include performance analysis of sorting and searching algorithms, as well as business applications development with a GUI that uses ADO or entity framework to access a database.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

IST140C
IST210C

**Learning Outcomes**

- Design, develop, and debug moderately complex Console, Windows Forms and WPF applications.
- Use the latest .NET technologies such as XAML, WPF, ADO, LINQ, Lambda expressions, extension methods and code synchronization.
- Design applications that has a GUI frontend and SQL Server as the backend.
- Use the basic searching and sorting of algorithms and to solve complex problems.

**IST216C : Introduction to Web Programming**

Explores frontend web development technologies and techniques with a focus on HTML, CSS, JavaScript, and supporting libraries and frameworks. Students should be familiar with basic programming concepts prior to taking this course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
IST140C
**Learning Outcomes**

- Structure and organize data using hypertext markup language (HTML).
- Style document presentation using cascading style sheets (CSS).
- Build a functional web page using HTML and CSS.
- Manipulate HTML using JavaScript and the document object model (DOM).
- Build a simple web application using HTML, CSS, and JavaScript.
- Deploy a web application to a local server or cloud platform.
- Use web-based resources to develop and refine a technical skillset.

**IST218C : Mobile Application Development**

A hands-on training course for designing and building mobile applications on the Android platform. This course walks students through a series of app-driven exercises showing the relationships among application building blocks.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
IST210C
**Learning Outcomes**

- Understand the architecture of an Android application.
- Use Android Studio to develop simple to moderately complex Android apps using XML, Kotlin, and Java.
- Use emulators and real devices for development, debugging, and testing apps.
- Know the syntax of Kotlin or Java programming language as it pertains to Android programming.
- Understand when to use XML and when to use Kotlin and Java for developing graphical user interface.
- Configure and use “Gradle”, the compiler used by Android Studio.
- Use touch, multitouch, and event handling in Android Studio including implicit and explicit intents and save and retrieve data.

**IST240C : Advanced Web Programming**

Students learn to design, build, and deploy a modern web application. Topics include database integration, asynchronous communication, design patterns, and security. Coursework combines conceptual and hands-on learning components and concludes with an independent web application development project.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

IST140C
IST210C

**Learning Outcomes**

- Use an integrated development environment (IDE) to write software.
- Use PHP, ASP.NET, Node.js or similar technology to build a web application backend.
- Integrate a web application backend with a SQL database.
- Integrate client-side and server-side components to build a complete web application.
- Describe contemporary web application design patterns.
- Describe security considerations for a web application.
- Deploy a complete web application to a local or cloud platform.

**IST254C : Switching, Routing, and Wireless Essentials**

Topics covered include but are not limited to implementation of virtual local area networks (VLANs), configuration and troubleshooting of inter-VLAN routing, configuration of dynamic host configuration protocol (DHCP) on networking devices utilizing IPv4 and IPv6, and the purpose and evolution of spanning tree protocol (STP). An introduction etherchannel is also included. Students will learn about wireless LAN concepts and configurations as well as routing protocols. A grade of C or higher must be achieved to continue to the next Cisco C3 Course.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Configure VLANs and Inter-VLAN routing applying security best practices.
- Troubleshooting Inter-VLAN routing on layer 3 devices.
- Configure redundancy on a switched network using STP and EtherChannel.
- Troubleshoot EtherChannel on switched networks.
- Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols.
- Configure dynamic address allocation in IPv6 networks.
- Configure WLANs using a WLC and L2 security best practices.
- Configure switch security to mitigate LAN attacks.
- Configure IPv4 and IPv6 static routing on routers.

**IST256C : Enterprise Networking, Security, and Automation**

Students will learn how to configure routers and switches for advanced functionality. Topics of discussion include but are not limited to SingleArea open shortest path first (OSPFv2) concepts and configuration, networking security concepts such as access control lists and network address translation, and wide area network (WAN) concepts. Students will learn about quality of service (QOS) and how VPNs are used. The course will focus on network design, management, and troubleshooting. Network virtualization and automation will be introduced.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

CCNA C2 with a grade of C or higher

**Learning Outcomes**

- Design and configure a network for a small- to medium-sized business.
- Implement networking technologies such as Open Shortest Path First routing protocol, Etherchannel, Hot Standby Routing Protocol, Dynamic Host Configuration Protocol, ACLs, Network Address Translation, and VPNs.

**IST260C : CyberOps**

Provides an introduction to the knowledge and skills needed for a security analyst working with a security operations center team. Students will learn core security skills needed for monitoring, detecting, investigating, analyzing, and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats, and vulnerabilities. Course aligns directly to a certification from Cisco.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

IST154C
IST170C

**Learning Outcomes**

- Understand cybersecurity operations network principles, roles, and responsibilities as well as the related technologies, tools, regulations, and frameworks available.
- Monitor, detect, investigate, analyze and respond to security incidents.
- Apply for entry-level jobs as Associate Security Analyst and Incident Responder.
- Take the Cisco Certified CyberOps Certification exam.

**IST263C : Network Security**

Gives students the skills needed to identify and resolve computer and network security issues. The course will provide students an introduction to firewalls and other network security components that can be used to work together to create an in-depth defensive perimeter around a local area network (LAN). Students will learn how to identify threats, plan and design firewalls, develop a security policy, configure routers, workstations, servers, switches, and firewall equipment for various packet-filtering and security measures, create user authentication policies and methods, design and set up VPNs;  and maintain and troubleshoot these systems.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand network security and the threats associated with it.
- Manage authentication and authorization.
- Design and set up remote access systems.
- Understand the hardware and software associated with network security.
- Troubleshoot network issues.

**IST265C : Information Security**

Covers basic security principles, compliance and operational security, threats and vulnerabilities; application, data, and host security; access control and identity management, and cryptography. It also covers mobile device security, cyberattacks and defenses, and recent developments and emerging trends in information security, such as virtualization. The course prepares students for the CompTIA Security+ certification exam.

**Credits** 3

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

IST154C

IST180C

**Learning Outcomes**

- Plan and implement network security.
- Plan and implement operational security to include risk management, incident response, physical security, and security awareness and training.
- Identify and mitigate security threats and vulnerabilities.
- Implement application, data, and host security.
- Implement access control and identity management.
- Understand and use appropriate cryptographic methods.

**IST267C : Cisco VoIP**

Incorporates both theory and hands-on labs on topics such as connecting IP phones to the LAN infrastructure, installing call manager express (CME), CME phone configuration, gateway and trunk concepts and configuration, and other topics pertaining to VoIP. Students successfully completing this course will have mastered the skills necessary to install a Cisco VoIP solution for a small- to mid-sized company.

**Credits** 3

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Successfully deploy Cisco VoIP technologies.

**IST268C : Cybersecurity Analysis**

This course focuses on your ability to proactively capture, monitor, and respond to network traffic findings and emphasizes software and application security, automation, threat hunting, and IT regulatory compliance, which affects the daily work of security analysts. This course covers the most up-to-date core security analyst skills and upcoming job skills used by threat intelligence analysts, application security analysts, compliance analysts, incident responders/handlers, and threat hunters, bringing new techniques for combating threats inside and outside the security operations center.

Attackers have learned to evade traditional signature-based solutions such as firewalls and antivirus software, thus an analytics-based approach within the IT security industry is increasingly important. This course is aligned to CompTIA CySA+ certification and applies behavioral analytics to networks to improve the overall state of security by identifying and combating malware and advanced persistent threats. This results in an enhanced threat visibility across a broad attack surface. It validates an IT professional's ability to proactively defend and continuously improve the security of an organization.

- Leverage intelligence and threat detection techniques.
- Analyze and interpret data.
- Identify and address vulnerabilities.
- Suggest preventative measures.
- Effectively respond to and recover from incidents.

Students enrolled in this course will incur a $99 fee for the CompTIA CertMaster Learn for CompTIA Cybersecurity Analyst (CySA+) (Exam CS0-002) and a $66 fee for the CompTIA Labs for CySA+ (CS0-002).
**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
IST265C

**IST270C : Advanced Linux**

The second of two courses that introduce the basics of Linux system management; prepares students to earn a Linux Certification. It is designed as a natural extension of IST 170C and introduces advanced file-system management capabilities, security controls, and firewall configuration. Students will learn how to manage scheduled jobs, and perform troubleshooting tasks, network- and security-related tasks, and other administrative-related tasks.
**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
IST170C
**Learning Outcomes**
- Perform core system administration tasks in Linux.
- Build additional skills needed to be a Linux system administrator.

**IST290C : IT Career Development**

Consists of a series of readings, exercises, and assignments designed to prepare students to succeed in their IT careers. Topics include resume writing, personal networking, job search resources, interviewing, compensation negotiation, and career development.
**Credits** 2
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Students must have accumulated 21 credits of IT-related courses before enrolling into this course.

**IST294C : Senior IT Internship**

This is a capstone course for the Information Technology curriculum providing application of skills acquired in a real-world environment. Students will test their ability to organize and interpret data, develop, apply programmed solutions to problems, and submit thorough documentation of the task.

**Credits** 2
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 0
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Develop and apply solutions to real world problems from knowledge gained in the IT program.
- Identify and explain skills gained from the internship.

**LAND101C : Identification and Uses of Trees**

Introduces evergreen and deciduous trees commonly found and used in the Northeast. Emphasis will be on identification, cultural requirements, and design applications in the landscape. Students will become proficient in identifying trees by recognizing distinctive features such as height, form, twig and bud characteristics, leaf shape, color, and flowers.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Properly develop a landscape plan.
- Understand that trees are just one part of a total landscape design.
- Understand a tree's impact on a landscape can be very positive or can be a liability.
- Understand the important use of trees in the landscape.

**LAND102C : Identification and Uses of Shrubs, Groundcovers, and Vines**

Introduces evergreen and deciduous shrubs, vines, and groundcovers commonly found and used in the Northeast. Emphasis will be on identification, cultural requirements, and design applications in the landscape. Students will become proficient in identifying plants by recognizing distinctive features such as height, form, twig and bud characteristics, leaf shape, color, and flowers.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand how to select appropriate shrubs, vines, and groundcovers for use in professional environmental and landscape design.

**LAND109C : Basic Site Grading and Surveying**

Familiarizes students with surveying techniques and grading principles that are integral to interpreting topographical information and understanding natural and man-made features that influence grade changes in the landscape. Emphasis will be on practical and basic applications of survey equipment, note-keeping, plotting, and other measuring techniques that are useful to landscape contractors and designers. Practical exercises include incorporating designed features such as stairs, retaining walls, ramps, walkways, swales, etc., into the landscape. High school-level Algebra I and Algebra II, with grades of C or higher, are recommended.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand slope and horizontal and vertical spatial concepts.
- Measure and record data in organized fashion.
- Prepare an accurate sketch which graphically communicates proposed improvements.
- Calculate areas and volumes.
- Estimate cost of time and materials.

**LAND112C : Landscape Drawing and Presentation Techniques**

Focuses on learning the fundamentals of landscape design drawing necessary to graphically communicate design ideas. Students will learn techniques to improve line quality, lettering, sketching, rendering, and drawing layout. Black and white and color media will be used. These drawing and rendering techniques will be used to create presentation quality site plans, elevations, and perspectives. The use of computers as a means in creating presentation drawings will be introduced.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Properly develop a landscape plan.
- Understand that trees are just one part of a total landscape design.
- Understand a tree's impact on a landscape can be very positive or can be a liability.
- Understand the important use of trees in the landscape.

**LAND115C : Landscape Design Theory**

Introduces the student to the field of landscaping design. Lectures, reading, and problem-solving exercises provide a basic overview of historical, philosophical, and technical aspects of landscape design and the profession of landscaping architecture. The course will also explore how design, site environment, and legislation affect the design process.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Have working knowledge of landscape design principles and practice.
- Have proficiency in written, oral, and graphic communication skills necessary to express design ideas and concepts in a professional environment.
- Have a working knowledge of and appreciation for the natural physical environment in the context of landscape and environmental design-related field.

**LAND118C : Natural Resource Stewardship**

Welcomes students of all levels of interest in outdoor careers, regional natural history, natural resources, and the relationship between thriving ecosystems and healthy communities. The course is held outdoors on 700 acres of historic woodlands, farm fields, orchards, gardens, and ponds at the landmark Canterbury Shaker Village Museum (15 minutes north of Concord). Students engage with field specialists while experiencing the science behind topics that include tree and plant identification, ecological landscaping, local wildlife and their habitats, urban and rural forestry practices, water quality, invasive species, climate change, and permaculture. Skill is achieved through experiential learning and supported by rich online resources and assignments that focus on the ecosystems surrounding our homes and communities. In a real-world, service-learning opportunity, students apply scientific and horticultural skills to a project of their own interest; experience is gained in public outreach, local government access, and natural resource stewardship from awareness to activism. Visit nhstewards.org to learn more about this course in partnership with UNH Extension and other N.H. natural resource partners and organizations.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LAND200C : Vectorworks Landmark 2-D**

Teaches students the basic functions and uses of computer-aided design (CAD) software in landscape architecture, design, and construction. This course will focus on 2-D applications of CAD software to create presentation and construction documents. Students will learn how to import hand-drawn concepts, survey plans, create planting plans, construction drawings, and details. Some 3-D applications will be demonstrated at the end of the semester. On completion students should be able to prepare basic 2-D landscape and planting plans.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand the power and precision of computer-aided modeling and drafting.
- Understand and be proficient at using 2D tools.
- Communicate 2D drawings and 2D representations of 3D plans and objects in a perspective view and section.
- Construct 2D drawings in industry-standard plan form and plot.

**LAND218C : Landscape Design Studio**

Focuses on understanding and analyzing the requirements of the program and the site to develop designs that respond both to client needs and environmental context through lectures, site visits, and design projects. Moving through projects that range in size, scale, and complexity, this course examines different issues in context, program, and client requirements. Students will learn to inventory and record existing site conditions. Emphasis in this design studio will be on preparing landscape plans, sections, planting plans, specifications, and details.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

LAND101C
LAND102C
LAND115C
LAND220C

**Learning Outcomes**

- Associate and classify biotic and abiotic components of N.H. natural resources and their functions in urban and rural ecosystems.
- Describe and evaluate the effects of human impact on N.H. ecosystems.
- Describe statewide ecological issues including land fragmentation, loss of habitat and biodiversity, invasive species, landscape practices, and urban forestry.
- Identify and evaluate techniques to mitigate human impact on functioning ecosystems.
- Appraise and document the physical, social, economic, and health benefits that healthy ecosystems provide to communities.
- Distinguish and apply tools and techniques for ecosystem restoration and resource conservation.
- Summarize the process of natural resources planning at the community level from awareness to stewardship.
- Describe the values that land conservation techniques, open-space, and greenway corridors provide to the healthy communities and ecosystems.
- Assess and apply ecologically-sound landscape practices such as inventory, site analysis, soil testing, and proper pruning, planting, and extended care of trees and shrubs and other plant material.
- Summarize steps for smart growth and community planning and principles for permaculture and sustainable living.

**LAND220C : Planting Design**

Includes the combination of landscape elements when used with architectural, aesthetic, engineering, and climate control uses of plants. Students work in graphics skills and develop the ability to produce professional quality plans.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

LAND112C

**Learning Outcomes**

- Understand the process of creating a landscape design.
- Understand how plants are used in the landscape for a successful design.
- Select plants for projects based on horticultural needs and use.
- Produce planting plans, details, and specifications necessary for implementing designs.

**LAND225C : Landscape Construction Details and Methods**

A survey of the materials used in landscape constructions, the methods used in assembling the materials into the landscape, and the forces acting on the structures. Included are the characteristics and properties of each of the landscape materials and the relative costs of the materials, including installation. Landscape materials and methods to be studied include site work, various paving materials, various structural materials, and site drainage materials. The student will learn how to read and prepare plans showing construction details including walls, walkways, wooden structures, and water features.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
LAND112C
**Learning Outcomes**

- Understand how landscape characteristics (soil, drainage, human interaction, natural processes) affect landscape installations.
- Investigate and identify landscape drainage and earthwork solutions for improved site access.
- Recommend and select appropriate landscape hardscape elements, materials, and installation methods.
- Interpret, communicate, and draw landscape construction details.
- Develop construction details for newly developed landscape construction elements.
- Develop cost estimates for landscape installations.

**LAND270C : Sustainable Landscape Principles and Practices**

Introduces and examines the principles and practices required to create a sustainable environment. Issues facing communities locally and globally will be examined and discussed. Emphasis will be placed on methods used to create landscapes that improve the environment by conserving resources and reducing chemical application. Students will learn how site design, plant selection, and pest and water management practices influence the sustainability of the designed landscape.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Gain and demonstrate an understanding of basic ecological design principles.
- Apply principles to the art and science of landscape design, integrating form, function, feasibility, and fitness of landscape features into a unified and harmonious whole with respect to surrounding natural systems.
- Understand basic ecological and environmental literacy, its implications on site, and reveal such implications in design work and in dialogues.

**LAND290C : Senior Project/Internship**

As the capstone course of the Landscape and Environmental Design curriculum, this course will require the student to demonstrate integration and application of the knowledge and skills from all courses in the program. This may be achieved either through a comprehensive senior design project developed by the student under the guidance of a faculty member or through participation in a field internship with an approved industry partner. Students will be required to provide regular and ongoing documentation of the learning experience to ensure that all course and program goals are met.

**Credits** 4
**Lab/Practicum/Clinical Hours** 12
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
LAND220C

**LGNC101C : Legal Nurse Consulting**

Provides a comprehensive program for the principles and practices of legal nurse consulting. This course examines issues of healthcare and nursing law, as well as the judicial system. This course utilizes the most current and authoritative textbook in the specialty of legal nurse consulting and presents all facets of the practice.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LGNC102C : Risk Management**

The student will define and examine risk management as well as be provided with the legal knowledge to assess and reduce risks to patients, visitors, staff, and institution. The student will develop the tools for formulation of plans aimed at reduced risks.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LGNC103C : Administrative Law**

Covers the delegation of power to agencies, the procedures followed by agencies, and judicial and other oversight of agencies. The power of agencies to promulgate rules, decide individual cases, and conduct investigations is carefully studied.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LGNC104C : Healthcare Law**

Focuses on issues in the healthcare industry such as organization, treatment, staff requirements, regulatory compliance, and record management. Topics include the delivery of healthcare services, private and public financing of healthcare services, and ethical considerations.
**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LGNC105C : Legal and Healthcare Ethics**

Examination of ethical issues. Topics include legal professional ethical rules and healthcare ethical issues with emphasis on skills necessary to guide self and others in the process of ethical decision making.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LGNC106C : LNC Internship**

Offers the opportunity to combine the theoretical and practical issues of the classroom in the workplace setting. Students are required to complete a specified number of hours in a law-related environment or healthcare setting. Meetings will be held with the internship coordinator to discuss the ongoing experience.
**Credits** 3
**Lab/Practicum/Clinical Hours** 9
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LLRC111C : Learning Skills Support**

Students complete individual contracts consisting of a total of 15 contact hours. Students can register by Week 7 of the semester.

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*Individualized learning support courses for students who need structured guidance, applied study skills, and instruction in time management strategies. Students enroll in LLRC courses to help them progress toward independent, self-directed learning and the rigors of college work. LLRC courses must be taken in conjunction with courses being taken for credit, earn institutional credit only, may not be taken as electives to meet graduation requirements, and are not eligible for financial aid. Students in the AGS/AGS programs must either be concurrently enrolled in or have already successfully completed GST 102C.*

*Students must register with permission of the coordinator of Accessibility Services or the director of the Academic Center for Excellence for any combination of up to three total LLRC courses, not to exceed a maximum of 6 credits toward GPA during enrollment at NHTI. At the conclusion of any LLRC course enrollment, students are encouraged to use the academic supports available to all students, such as Math Lab, Writing Center, and Computer Lab, and/or request a tutor, assistive technology, and computer-aided instruction.*
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LLRC112C : Structured Learning Support**

Students complete individual contracts consisting of a total of 30 contact hours. Students can register by Week 4 of the semester.

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*Individualized learning support courses for students who need structured guidance, applied study skills, and instruction in time management strategies. Students enroll in LLRC courses to help them progress toward independent, self-directed learning and the rigors of college work. LLRC courses must be taken in conjunction with courses being taken for credit, earn institutional credit only, may not be taken as electives to meet graduation requirements, and are not eligible for financial aid. Students in the AGS/AGS programs must either be concurrently enrolled in or have already successfully completed GST 102C.*

*Students must register with permission of the coordinator of Accessibility Services or the director of the Academic Center for Excellence for any combination of up to three total LLRC courses, not to exceed a maximum of 6 credits toward GPA during enrollment at NHTI. At the conclusion of any LLRC course enrollment, students are encouraged to use the academic supports available to all students, such as Math Lab, Writing Center, and Computer Lab, and/or request a tutor, assistive technology, and computer-aided instruction.*
**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LLRC113C : Intensive Learning Support**

For students who need significantly more time than the typical one to two hours of independent work required for each hour of class time. Academic guidance for those who have not demonstrated successful progress in the past will include addressing reasons for lack of success, such as fit with program requirements, goals, need for additional structure, and formal support. Students complete individual contracts consisting of a total of 45 contact hours. Students can register by Week 3 of the semester.

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*Individualized learning support courses for students who need structured guidance, applied study skills, and instruction in time management strategies. Students enroll in LLRC courses to help them progress toward independent, self-directed learning and the rigors of college work. LLRC courses must be taken in conjunction with courses being taken for credit, earn institutional credit only, may not be taken as electives to meet graduation requirements, and are not eligible for financial aid. Students in the AGS/AGS programs must either be concurrently enrolled in or have already successfully completed GST 102C.*

*Students must register with permission of the coordinator of Accessibility Services or the director of the Academic Center for Excellence for any combination of up to three total LLRC courses, not to exceed a maximum of 6 credits toward GPA during enrollment at NHTI. At the conclusion of any LLRC course enrollment, students are encouraged to use the academic supports available to all students, such as Math Lab, Writing Center, and Computer Lab, and/or request a tutor, assistive technology, and computer-aided instruction.*

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**LXMO103C : Radiographic Positioning I**

Introduces the student to the principles of radiography, radiographic terminology, and radiation protection. This course covers the anatomy and radiographic positioning of the thoracic viscera.

**Credits** 2
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
LXMO109C
LXMO151C
LXMO180C
**Learning Outcomes**

Learning Outcomes

Upon completion of this course, students will be able to:

- Define general radiographic and anatomic relational terminology; define and apply various positioning principles in hypothetic clinical situation.
- Describe image quality factors in digital radiography; describe basic radiation protection methods to reduce exposure to the patient and imaging personnel; explain the patient dose terminology for specific regions of the body.
- Demonstrate the routine and special projections for chest radiography and upper airway.
- Evaluate chest radiographs based on established radiographic criteria.

Acquired Skills:

- Students will operate radiographic equipment to produce diagnostic-quality images
- Students will practice patient care including radiation safety
- Students will perform diagnostic imaging procedures for chest radiography
- Students will modify technical factors for non-routine examinations
- Students will demonstrate the ability to make decisions and use independent judgment
- Students will practice effective oral communication skills

**LXMO109C : Introduction to Healthcare in Radiologic Technology**

A series of continuous focused lectures pertinent to each clinical semester. Radiologic science, patient care, image critiques, and imaging methods will be presented and discussed.

**Credits** 1
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
LXMO103C
LXMO109C
LXMO151C
**Learning Outcomes**

Learning Outcomes

- Demonstrate patient transfer and safety techniques.
- Identify characteristics of human diversity and adapt to their needs.
- Identify critical-thinking and problem-solving strategies.
- Understand confidentiality in regards to HIPAA.
- Understand the ARRT Standard of Ethics.

**LXMO116C : Radiographic Imaging Technology I**

A discussion of the principles leading to the production of the manifest image. The general design of the x-ray tube as well as x-ray production and emission. Tube rating charts, factors affecting radiographic quality, grids, and accessories.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

LXMO103C
LXMO109C
LXMO151C
LXMO180C

**Corequisite Courses**

LXMO159C

**LXMO151C : Patient Care**

Teaches patient care and safety skills necessary for a LXMO in a hospital setting. Topics covered include hospital organizational structure, ethics, patient assessment, safety, medical emergencies, infection control, asepsis, medical terminology, pharmacology, and venipuncture. Students will learn proper patient communication and care through a variety of lectures and interactive exercises.

**Credits** 2
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

LXMO103C
LXMO109C
LXMO180C

**LXMO159C : Radiographic Positioning II and Clinical Procedures I**

Examines the radiographic positioning of the osseous system. Topics in this course include positioning, radiographic exposure factors, medical terminology, pathology, radiographic anatomy, radiation protection, and special considerations for the pediatric and geriatric patients. The clinical experience is an extension of the classroom where the student will develop the theory into practical skills through instruction, application, critique, and evaluation on common procedures. All students enrolled in in this course will be charged a $500 per semester clinical surcharge.

**Credits** 9

**Lab/Practicum/Clinical Hours** 26

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

LXMO103C
LXMO109C
LXMO151C
LXMO180C

**Corequisite Courses**

LXMO116C

**Learning Outcomes**

Learning Outcomes

Clinical Portion

- Demonstrate effective interpersonal skills, including the ability to identify the impact of non-verbal communication.
- Identify patient appropriately and review clinical history, while maintaining patient confidentiality and dignity in all interactions.
- Adhere to concepts that focus on organization theories, roles of team members, and conflict resolution.

Didactic Portion

- Identify the anatomy and topographic landmarks of the osseous system.
- Explain all radiographic positioning considerations and clinical indications.
- Demonstrate routine and special projections.
- Evaluate radiographs based on established radiographic criteria.

**LXMO164C : Clinical Procedures II**

This is a continuation of Clinical I and examines the radiographic positioning of the cervical, thoracic and lumbar spine, along with upper and lower extremities. During the course the student will complete the competency requirements set by the American Society of Radiologic Technologists and satisfy the requirements of the American Registry of Radiologic Technologists.

**Credits** 5

**Lab/Practicum/Clinical Hours** 24

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

LXMO103C
LXMO109C
LXMO151C
LXMO159C
LXMO180C

**Corequisite Courses**

LXMO201C
LXMO220C

**Learning Outcomes**

Learning Outcomes

- Discuss the basis of ethics and characteristics of ethical behavior.
- Describe the elements of professionalism in health care, including attitudes,
- Communication techniques and psychological aspects of patient care.
- Understand personal, societal and professional values as it relates to medical imaging.
- Perform the recommended number of clinical competencies for chest, upper extremity, pectoral girdle, lower extremity and spine.

**LXMO180C : Radiographic Physics**

A basic review of the physical principles of matter, leading to tube production of electricity with its ramifications pertinent to the field of radiologic technology. Basic radiation producing circuitry is discussed including closed circuit television along with digital radiography.

**Credits** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH120C

**Corequisite Courses**

LXMO103C
LXMO109C
LXMO151C

**Learning Outcomes**

Learning Outcomes

- Explain the basic characteristics of the atom, subatomic particles and discuss ionization and the emission of alpha, beta, and gamma radiation, and their effects on the nucleus.
- Define the characteristics of waves, with particular attention to electromagnetic waves, their electrical and magnetic components, and magnetism and electrostatics.
- Define electrical current, circuits, power, and frequency; and distinguish between AC and DC waveforms, and describe electromagnetic induction and transformers.
- Describe the basic layout of an X-ray machine circuit and explain the various components of the circuit, to include the materials, components, and function of the X-ray tube including the cathode, high speed rotating anode, glass envelope, and induction motor, and explain the process of thermionic emission and the creation of the space charge.
- Describe the Bremsstrahlung and characteristic interactions, their effects on the Xray beam spectrum and impact on the image, and describe the effects of target material, mAs, filtration, kVp, and the type of generator used on the X-ray beam spectrum.

**LXMO201C : Registry Review**

Prepares the student to take the national certification examination through the American Registry of Radiologic Technologists. Various topics will be addressed each week with practice registry exam given to complete the program.

**Credits** 1

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

LXMO103C
LXMO109C
LXMO116C
LXMO151C
LXMO159C
LXMO180C

**Corequisite Courses**

LXMO220C
LXMO164C

**LXMO220C : Radiographic Imaging Technology II**

An understanding of the components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving, and retrieval are discussed as well as quality assurance and maintenance.

**Credits** 3
**Lab/Practicum/Clinical Hours** 1
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
LXMO103C
LXMO109C
LXMO116C
LXMO151C
LXMO159C
LXMO180C
**Corequisite Courses**
LXMO201C
LXMO164C

**MATH092C : Introduction to Algebra**

A stand-alone preparatory course. Topics include expressions, linear equations and inequalities, linear functions, slope, word problems, systems of linear equations, radicals, polynomials and factoring techniques, rational expressions, quadratic equations, and exponents. Calculator use is allowed in the course. The institutional credits awarded for this course do not count toward graduation requirements but are calculated into GPA. Completion of this course requires a grade of C or higher to advance to a college-level mathematics course. For institutional credit only.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Permission of academic advisor
**Learning Outcomes**

- Apply the properties of real numbers to simplify algebraic expressions.
- Solve algebraic equations in one variable, including formulas and proportions.
- Solve algebraic inequalities in one variable, including single and compound inequalities, and show solutions in interval notation and on a number line.
- Graph points and lines on a coordinate plane.
- Write linear equations from information given about the line.
- Graph and define functions using function notation.
- Solve and graph systems of linear equations, including applications of systems.
- Apply the rules of exponents in simplifying algebraic expressions.
- Perform operations on polynomials.
- Demonstrate the techniques of factoring polynomials.
- Perform operations on rational expressions and express in simplest terms.
- Perform operations on radical expressions and express in simplest terms.
- Solve and graph quadratic equations, including applications of quadratic equations.

**MATH106C : Statistics I: An Introduction to Statistical Reasoning**

Recognizing that data and variability impact our daily decisions, Statistics I: An Introduction to Statistical Reasoning focuses on developing statistical literacy through an investigative process of problem-solving and decision-making. Students participate in the statistical process by formulating questions, analyzing data, and interpreting results, learning to become critical consumers of statistical information. The course introduces students to descriptive and inferential statistics. Topics include statistical distributions, linear regression and correlation, surveys and experiments, sampling distributions, probability, confidence intervals and hypothesis testing. A variety of statistical tools and software are used to explore concepts and deepen students' conceptual understanding of the topics.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

High school Algebra II with a C or higher [or equivalent]; MATH 092 with a C or higher; or recommendation of the Math/Physics Department.

MATH092C

**Learning Outcomes**

- Identify types of data and sampling methods.
- Identify, create, and interpret common statistical graphs.
- Calculate basic descriptive statistics (central tendency, variation, and position).
- Apply basic probability concepts (addition rule, multiplication rule, complement).
- Identify and solve problems involving discrete probability distributions.
- Identify and solve problems involving continuous probability distributions.
- Apply the Central Limit Theorem to problems involving sampling distributions.
- Calculate a confidence interval estimate of population mean, proportion, or standard deviation.
- Test a claim concerning a population mean, proportion, or standard deviation.
- Calculate and interpret the linear correlation coefficient.
- Produce a linear regression model to solve an application problem.

**MATH120C : Quantitative Reasoning**

Exposes students to a wide range of general mathematics. Problem solving and critical thinking skills, along with the use of technology, will be emphasized and reinforced throughout the course as the student becomes actively involved in solving applied problems. Topics include number systems, set theory, modeling, finance, geometry, measurement, probability, statistics, and selected subtopics related to the student's major field of study. A graphing calculator is strongly recommended. Students who have received credit for this course may not also receive credit for MATH 120XC.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Satisfactory placement test scores as defined by the mathematics faculty or successful completion (with a grade of C or better) of MATH 092C or by permission of the math department chair.

MATH092C

**Learning Outcomes**

- Solve problems involving percent and proportion.
- Convert between number systems that have different bases.
- Apply finance formulas for simple and compound interest and annuities.
- Convert between standard and metric systems of measurement (area, volume, weight, temperature).
- Calculate perimeter, area, volume, and surface area of two- and threedimensional objects.
- Apply trigonometric relationships.
- Apply counting methods and fundamentals of probability.
- Calculate measures of central tendency and dispersion.
- Build and interpret frequency distributions and statistical graphs.
- Apply the normal distribution to solve problems.
- Apply, and interpret linear correlation and regression.

**MATH120XC : Quantitative Reasoning**

Exposes students to a wide range of general mathematics. Problem solving and critical thinking skills, along with the use of technology, will be emphasized and reinforced throughout the course as the student becomes actively involved in solving applied problems. Topics include number theory and systems, functions and modeling, finance, geometry, measurement, probability, statistics, and selected subtopics related to the student's major field of study. Students who have received credit for this course may not also receive credit for MATH 120C.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Satisfactory placement test scores as defined by the mathematics faculty or successful completion (with a grade of C or better) of MATH 092C or by permission of the math department chair.

MATH092C

**Learning Outcomes**

- Solve problems involving percent and proportion.
- Convert between number systems that have different bases.
- Apply finance formulas for simple and compound interest and annuities.
- Convert between standard and metric systems of measurement (area, volume, weight, temperature).
- Calculate perimeter, area, volume, and surface area of two- and threedimensional objects.
- Apply trigonometric relationships.
- Apply counting methods and fundamentals of probability.
- Calculate measures of central tendency and dispersion.
- Build and interpret frequency distributions and statistical graphs.
- Apply the normal distribution to solve problems.
- Apply, and interpret linear correlation and regression.

**MATH122C : Intermediate Algebra**

Reviews introductory algebra concepts such as solving systems of linear equations and factoring and covers intermediate algebra topics including compound and absolute value inequalities; systems of linear inequalities; quadratic and higher order functions and equations; graphing; composition and transformations of functions; rational, radical, exponential, and logarithmic functions and equations; and applications of each topic. A TI 84 graphing calculator is required.

**Credits** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Recommendation of the Math/Physics Department based on placement testing.

MATH092C

**MATH124C : College Algebra**

Topics include linear, quadratic, and higher degree equations; rational, radical, exponential, and logarithmic equations; graphs of functions; models and applications of functions; systems of linear equations; matrices and conic sections; sequences and series; and trigonometry. A graphing calculator is required. (Prerequisite: MATH 122C with a grade of "C" or higher or by recommendation of the Math/Physics Department based on placement testing.) Students who have received credit for MATH 124XC may not also receive credit for MATH 124C.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Recommendation of the Math/Physics Department based on placement testing.

MATH122C

**Learning Outcomes**

- Describe key features of the graphs of functions when given tables, equations, or graphs.
- Solve equations including: linear, quadratic, rational, radical, absolute value, exponential, and logarithmic equations.
- Perform transformations and algebraic operations (including composition) on functions
- Solve absolute value inequalities.
- Solve and graph higher order polynomial equations and functions.
- Solve systems of equations in two and three variables.
- Solve right triangles using basic trigonometry.
- Analyze and graph equations of conic sections.
- Convert between lists, equations, and sigma notation in sequences and series.
- Apply function and equation solving skills to real world problems.

**MATH124XC : College Algebra**

Topics include linear, quadratic, and higher degree equations; rational, radical, exponential, and logarithmic equations; graphs of functions; models and applications of functions; systems of linear equations; matrices and conic sections; sequences and series; and trigonometry. A graphing calculator is required. Students who have received credit for MATH 124XC may not also receive credit for MATH 124C.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Recommendation of the Math/Physics Department based on placement testing.

MATH122C

**MATH125C : Finite Mathematics**

Topics include matrices, linear programming, counting techniques, sets, probability, statistics, mathematics of finance, Markov chains, and game theory. Applications will be emphasized. A graphing calculator will be required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH124C

**Learning Outcomes**

- Use matrix operations to solve applications involving systems of equations, including input-output systems and message encoding.
- Formulate and solve a linear programming problem using graphing or the simplex method.
- Solve problems in finance (simple and compound interest and annuities; amortization tables).
- Perform operations on sets and use Venn diagrams to solve application problems.
- Apply concepts of probability, including conditional probability and Bayes' Theorem.
- Perform calculations involving counting principles and apply to probability problems.
- Solve applications involving the binomial probability distribution.
- Calculate measures of central tendency and variation for a data set or frequency distribution.
- Solve applications involving the normal distribution.
- Use regular or absorbing Markov chains to solve long-term probability problems.
- Calculate payoff and evaluate strategies for applications involving strictly determined or mixed strategy games.

**MATH130C : Geometry**

Introduces the student to college-level Euclidean geometry, including definitions, postulates, and theorems. Topics include reasoning and proofs; parallel and perpendicular lines; triangles and congruence; quadrilaterals; circles; transformations; area; and analytic geometry. The course also introduces concepts in non-Euclidean geometry. The student will complete a required project. A graphing calculator, compass, protractor, and dynamic geometry software are required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- High school Algebra II with a grade of C or higher (or equivalent) or MATH 092 with a grade of C or higher or by recommendation of the Math/Physics Department.

MATH120C

MATH124C

MATH124XC

**Learning Outcomes**

- Use axioms, definitions, and given theorems to prove properties of geometry.
- Prove two triangles congruent under varying sets of hypotheses (the traditional SAS, SSS, ASA, AAS proofs).
- Use the inequality theorems for triangles to establish relationships between measures of sides and angles of triangles.
- Explain the difference between Euclidean and Non-Euclidean Geometries as related to the Parallel Postulate.
- Use symmetry and transformations to solve problems.
- Use logical reasoning in geometric proofs.
- Write analytic proofs using properties from algebra and congruence.
- Apply the properties of right triangles, including Pythagorean Theorem and similar right triangles, and trigonome-try.
- Apply the properties of circles to solve problems.
- Use geometric formulas to compute the area of plane figures.

**MATH140C : Precalculus**

Topics include, rational functions, polynomial and rational inequalities, right triangle trigonometry, graphs of trigonometric functions, trigonometric identities and equations, oblique triangles, polar coordinates and equations, vectors, systems of equations and inequalities, matrices, rotation of conic sections, counting methods, binomial theorem, and limits. A graphing calculator is required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Recommendation of Math Department based on placement testing

MATH124C

**Learning Outcomes**

- Graph and evaluate rational and polynomial functions.
- Solve applied problems involving right triangles and trigonometric functions.
- Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.
- Analyze and graph trigonometric functions and their transformations.
- Prove trigonometric identities.
- Solve right and oblique triangles.
- Solve trigonometric equations.
- Graph and transform equations in polar coordinates and using parametric equations.
- Perform operations on and graph complex numbers.
- Apply vector operations and use vectors to solve applications.
- Solve systems of equations using matrix methods.
- Graph and solve nonlinear system of equations and inequalities.
- Analyze equations of and graph rotations of conic sections.
- Prove infinite sequences of statements through mathematical induction.
- Evaluate expressions containing factorials with permutations, combinations, and apply to Pascal's triangle.

**MATH205C : Calculus I**

Includes limits; derivatives of algebraic, trigonometric, exponential and logarithmic functions; antiderivatives; and an introduction to integration. Applications will be stressed throughout the course including velocity, acceleration, curve sketching, optimization, and related rates. A graphing calculator is required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH140C

**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving limits, continuity, derivatives, anti-derivatives, and definite integrals.
- Evaluate limits and derivatives of many functions and antiderivatives of simple functions.
- Solve problems involving limits, derivatives, and antiderivatives using numerical methods.
- Solve problems involving limits, derivatives, and antiderivatives using graphical methods.
- Construct and solve mathematical models using definite integrals.

**MATH206C : Calculus II**

Topics include indefinite integration, the definite integral, the Fundamental Theorem of Calculus, integrals of elementary transcendental functions, techniques of integration, polar coordinates, and power series including Taylor series. Applications will be stressed throughout the course including area, volumes of revolution, centroids, and moments of inertia. A graphing calculator is required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH205C

**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving antiderivatives, definite integrals, and series.
- Determine or evaluate antiderivatives or definite integrals involving algebraic or transcendental functions.
- Determine the convergence or divergence of a series.
- Solve problems involving definite integrals and series using numerical methods.
- Solve problems involving antiderivatives and definite integrals using graphical methods.
- Construct and solve mathematical models using definite integrals.

**MATH208C : Multivariable Calculus**

A study of vectors, vector products, vector algebra, and vector-valued functions; motion in space; partial differentiation, gradient, divergence, curl, chain rule, tangent planes, extrema, and Lagrange multipliers; multiple, line, and surface integrals; divergence, and Green's and Stokes' theorems. A graphing calculator is required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH206C

**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving the algebra and differential and integral calculus of multivariable vector-valued functions, including Green's, Stokes', and divergence theorem.
- Solve problems involving vector algebra and vector products.
- Solve problems involving limits, derivatives, and integrals of multivariable vector-valued functions including those invoking the use of Green's, Stokes', and divergence theorem.
- Approximate the value of a function using the tangent plane approximation.
- Graph cylinders, quadric surfaces, multivariable functions and their level curves, and vector-valued functions.
- Apply vector products to calculate curvature and torsion.
- Solve extremization problems using the second derivative test and the Lagrange multiplier technique.

**MATH210C : Differential Equations**

Topics include methods of solving and applications of ordinary first- and second-order differential equations, Laplace transformations, series solutions, basics of linear algebra, and systems of differential equations. A graphing calculator is required.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MATH206C
**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving differential equations
- Determine solutions to first-, second-, and higher order differential equations
- Determine solutions to systems of first-order linear differential equations.
- Determine solutions to differential equations using Laplace and Inverse Laplace Transforms
- Determine power series solutions to differential equations about ordinary points
- Construct and solve mathematical models using differential equations

**MATH215C : Mathematical Proofs**

Introduces students to reading and writing mathematical proofs. Topics include sets and logic, methods of proof, equivalence relations, functions, and cardinality, and topics from number theory and calculus.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MATH205C
**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving sets, divisibility, congruence, the algebra of real numbers, equivalence relations, functions, and cardinality. Communicate mathematical reasoning using appropriate mathematical vocabulary.
- Use logic and methods of proof, including direct proof, proof by contrapositive, proof by cases, proof by contradiction, existence proof, and induction proof, to produce valid mathematical proofs.
- Assess mathematical reasoning, both correct and flawed.
- Generate conjectures and determine their truth value, providing counterexamples or proofs as appropriate.
- Draw Venn diagrams to indicate set operations and to aid in the construction of proofs.

**MATH220C : Elementary Linear Algebra**

Emphasizes techniques of linear algebra with applications. Topics include matrix operations, determinants, solutions of systems of linear equations, linear independence, matrix factorization, linear transformations, vector spaces, orthogonality, inner products and norms, and eigenvalues and eigenvectors. A graphing calculator is required.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MATH205C
**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving matrices, vector spaces and subspace, eigenvalues and eigenvectors, and linear transformations.
- Use matrices to determine solutions to systems of linear equations.
- Determine different matrix factorizations.
- Determine orthogonality.
- Determine the Least-Squares solution to a nonhomogeneous system of linear equation
- Construct an orthogonal/orthonormal basis to a vector space using the Gram-Schmidt Orthonormal Process.

**MATH271C : Probability and Statistics for Engineers and Scientists**

Topics include: descriptive statistics; probability and probability distributions; statistical test and confidence intervals for one and two samples; building regression models; designing and analyzing experiments; statistical process control. Includes use of a statistical software package throughout the course. A graphing calculator will be required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH205C

**Learning Outcomes**

- State, interpret, and apply the definitions, theorems, and properties involving descriptive statistics, the probability of discrete and continuous random variables, statistical intervals, hypothesis tests, ANOVA, factorial experiments, as well as linear regression and correlation.
- Determine measures of location and variability as well as cumulative probability for the binomial, Poisson, normal, exponential, and gamma distributions.
- Determine expected value, covariance, and correlation for jointly distributed random variables.
- Determine measures of location and variability, statistical intervals, test hypotheses for sample data, including data from two or more populations, and perform linear regression.
- Solve probabilistic and statistical problems using a statistical software package.
- Solve problems using the graphing capabilities of a statistical software package.
- Maximize the time of flight of a paper helicopter using a designed experiment involving a screening, steepest ascent, and the response surface methodology phase.

**MATH290C : Senior Project/Internship**

Serves as the capstone course for the Associate in Science in Mathematics Degree, in which the student will demonstrate the application of the knowledge gained throughout the program. This will be achieved either by an independent study investigating mathematics, physics, and/or engineering topics selected by the student with guidance from their program advisor or through participation in an internship with an approved industry partner. The student will submit a written paper and make an oral presentation of the project/internship in a student seminar.

**Credits** 4

**Lab/Practicum/Clinical Hours** 12

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

All MATH courses with grades of C or higher and the approval of the department chair. Only offered in the final semester of the Mathematics program.

MATH205C
MATH208C
MATH210C
MATH206C

**Learning Outcomes**

**Learning Outcomes**

- Identify, discuss, and analyze mathematical and physical theories relevant to STEM.
- Demonstrate technical proficiency and effective problem-solving ability in completing mathematical processes.
- Communicate mathematics in both oral and written formats using appropriate mathematical language.
- Use logical reasoning and mathematical proof to justify results.
- Apply mathconcepts to other disciplines including business, economics, social sciences, and natural sciences.

**MCET105C : Engineering Design**

Introduces students to the fundamentals of engineering design and professional practice through the use of hands-on projects. Students will learn about the design cycle and the necessary steps to complete a successful project as a member of a team. Topics include problem identification, brainstorming, drawing and documentation, reverse engineering, testing and evaluation, and manufacturing. Cost, safety, and environmental issues are considered as well as ethical and professional responsibilities. Students will document designs using industry standard 3-D modeling software and will be required to communicate their designs through written, oral, and graphical presentations. A $10 materials fee will be assessed for all students.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**MCET106C : Advanced CAD Modeling**

Builds on the skills learned in MCET 105C. Advanced features of CAD will be explored and demonstrated in their application to mechanical design. CAD program used is latest version SolidWorks. Skills learned include advanced part features (sweep, loft, and datum curves), design automation techniques (configurations and design tables), advanced assemblies (animation, simulations, and top-down design), and advanced design features (sheet metal and mold design). Participants in the class are eligible to download a student version of SolidWorks and take the Certified SolidWorks Associate CSWA exam.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MCET105C
**Learning Outcomes**

- Be proficient in the following aspects of CAD modeling: sketching, datum features, advanced features, assemblies, detailed and assembly drawings, animations, and top-down design.

**MCET110C : Engineering Principles**

Explores a broad range of topics across multiple disciplines including mechanisms, energy, machine control, fluid power, statics, materials, statistics, and kinematics. Students will develop problem-solving skills and technology literacy as they create solutions to various challenges. The use of industry standard 3-D CAD and Microsoft Office applications is integrated throughout as students document their designs in written and oral formats.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MCET105C
**Corequisite Courses**
MATH124C

**MCET150C : Statics and Strength of Materials**

Analysis of external force systems acting on bodies in equilibrium with subsequent treatment of the stresses and strains induced. Lab projects will involve the use of nondestructive and destructive testing equipment to determine the various mechanical properties of materials and their behavior under load.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH124C
PHYS133C

**Learning Outcomes**

- Understand engineering mechanics as it applies to statics.
- Define and describe the qualities and types of forces that act on a solid body.
- Determine and analyze the resultants of concurrent, parallel, and nonconcurrent force systems.
- Determine and analyze the moment of a force.
- Develop a free-body diagram for a given body or structural system.
- Analyze forces and perform stress and strain analyses on structures and basic machine elements.
- Identify and analyze reaction forces for concurrent, parallel, and nonconcurrent coplanar force systems using the concepts of equilibrium.
- Analyze trusses, frames, and machines using various methods and the concepts of equilibrium.
- Calculate direct and shear stress on objects as well as determine acceptable design limits based on the allowable and ultimate stresses of a material.
- Determine strain and deformation of objects when subjected to loads and stresses.
- Calculate the location of the centroid of a complex shape
- Calculate the moment of inertia of a composite shape about its centroidal axis.
- Select and understand engineering materials based upon the composition, behavior, physical and mechanical properties.
- Use mechanical test methods to determine material properties.
- Calculate torsional shear stresses due to applied torque.
- Determine the internal shear and bending at any point along the length of a beam

**MCET205C : Material Science**

This course studies the structures, properties, and behavior of engineering materials as well as how they can be altered through mechanical working and heat treating. Materials considered are ferrous and nonferrous metals and their alloys, plastics, and ceramics. Consideration is also given to the selection of these materials to meet manufacturing and design criteria. Lab experiments will complement the classroom presentations.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Recommended Prerequisites**

MCET 150C

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

CHEM105C

**Learning Outcomes**

- Understand the major concepts in the overview of metals, polymers, and ceramics; testing materials; polymers; ceramics; Fe-Fe3C phase diagram and alloying elements in steel; types of steel; heat treatment of steel; and nonferrous metals.

**MCET229C : Thermodynamics**

The fundamentals of equilibrium thermodynamics will be presented. Topics will include thermodynamic properties, processes, process diagrams, the First and Second laws, entropy, and an introduction to thermodynamic cycles. Energy analysis of both closed and open systems will be performed with considerations to overall system efficiencies. Discussions and examinations of renewable energy technologies is integrated throughout the course and their impact on society is considered.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH205C
PHYS133C

**Learning Outcomes**

- Determine its properties of state using formulas, tables and charts as appropriate.
- Determine the interchange of energy as work and heat through application of the first law of thermodynamics.
- Using the Second Law, the student will be able to calculate the limiting efficiencies of simple heat engines and heat pumps.
- Differentiate the difference between open and closed system and apply appropriate analysis techniques a variety of engineering systems such as piston-cylinder devices, mixing tanks, valves, turbines, compressors, pumps, and heat exchangers.

**MCET250C : Dynamics and Mechanical Design I**

A study of the effect of forces acting on rigid and deformable bodies subject to static and dynamic loading and the utilization of this knowledge for the design of mechanical components. Major topics include strength and fatigue, kinematic analysis, power transmission, design methodology, and computer applications.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ENGL120C
ENGL125C
MCET105C
MCET150C
MATH140C

**Learning Outcomes**

- Understand rational design methods and procedures.
- Perform combined stress analyses.
- Apply theoretical and empirical principles of mechanics in dealing with steady and variable loading.
- Employ the factor of safety method of failure analysis to design and size mechanical components.
- Perform deflection analysis and column stability.
- Size and select power transmission components such as belts and pulleys, chains, and sprockets.
- Select appropriate gear types and design gear trains.
- Use various software programs to solve engineering problems.

**MCET260C : Mechanical Design II**

A continuation of MCET 250C, treating the topics of rigid and elastic fasteners, shafts and bearings, welds, springs, clutches, and brakes. A series of design projects combining several of these elements will be assigned. Computer methods will be employed where appropriate.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH205C
MCET250C

**Learning Outcomes**

- Design shafts and axles for power transmission applications.
- Make selections of sliding and roller bearings.
- Specify standard mechanical hardware for use in machine design
- Understand bolted joint mechanics and select fasteners.
- Calculate the strength of simple welded joints and design welded connections.
- Design/specify various types of springs.
- Design simple clutches and brakes.

**MCOD118C : Introduction to Hospital Diagnosis Coding**

Provides an introduction to hospital diagnosis coding concepts, nomenclature, and ICD-10-CM classification systems. It includes discussion of inpatient reimbursement systems including prospective payment, managed care, and other third-party payers. An introduction to basic current hospital diagnosis coding systems principles in assigning valid diagnostic codes is presented. Official Inpatient Coding Guidelines developed by the American Hospital Association are utilized for accurate coding assignment of diagnoses.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HLTH101C
HLTH104C
BIOL120C
BIOL122C

**Learning Outcomes**

- Explain diagnostic coding concepts and properly locate diagnoses codes.
- Interpret and apply official coding guidelines for inpatients.
- Differentiate between principal and secondary diagnoses in the inpatient setting.
- Evaluate payment reimbursement concepts such as prospective payment, managed care, and other third-party payment systems.
- Describe how coding data is used in Uniform Hospital Discharge Data reporting.

**MCOD119C : Introduction to Hospital Procedure Coding**

Provides an introduction to current hospital procedure coding systems principles in assigning valid ICD-10-PCS procedure codes, expanding on and further applying concepts learned in Introduction to Hospital Diagnosis Coding. Official Inpatient Coding Guidelines developed by the American Hospital Association are utilized for accurate selection of principal diagnosis and procedure and determining other diagnoses or procedures that will be coded.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MCOD118C
**Learning Outcomes**

- Explain procedure coding concepts and properly locate procedure codes.
- Integrate diagnostic coding concepts and codes.
- Accurately interpret and apply official coding guidelines for inpatients.
- Differentiate between principal and secondary diagnoses in the inpatient setting.

**MCOD218C : Advanced Hospital Coding**

Provides more complex cases using medical record reports. Students must read and interpret data utilizing prior learned skills. The 3M computerized encoding and grouping system will be employed to provide experience in utilizing technology to select codes and to calculate DRG payments for prospective payment systems. The student will expand on and apply the principles of reimbursement and coding derived from Introduction to Hospital Diagnosis Coding and Introduction to Hospital Procedure Coding at an advanced level. The student will use the AHA Official Inpatient Coding Guidelines to accurately identify and sequence the principal diagnosis and procedure. Coding discussions will include determining which diagnoses or procedures should be included as secondary.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MCOD119C
**Learning Outcomes**

- Apply International Classification of Diseases Clinical Modification and Procedure Coding System concepts to inpatient cases.
- Evaluate diagnosis-related groups and relate them to hospital reimbursement.
- Differentiate between principal and secondary diagnoses and procedures in the inpatient setting.
- Calculate case mix indexes and explain how they are used by hospital administration in determining resource allocation and statistically predicting outcomes.
- Describe the present on admission indicators and their impact on diagnosis related groups calculation.

**MCOD219C : Ambulatory Coding**

Presents hospital ambulatory coding using CPT coding systems for procedures and ICD-10-CM coding system for diagnoses. Ambulatory reimbursement and payment systems are presented including prospective payment system and regulatory compliance issues. The course will include an introduction to ambulatory coding and applying the principles to medical record documentation. The 3M computerized encoding and grouping system will be employed to provide experience in utilizing technology to select codes and to calculate payments for prospective payment systems.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MCOD218C
**Learning Outcomes**

- Accurately locate and apply current procedural terminology codes and modifiers.
- Apply clinical modification diagnosis coding concepts to ambulatory case scenarios.
- Calculate ambulatory patient classification and relate to hospital reimbursement.
- Describe Medicare Outpatient Prospective Payment System.
- Identify ambulatory diagnoses based on official outpatient coding guidelines.
- Connect diagnosis/condition to current procedural terminology codes.

**MFET111C : Manufacturing and Materials Processing**

Provides a basic understanding of traditional methods of materials processing used in product manufacturing. Through lectures, demonstrations, and first-hand lab exposure, the student is given the theory and applications of each process. The following are covered: casting, extruding, forging, molding, forming, heat treating, joining, and an introduction to machining methods, both conventional and numerically controlled. A $20 materials fee will be assessed for all students.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify basic mechanical properties of typical engineering materials and methods of modifying them.
- Use basic precision measuring equipment and/or tools.
- Read and interpret engineering drawings, including GD&T.
- Be versed in machine shop safety practices and procedures.
- Distinguish between processes, appreciate their advantages/disadvantages, and design basic processing sequences.
- Set up and operate the following machines and demonstrate safe operating procedures: cut-off saw, lathe, vertical milling machine, and conventional surface grinder.
- Produce a sand casting given a simple pattern and related engineering documentation.

**MFET202C : Measurement and Control**

Begins with the study of basic electronics (analog and digital) and electronic components (transistors, op-amps, SCR's). Electromechanical principles are introduced, leading to consideration of sensors and transducers used in production processes. Paralleling this sequence is the development of programming in Visual Basic. These two paths join during the second half of the course where programming logic controllers (PLCs) and relay ladder logic (RLL) are presented. In the lab, students gain hands-on experience with all hardware and software covered in the course.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PHYS135C

**Learning Outcomes**

- Learn the function and safe operation of basic electrical and electronics test equipment.
- Review of basic circuit theory.
- Apply electromechanical concepts in design and selection of systems.
- Have working knowledge of computer programming, with emphasis on industrial applications.
- Implement industrial transducers and controllers through the selection, setup, and calibration of measurement instrumentation.
- Conduct and document laboratory experiments.
- Use various software programs to solve engineering problems.

**MFET210C : Lean Manufacturing**

A study of the concept of lean production applied to the manufacturing sector. The course covers the fundamental concepts and philosophy of lean used to achieve operational excellence. Lean concepts such as waste reduction, one-piece flow, pull systems, constant continuous improvement, and development of personnel into leaders. Lean concepts/tools covered will include kaizen, value stream mapping, work standardization, kanban, 5S, 5 why, A3 report, just in time (JIT), and takt time.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Describe the difference between Lean manufacturing and traditional mass production systems.
- Identify muda (waste) and its detriments to efficient manufacturing.
- Create and use standards and stability in a lean enterprise.
- Describe and use visual management concepts.
- Identify and implement the 5 S system in a lean environment.
- Understand standardized work in lean production.
- Understand and demonstrate a JIT and kanban system.
- Develop and use a value stream map.
- Develop and use an A3 report.
- Describe the value of the jidoka principle.
- Understand the importance of management involvement in creating a lean culture.
- Describe hoshin planning and its importance in a lean manufacturing system

**MFET220C : Manufacturing Processes and Machine Tools**

A technical study of the theory, equipment, and application of machine tools and metal removal processes. Processes covered include turning, milling, and drilling, with an emphasis on numerical control. Theory is applied through actual machine operation in lab.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MFET111C
MCET105C

**Learning Outcomes**

- Understand the physics and dynamics of the metal cutting process and the various types of chip formation.
- Identify mechanical and physical properties of various cutting tool materials and specify the proper tool material for a specific application.
- Select the proper machining processes required to generate various features for a desired part.
- Understand and describe the operation of various types of machining operations and specify the application and limitations of each of the machines and tooling required.
- Operate CNC machines and create basic Gcode programs.
- Understand the economics of machining and estimate the cost of manufactured items.

**MFET231C : Production Systems**

A study of the organization of the production system as well as the techniques used to control its operation. Topics covered include forecasting, production planning, plant layout, inventory control, work measurement, job sequencing, and operation scheduling. An introduction to lean manufacturing concepts is also provided.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MFET111C

**Learning Outcomes**

- Understand operations management tools ,maintenance and reliability, JIT and lean operations, location and layout global challenges strategy, project management techniques, forecasting, quality, design of goods, process strategy/sustainability, human resources and work measurement, and production planning/scheduling in a manufacturing context.

**MFET241C : Computer-Integrated Manufacturing**

A study of flexible industrial automation as it applies to product-producing industry. Particular emphasis is on numerical control, CAD/CAM, and computer-integrated manufacturing. The basic theory and application of these areas are studied. In the lab portion of the course, the student has the opportunity to set up, program, and operate aspects of a computer-controlled manufacturing system.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MFET220C

**Learning Outcomes**

- The student will learn basic CNC programming techniques using manual G-code programming language.
- The student will learn to use CAM software in order to generate CNC programs (G-code) from CAD modeling data.
- The student will become familiar with simulation software. These include CNC programming and machine simulation, robotic setup, robotic programming, and simulation.
- The student will learn the basics of robotics and various programming methods.
- The student will become familiar with the concepts and components of hard and flexible automation.
- The student will learn about other automation concepts and components that comprise the CIM function.
- The student will function cooperatively and effectively in group settings on project or laboratory work.
- The student will produce technical documentation used to build and troubleshoot an advanced manufacturing process.
- The student will produce a product and/or design a manufacturing system using CAD/CAM/CNC or FMS tools.

**MFET252C : Quality Control**

A study of the techniques used to collect, organize, and analyze information that can be used in making decisions regarding quality. The course will begin with a review of the basic principles of statistics and probability and then develop such topics as process capability, process control, acceptance sampling, and reliability. The scope of quality will be expanded to include such topics as reliability, quality costs, product liability, 6-sigma, and quality systems. Activities will provide the student with the opportunity to apply the principles developed in the classroom through the use of computer examples and hands-on exercises.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH106C

**Learning Outcomes**

- Develop a working knowledge of statistical terminology and symbols.
- Demonstrate an understanding of the basic concepts underlying probability and statistics.
- Construct X, R, p, and C charts and demonstrate knowledge of chart interpretation.
- Use various sampling plans current in industry.
- Use computer software applicable to statistical quality control.
- Understand the relationship between quality and reliability.
- Determine the cost of quality.
- Understand quality systems such as ISO 9000, ISO 14000, and Six Sigma.

**MHTH187C : The Helping Relationship: Interpersonal Communication Skills for Today's Professional**

Knowledge, skills, and personal characteristics that are needed in today's professional world of helping careers will be examined. Students will learn the purpose and skill of interpersonal communication techniques through various didactic and experiential methods. Coverage will include documentation and verbal and non-verbal communications, along with time management, self-management, and successful work practices. Dynamics of human behavior, culture, and specific needs seen in the workplace will be explored.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Discuss interviewing, counseling, and psychotherapy and the requirements for each helping professional working in these skill areas.
- Understand intentionality and cultural intentionality as skills as well as therapeutic processes and how each will assist you in your profession when working with a wide variety of clients.
- Demonstrate your understanding on how to adapt your attending, listening, and responding skills to adapt to clients with diverse cultural backgrounds.
- Respond to ethical dilemmas facing them while working with clients.
- Communicate the connection between stress, brain activity, neuroscience, and the helping connection of attending, listening, and responding.
- Communicate the knowledge of each level of skill on the Microskill Hierarchy and how to apply these skills in a counseling session.

**MHTH195C : Mental Health Practicum I**

The student will work in an approved mental health setting under the supervision of an approved professional. Periodic conferences between the supervisor and practicum coordinator are planned to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience.

**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

HSV111C
HSV242C
MHTH187C
PSYC105C
PSYC283C

**MHTH298C : Mental Health Practicum II**

The student will continue field experience work in an approved mental health setting under the supervision of an approved professional. Skills, knowledge, and personal characteristics are built on and integrated into the learning and supervision of this course, as well as second-year coursework including ethics, individual counseling, and conflict resolution. Periodic conferences between the supervisor and practicum coordinator are planned to evaluate the student's progress. At the close of the semester, the student will submit documentation of the practicum activities/experience and demonstrate the ability to relate theory to practice in the chosen field of experience. The student will complete a total of 125 hours of field experience.

The student will also complete an interview with the practicum advisor the semester prior to the first scheduled practicum. Special requests regarding practicum entrance may be brought to the department chair by the student. Review of the requests will be made by the department faculty and special exemptions may be made for entrance into the practicum.
**Credits** 4
**Lab/Practicum/Clinical Hours** 8
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
MHTH195C

**MUSC105C : Introduction to Music**

Offers a fundamental approach to perceptive listening based on a detailed study of several masterpieces representing different periods and forms. The pieces will be studied from aesthetic and historical perspectives.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**MUSC106C : The History of Jazz, Blues, and Rock and Roll**

Examines the history of three of America's great musical contributions to world culture via detailed study of several masterpieces in each genre. Students will explore the fundamental musical elements, the historical roots, and the development of musical traditions of each style. Various listening and vocal music guides will facilitate the student's knowledge and awareness.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**MUSC107C : World Music**

Through the exploration of soundscapes, or music within a cultural setting, students will learn sound characteristics and instrument classification that can be used for any type of music. Students will come to understand the significance of world music and music within a culture. Students will develop critical listening skills and the vocabulary necessary to understand and evaluate music. No musical background is necessary.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**MUSC150C : Introduction to Guitar**

Offers a fundamental approach to learning the guitar for beginning students with varied levels of experience. Students will be involved with and exposed to performance situations, some practical applications of music theory, and different playing styles and techniques. Students must provide their own acoustic instruments.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**MUSC155C : Vocal Production and Performance**

Offers an opportunity to study various aspects of vocal production and performance, which will include vocal process from theory to application. The vocal process will focus on optimizing one's vocal understanding through performance techniques and musicianship.
**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**NURS115C : Nursing I**

Introduces the student to the role of the associate degree nurse and the concepts of nursing knowledge and caring within the self-care framework. The emphasis of the course is on assessment of the universal self-care requirements, which include air, food, activity and rest, elimination, water, and solitude and social interaction. Promotion of normalcy and prevention of hazards will be addressed within the universal self-care requirements. The focus is on the use of the educative/supportive nursing system and effective therapeutic communication to care for patients with selected self-care deficits. Professional, ethical, and legal standards of nursing practice are introduced to provide culturally-sensitive nursing care. Opportunities for application of nursing knowledge to clinical practice are provided through the Clinical Resource Center experiences and patient care assignments in various settings. To facilitate the teaching/learning process, ongoing evaluations occur through interactions between student and faculty. Students enrolled in this course will be charged a $500 per semester clinical surcharge. Students enrolled in this course will be charged $615 to help cover the costs associated with ATI online practice and proctored assessments and tutorials, detailed individualized remediation plans, and end-of-program testing to prepare them for the NCLEX-RN licensure exam. Clinical sites are in medical/surgical settings.

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*All nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing major field courses must be passed before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C, BIOL 202C, and a math elective (MATH 120C or higher) to enter or progress in the nursing courses.*

**Credits** 8

**Lab/Practicum/Clinical Hours** 9

**Lecture Hours** 5

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

BIOL195C
ENGL101C
PSYC105C

**Learning Outcomes**

- Describe the nursing process as a problem-solving tool in planning nursing care to meet specific Universal Self-Care Requirements for the patient.
- Identify principles and concepts of nursing knowledge using critical thinking and information technology skills.
- Participate in providing for the self-care deficits of the patient with a focus on educative/supportive nursing system.
- Demonstrate knowledge of effective therapeutic communication when interacting with the patient.
- Provide nursing care for the patient with selected self-care deficits.
- Identify components in the environment that impact patient safety.
- Demonstrate knowledge of the concept of caring to provide culturally-sensitive nursing care.
- Identify professional, ethical, and legal standards within nursing.

**NURS116C : Nursing IIA**

Expands on the concepts of nursing knowledge and caring to support growth and development over the life cycle. The emphasis of the course is on universal, developmental, and/or health deviation self-care requirements. The student focuses on the educative/supportive and partially compensatory nursing systems and employs effective therapeutic communication to care for patients with selected self-care deficits throughout the life cycle. Professional, ethical, and legal standards of nursing practice are utilized to provide holistic and culturally-sensitive nursing care throughout the life cycle. Planned learning experiences provide the student with the opportunity to coordinate environmental and technological resources in the delivery of patient care. Opportunities for analysis of principles and concepts of nursing knowledge are provided through Clinical Resource Center experiences and patient care assignments in various settings. To facilitate the teaching/learning process, ongoing evaluations occur through interactions between student and faculty. Students enrolled in this course will be charged a $500 per semester clinical surcharge. Students enrolled in this course will be charged $615 to help cover the costs associated with ATI online practice and proctored assessments and tutorials, detailed individualized remediation plans, and end-of-program testing to prepare them for the NCLEX-RN licensure exam. Clinical sites include maternal/child, pediatrics, and gerontology settings.

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**Credits** 11

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 6

**Recommended Prerequisites**

MATH 251C strongly recommended

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Students are advised to follow this schedule:

**Semester 2**

- Prerequisites: NURS 115C, ENGL 101C, PSYC 105C, BIOL 195C
- Co-requisites: BIOL 196C, PSYC 220C

**Semester 3:**

- Prerequisites: NURS 117C, PSYC 220C, BIOL 195C, BIOL 196C
- Co-requisites: BIOL 202C, MATH 120C or higher (MATH 251C strongly recommended)

NURS115C
ENGL101C
PSYC105C
BIOL195C
PSYC220C
BIOL195C
BIOL196C

**Corequisite Courses**

BIOL196C
PSYC220C
BIOL202C
Mathematics elective (MATH 120C or higher level)

**Learning Outcomes**

- Utilize the nursing process and evidence-based practice to assist the patient to meet Universal, Developmental and/or Health Deviation Self-Care Requirements.

- Analyze principles and concepts of nursing knowledge using critical thinking, clinical reasoning, and information technology skills.
- Organize and provide for the self-care deficits of the patient throughout the lifecycle with a focus on educative/supportive and partially compensatory nursing systems.
- Employ effective therapeutic communication when interacting with the patient and health care team.
- Organize nursing care for the patient with a range of self-care deficits throughout the life cycle.
- Coordinate resources to assist the patient in maintaining a safe and supportive environment.
- Utilize the concept of caring to provide holistic and culturally-sensitive nursing care to the patient throughout the life cycle.
- Apply professional, ethical, and legal standards that support individual practice within nursing.

**NURS117C : Nursing IIB**

Expands on the concepts of nursing knowledge and caring to support growth and development over the life cycle. The emphasis of the course is on universal, developmental, and/or health deviation self-care requirements. The student focuses on the educative/supportive and partially compensatory nursing systems and employs effective therapeutic communication to care for patients with selected self-care deficits throughout the life cycle. Professional, ethical, and legal standards of nursing practice are utilized to provide holistic and culturally-sensitive nursing care throughout the life cycle. Planned learning experiences provide the student with the opportunity to coordinate environmental and technological resources in the delivery of patient care. Opportunities for analysis of principles and concepts of nursing knowledge are provided through Clinical Resource Center experiences and patient care assignments in various settings. To facilitate the teaching/learning process, ongoing evaluations occur through interactions between student and faculty. Students enrolled in this course will be charged a $500 per semester clinical surcharge. Students enrolled in this course will be charged $615 to help cover the costs associated with ATI online practice and proctored assessments and tutorials, detailed individualized remediation plans, and end-of-program testing to prepare them for the NCLEX-RN licensure exam. Clinical sites include mental health and medical/surgical settings.

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*All nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing major field courses must be passed before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C, BIOL 202C, and a math elective (MATH 120C or higher) to enter or progress in the nursing courses.*

**Credits** 11

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 6

**Recommended Prerequisites**

MATH 251C strongly recommended

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Students are advised to follow this schedule:

**Semester 2:**

- Prerequisites: NURS 115C, ENGL 101C, PSYC 105C, BIOL 195C
- Co-requisites: BIOL 196C, PSYC 220C

**Semester 3:**

- Prerequisites: NURS 116C, PSYC 220C, BIOL 195C, BIOL 196C
- Co-requisites: BIOL 202C, MATH 120C or higher-level math (MATH 251C strongly recommended)

NURS115C
NURS116C
ENGL101C
PSYC105C
BIOL195C
PSYC220C
BIOL195C
BIOL196C

**Corequisite Courses**

BIOL196C
PSYC220C
BIOL202C
MATH120C

**Learning Outcomes**

- Utilize the nursing process and evidence-based practice to assist the patient to meet Universal, Developmental and/or Health Deviation Self-Care Requirements.
- Analyze principles and concepts of nursing knowledge using critical thinking, clinical reasoning, and information technology skills.

- Organize and provide for the self-care deficits of the patient throughout the lifecycle with a focus on educative/supportive and partially compensatory nursing systems.
- Employ effective therapeutic communication when interacting with the patient and health care team.
- Organize nursing care for the patient with a range of self-care deficits throughout the life cycle.
- Coordinate resources to assist the patient in maintaining a safe and supportive environment.
- Utilize the concept of caring to provide holistic and culturally-sensitive nursing care to the patient throughout the life cycle.
- Apply professional, ethical, and legal standards that support individual practice within nursing.

**NURS175C : Paramedic to RN Bridge**

Introduces the student to the transition role of the paramedic to the associate degree nurse and the concepts of nursing knowledge and caring within the self-care framework. The emphasis of the course expands on the assessment of the universal self-care requirements, which include air, food, activity and rest, elimination, water, solitude, and social interaction. Promotion of normalcy and prevention of hazards will be addressed. The focus is on the use of the educative/supportive nursing system and effective therapeutic communication to care for patients with selected self-care deficits. Professional, ethical, and legal standards of nursing practice are introduced to provide culturally-sensitive nursing care. Opportunities for application of nursing knowledge to clinical practice are provided through Clinical Resource Center experiences and patient care assignments in the medical surgical setting. To facilitate the teaching/learning process, ongoing evaluations occur through interactions between student and faculty. Clinical sites are in medical/surgical settings. For Paramedic to RN students only.

Students enrolled in this course will be charged a $500 per semester clinical surcharge. Students enrolled in this course will be charged $100 to help cover the costs associated with ATI online practice and proctored assessments and tutorials, detailed individualized remediation plans, and end-of-program testing to prepare students for the NCLEX-RN licensure exam.

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*All nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing major field courses must be passed before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C, BIOL 202C, and a math elective (MATH 120C or higher) to enter or progress in the nursing courses.*

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ENGL101C
BIOL195C
PSYC105C

**Corequisite Courses**

BIOL196C
PSYC220C

**Learning Outcomes**

- Describe the nursing process as a problem-solving tool in planning nursing care to meet specific Universal Self-Care Requirements for the patient.
- Identify principles and concepts of nursing knowledge using critical thinking and information technology skills.
- Participate in providing for the self-care deficits of the patient with a focus on educative/supportive nursing system.
- Demonstrate knowledge of effective therapeutic communication when interacting with the patient.
- Provide nursing care for the patient with selected self-care deficits.
- Identify components in the environment that impact patient safety.
- Demonstrate knowledge of the concept of caring to provide culturally-sensitive nursing care.
- Identify professional, ethical, and legal standards within nursing.

**NURS178C : Transitions in Nursing**

Introduces the student to the advanced role of the associate degree nurse and the concepts of nursing knowledge and caring within the self-care framework. The course expands on the concepts of nursing knowledge and caring to support growth and development over the life cycle. The emphasis of the course is on universal, developmental, and/or health deviation self-care requirements. The student focuses on the educative/supportive and partially compensatory nursing systems and employs effective therapeutic communication to care for patients with selected self-care deficits throughout the life cycle. Professional, ethical, and legal standards of nursing practice are utilized to provide holistic and culturally sensitive nursing care throughout the life cycle. Planned learning experiences provide the student with the opportunity to coordinate environmental and technological resources in the delivery of patient care. Opportunities for analysis of principles and concepts of nursing knowledge are provided through Clinical Resource Center experiences and patient care assignments in various settings. To facilitate the teaching/learning process, ongoing evaluations occur through interactions between student and faculty. Clinical sites include medical/surgical settings. Students enrolled in this course will be charged a $500 per semester clinical surcharge. Students enrolled in this course will be charged $615 to help cover the costs associated with ATI online practice and proctored assessments and tutorials, detailed individualized remediation plans, and end-of-program testing to prepare students for the NCLEX-RN licensure exam.

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*All nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing major field courses must be passed before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C, BIOL 202C, and a math elective (MATH 120C or higher) to enter or progress in the nursing courses.*

**Credits** 7

**Lab/Practicum/Clinical Hours** 10

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ENGL101C
PSYC105C
PSYC220C
BIOL195C
BIOL196C

**Learning Outcomes**

- Describe the nursing process as a problem-solving tool in planning nursing care to meet specific Universal Self-Care Requirements for the patient.
- Identify principles and concepts of nursing knowledge using critical thinking and information technology skills.
- Participate in providing for the self-care deficits of the patient with a focus on educative/supportive nursing system.
- Demonstrate knowledge of effective therapeutic communication when interacting with the patient.
- Provide nursing care for the patient with selected self-care deficits.
- Identify components in the environment that impact patient safety.
- Demonstrate knowledge of the concept of caring to provide culturally-sensitive nursing care.
- Identify professional, ethical, and legal standards within nursing.
- Apply professional, ethical, and legal standards that support individual practice within nursing.

**NURS215C : Nursing III**

Incorporates principles and concepts from nursing knowledge and liberal arts education. The emphasis of the course is on the patient with commonly occurring illnesses. The student focuses on the wholly compensatory nursing system and evaluates effective therapeutic and collegial communication to enhance health outcomes. Planned learning experiences provide the student with the opportunity to utilize microsystem resources, evidence-based practice, quality improvement processes, and safety standards in the delivery of patient care. The student demonstrates accountability for the professional, ethical, and legal standards of nursing practice to provide holistic and culturally-sensitive nursing care throughout the life cycle. Opportunities to utilize critical thinking, clinical reasoning, and humanistic values are provided through Clinical Resource Center experiences and patient care assignments in various settings. To facilitate the teaching/learning process, ongoing evaluations occur through interactions between student and faculty. Students enrolled in this course will be charged a $500 per semester clinical surcharge. Students enrolled in this course will be charged $615 to help cover the costs associated with ATI online practice and proctored assessments and tutorials, detailed individualized remediation plans, and end-of-program testing to prepare students for the NCLEX-RN licensure exam. Clinical sites are in medical/surgical settings.

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*All nursing courses integrate theory and clinical experience. Failure to receive a satisfactory grade in either theory or the clinical experience portion of the course will result in a failing grade. All Nursing major field courses must be passed before proceeding to the next level. A grade of C or higher is required in BIOL 195C, BIOL 196C, BIOL 202C, and a math elective (MATH 120C or higher) to enter or progress in the nursing courses.*

**Credits** 9

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

NURS116C

NURS117C

Mathematics elective (MATH 120C or higher level)

BIOL202C

**Corequisites**

ENGL xxxC and Humanities/Fine Art/Language xxxC.

**Learning Outcomes**

- Utilize the nursing process, clinical reasoning, and evidence-based practice to design, implement, and evaluate care focusing on the self-care requirements for the patient with commonly occurring illnesses.
- Incorporate principles and concepts from nursing knowledge and liberal arts education.
- Use critical thinking, clinical reasoning, clinical judgment, and humanistic values.
- Design and implement a plan of care in collaboration with the patient and health care team with a focus on the wholly compensatory nursing system.
- Evaluate effective therapeutic and collegial communication needed to enhance health outcomes.
- Manage nursing care directly and/or through delegation for the patient with a range of self-care deficits throughout the life cycle.
- Create an optimal environment for the patient utilizing microsystem resources, evidence-based practice, quality improvement processes, and patient safety standards.
- Establish a caring relationship with the patient to provide holistic and culturally-sensitive nursing care throughout the life cycle.
- Demonstrate accountability for standard-based nursing care given by self and delegated to others adhering to professional, ethical and legal standards within nursing.

**ORTH101C : Orthopaedic Anatomy and Physiology I**

An introduction to the anatomy and physiology of the musculoskeletal system and related structures. Attention will be directed toward structural make-up, group composition, relationships, and location of each bone. Common fractures and treatments will be discussed in detail. Also covered will be normal and abnormal growth and development and the response to injury and disease, as well as the response of related structures to the mechanisms of injury and disease.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- List the classifications of bones and the functions of the axial and appendicular skeletal systems.
- Describe the formation of blood cells, bone and cartilage.
- Identify common fractures, orthopaedic disorders, sprains, and strains.
- Identify all bones of the vertebral column, thoracic cage, pectoral girdle, upper and lower extremity, and all joints.

**ORTH102C : Orthopaedic Anatomy and Physiology II**

A continuation of Orthopaedic Anatomy and Physiology I with a focus on common orthopaedic injuries and conditions of muscles, ligaments, tendons, and nerves, and their treatments. Also covered will be the disruption to continuity to the musculoskeletal system and related structures resulting from congenital, emergent, or opportunistic diseases and trauma and their treatments.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ORTH101C
**Learning Outcomes**

- Discuss the functions of the Musculoskeletal system.
- Differentiate all types of muscle within the body.
- Assess the function of muscles, tendons, and nerves.
- Identify all the muscles, tendons, and nerves of the head and neck.
- Identify all muscles, tendons, and nerves of the vertebral column, pectoral girdle, upper extremities and lower extremities.
- Label the different structures associated with joints in the human body.
- Compare and contrast human muscle, tendon and nerve disorders.

**ORTH103C : Basic Radiology Interpretation**

Covers the history of radiology and gives the student the basics of radiographic image production. Students will be introduced to the viewing and interpretation of plain orthopaedic radiographs, MRIs, and other types of permanent imaging relating to orthopaedics and terminology relating directly to the skeletal system and fracture healing and describing a fracture as it relates to the radiographic image.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Discuss the history of x-rays.
- Understand how a radiographic image is produced and the danger of radiation.
- Identify common fractures on x-ray image.
- Identify abnormalities on vertebral column, thoracic cage, upper and lower extremity, pelvic girdle, and pectoral girdle x-rays.
- Identify abnormalities on joint x-rays.

**ORTH104C : Physical Assessment of the Orthopaedic Patient**

Provides integration of knowledge and terminology utilized for orthopaedic patient physical assessment. Included are lifespan differences and assessment of acute and chronic patient orthopaedic problems. Lab time covering the application and use of various orthopaedic devices, their complications, and contraindications is an intrinsic part of this course, allowing students hands-on experience with these products. Students will learn how to do custom measurements along with brace fitting techniques. Braces will be matched up with their commonly used diagnoses for better conceptual understanding of how these devices affect patient outcomes. Medical coding and reimbursement procedures will also be discussed.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ORTH101C
ORTH103C
ORTH108C
ORTH109MC
ORTH113C

**Learning Outcomes**

- Understand how to take a proper patient medical history
- Identify how to do a proper physical assessment exam for orthopaedic cervical problems, upper extremity problems, thoracic and lumbar problems, and lower extremity problems and understand the correct diagnostic testing that should be done.
- Understand proper diagnostic testing to help identify diseases and conditions related to orthopaedic problems.

**ORTH108C : Casting and Splinting I**

This area is an integral part of the practice of an orthopaedic technologist. Topics to be covered will include the types, application, functions, and materials of the various casts and splints, as well as basic terminology related to the subject. Students will acquire a working knowledge of anatomy specifically relating to casting and splinting, the proper use of external aide devices commonly associated with casting and splinting – such as crutches, canes and walkers – and transfer of patients from wheelchairs and beds. Attention will be given to the removal of casts and splints, as well as the skills associated with providing patient instructions. Students enrolled in this course will be charged a $750 specialty supplies fee.

**Credits** 5

**Lab/Practicum/Clinical Hours** 6

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Apply, adjust, and remove upper and lower extremity casts, splints, and DME.
- Remove sutures, staples, Steinman pins, and K-wires.
- Instruct patient in proper cast care.
- Identify proper treatment of different fractures.
- Understand bone morphology, bone classifications, and functions.

**ORTH109MC : Introduction to Orthopaedics**

Introduces students to the world of orthopaedics. Students get an in-depth look into diverse orthopaedic settings, learn appropriate social skills, and learn how to communicate mindfully and effectively with orthopaedic surgeons, patients, and colleagues. Students are encouraged and given the opportunity to engage in regular contemplative practices such as mindfulness meditation. Professional skills with a focus on self care, time management, stress relief, geriatric care, patient awareness, and ethical diversity are presented and evaluated.

**Credits** 2

**Lab/Practicum/Clinical Hours** 1

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

ORTH101C
ORTH103C
ORTH108C
ORTH113C

**Learning Outcomes**

- Understand the purpose, principles, and functions of orthopaedic healthcare.
- Compare and contrast the different of types of orthopaedic healthcare.
- Compare and contrast methods and techniques of orthopaedic healthcare.
- Provide basic assessments, planning and implementation of orthopaedic healthcare plans
- Identify different orthopaedic diagnoses.

**ORTH113C : Orthopaedic Patient Care**

Introduces patient care in an orthopaedic environment. Topics will include communication skills, practical skills associated with assisting the orthopaedic surgeon, an understanding of surgical procedures, aseptic techniques, surgical instrumentation, OSHA standards, medications, patient safety, patient transfers, and patient education. In the lab setting, students will learn to take blood pressure, pulse, and BMI measurements, as well as wound care and routine and emergency procedures. Students will be assigned to orthopaedic surgical suites for observation of procedures.

**Credits** 3

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ORTH101C
ORTH103C
ORTH109MC

**Learning Outcomes**

- Communicate with patients, their families, and other team members associated with their care.
- Take vital signs, properly care for wounds, remove sutures/staples, and provide crutch training.
- Understand how to properly triage a patient and record patient history in EMR systems.
- Explain surgical procedures and educate the patient and their families on recovery.
- Assist the surgeon by prepping injections, ordering proper tests, and understanding medications prescribed and their usage.

**ORTH150C : Spring Externship**

Provides students with initial concentrated clinical experience in an orthopaedic office or hospital setting. Students will practice the skills they have learned in the classroom and lab on real orthopaedic patients under the direct supervision of an orthopaedic clinical supervisor and orthopaedic provider. Clinical placement will be provided by the program coordinator. Students enrolled in this course will be charged an $89 fee covering the cost of the radiation badge, which is required per state/national law and accreditation to monitor student rations dose.

**Credits** 3
**Lab/Practicum/Clinical Hours** 16
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ORTH101C
ORTH103C
ORTH108C
ORTH113C
**Corequisite Courses**
ORTH102C
ORTH104C
ORTH208C

**ORTH208C : Casting and Splinting II**

Students will learn advances casting techniques along with windowing of a cast, protection of pins, and external hardware, pin care, and wound care. Custom bracing and DME applications will be reviewed along with proper use of wheelchairs and Hoyer lifts. Students will learn how to accommodate patients who are in wheelchairs, beds, and traction. Students enrolled in this course will be charged a $750 specialty supplies fee.

**Credits** 5
**Lab/Practicum/Clinical Hours** 6
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
ORTH113C
ORTH108C
**Corequisite Courses**
ORTH102C
ORTH150C
**Learning Outcomes**

- Apply, adjust, and remove upper and lower extremity casts and splints.
- Remove sutures, staples, Steinman pins, and K-wires.
- Identify different types of fractures on an x-ray.
- Identify proper treatment of different fractures.
- Apply, adjust, and remove upper and lower extremity braces and DME products.

**ORTH219C : Traction**

Students will learn the basic terminology and basic bio-mechanical principles of orthopaedic traction, different types of traction, traction set-up and application, necessary equipment needed for orthopaedic traction, complications, and contraindications. Students will also learn various custom orthopaedic devices, positioning of the patient, complications and contraindications of custom back bracing, and different brace-fitting techniques. Modifying, customizing, and fitting of braces will be discussed. Medical coding for reimbursement for these devises will also be discussed.

**Credits** 2

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ORTH104C

ORTH150C

ORTH208C

**Corequisite Courses**

ORTH220C

**Learning Outcomes**

- Explain the purpose of traction using proper medical terminology.
- Apply the different of types of traction.
- Provide basic assessments, planning, and implementation of traction for patients.
- Identify different diagnoses in the traction patient.

**ORTH220C : Senior Externship and Capstone Experience**

Provides students concentrated clinical experience in an orthopaedic office or hospital setting, in which students will practice the skills they have learned in the classroom and lab on real orthopaedic patients under the direct supervision of an orthopaedic clinical supervisor and orthopaedic provider. Clinical placement will be provided by the program coordinator. In addition, students will be required to work in small groups to make a presentation to the class on an advanced topic related to the field of orthopaedic technology. Lecture hours also include a review for the national licensure exam in orthopaedic technology. Students enrolled in this course will be charged a $350 clinical surcharge.

**Credits** 6

**Lab/Practicum/Clinical Hours** 16

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Successful completion of all other courses in the Orthopaedic Technology Program and permission of the program coordinator

**PEM111C : Paramedic Procedures**

Focuses on the broad spectrum of paramedic procedures. Students will perform technical skills drawn from Advanced Trauma, Advanced Cardiology, Medical Emergencies, Special Populations, and Pharmacology courses. Emphasis will be placed on skill-competencies making students eligible for advanced hospital and field clinic rotations.

**Credits** 2
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All fall PEM courses
**Corequisite Courses**
PEM126C
PEM135C
PEM244C
**Learning Outcomes**

- Demonstrate appropriate body substance isolation techniques.
- Demonstrate successful performance of all skills, procedures, and use of associated equipment (listed in the course schedule) in a time efficient manner.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM117C : Physical Assessment**

Provides integration of knowledge and terminology utilized for physical assessment. Included are life-span differences as well as the assessment of acute and chronic patients who present with medical problems. Any failure in this course, PEM 142C, or PEM 150C, will trigger a failure in PEM 161C (even if a passing grade in PEM 161C has been achieved).

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
PEM142C
PEM150C
PEM161C
**Learning Outcomes**

- Demonstrate problem-orientated and comprehensive health histories.
- Integrate the principles of history taking and the techniques of physical exam to perform a patient assessment.
- Explain the pathophysiological significance of physical exam findings.
- Integrate physiological, psychological, and sociological changes throughout human development with assessment and communication strategies for patients of all ages.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM126C : Pharmacology**

Covering pharmacologic theory and practice as it relates to paramedicine. Includes cardiovascular, respiratory, analgesic, gastrointestinal, antibiotic, and CNS medications. Any failure in this course, PEM 135C, or PEM 244C will trigger a failure in PEM 162C (even if a passing grade in PEM 162C has been achieved).

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

All fall PEM courses

**Corequisite Courses**

PEM111C

PEM135C

PEM244C

**Learning Outcomes**

- Demonstrate knowledge (including dosage, use, side effects, and potential interactions) of medications in the EMS protocols and those prescribed for common diseases.
- Consistently model best practices with medication administration, handling of sharps, communication, and patient advocacy.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM135C : Medical Emergencies**

Includes the pathophysiology and management of medical emergencies in all body systems. Critical thinking and problem solving will be emphasized using a scenario-based approach. Any failure in this course, PEM 126C, PEM 244C will trigger a failure in PEM 162C (even if a passing grade in PEM 162C has been achieved).

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

All fall PEM courses

**Corequisite Courses**

PEM244C

PEM126C

PEM111C

**Learning Outcomes**

- Demonstrate understanding of the normal anatomy and pathophysiology for each body system as they relate to medical emergencies.
- Demonstrate assessment approaches to identify and appropriately manage patients' illnesses.
- Understand signs and symptoms of each medical emergency and demonstrate an understanding of the probable pathology related to each situation.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM142C : Cardiology I**

Focuses on the conduction system of the heart, electrocardiography, as well as interpretation and the treatment of cardiac arrhythmias. Any failure in this course, PEM 117C, or PEM 150C will trigger a failure in PEM 161C (even if a passing grade in PEM 161C has been achieved).

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
PEM117C
PEM150C
PEM161C
**Learning Outcomes**

- Demonstrate understanding of the anatomy and physiology of the cardiovascular system.
- Explain the pathophysiology, defining characteristics, clinical presentation, and management of cardiac rhythms and dysrhythmias.
- Discuss the principles of electrophysiology by describing ECG lead placement and ECG monitor utilization in various clinical situations (including 4-lead and 12-lead).
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM150C : Advanced Trauma**

Covers the assessment, pathophysiology and management of trauma including: head, spinal, chest, abdominal, soft tissue, and musculoskeletal trauma. MCI, environmental emergencies, and HAZMAT are also covered. Critical thinking and problem solving will be emphasized using a scenario-based approach. Any failure in this course, PEM 117C, or PEM 142C will trigger a failure in PEM 161C (even if a passing grade in PEM 161C has been achieved).

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
PEM117C
PEM142C
PEM161C
**Learning Outcomes**

- Demonstrate an understanding normal human anatomy, as well as changes with age and pregnancy, in regard to traumatic emergencies.
- Demonstrate an understanding of the signs and symptoms for each type of traumatic emergency, for each body system, and demonstrate an understanding of the probable related pathologies.
- Demonstrate an assessment approach that identifies an understanding/diagnosis of the presenting problem and appropriate management of the patient and injury.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM161C : Integration Lab I**

Formative, scenario-driven course designed to develop team leadership skills and clinical decision-making. Emphasis will be placed on paramedic assessment skills, and treatment aims/outcomes. Students will draw from the knowledge and interventions learned in Cardiology, Medical Emergencies, and Physical Assessment. Any failure in PEM 117C, PEM 150C, or PEM 142C will trigger a failure in this lab course, which includes the practical portion of the above listed courses.

**Credits** 2
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
PEM117C
PEM142C
PEM150C
**Learning Outcomes**

- Demonstrate history taking and physical exam techniques.
- Demonstrate the techniques of cardiac monitoring and cardiac rhythm identification.
- Demonstrate assessment, formulation of field diagnosis, and management of various traumatic conditions.
- Demonstrate an appropriate affect when interacting with faculty, staff, peers, and simulated patients.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM162C : Integration Lab II**

Formative, scenario-driven course designed to develop team leadership skills and clinical decision-making. Emphasis will be placed on paramedic assessment, diagnostic skills, and treatment aims/outcomes. Students will draw from the knowledge and interventions learned in Advanced Cardiology, Medical Emergencies, Advanced Trauma, and Pharmacology courses. Any failure in PEM 126C, PEM 135C, and PEM 244C will trigger a failure in this lab course, which includes the practical portion of the above listed courses.

**Credits** 2
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All freshman-fall PEM courses
**Corequisite Courses**
PEM126C
PEM135C
PEM244C
**Learning Outcomes**

- Demonstrate a working knowledge of the assessment, recognition, and prehospital management (including pharmacological treatment modalities) of medical emergencies.
- Develop decision-making skills necessary, as a team leader, for the safe treatment and transport of all case-based patients.
- Demonstrate assessment techniques, diagnosis, and emergency management of cardiac patients in line with Advanced Cardiac Life Support.
- Deliver concise and pertinent simulated radio transmissions for each scenario.
- Demonstrate a working knowledge of pharmacology including proper medication administration.
- Demonstrate an appropriate affect when interacting with faculty, staff, peers, and simulated patients.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM163C : Integration Lab III**

Summative, scenario-driven course designed to challenge team leadership skills and solidify clinical decision-making. Emphasis will be placed on paramedic assessment, diagnostic skills, and treatment aims/outcomes. Students will draw from the knowledge and interventions learned in PEM 201C.

**Credits** 2

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

All first-year PEM courses

**Corequisite Courses**

PEM201C

**Learning Outcomes**

- Demonstrate the assessment, formulation of field diagnosis, development of treatment plans, and the implementation of EMS-related procedures/interventions across the spectrum of special populations.
- Demonstrate successful performance of the National Registry Oral Station relating to special populations.
- Successfully obtain AHA Pediatric Advanced Life Support certification.
- Demonstrate an appropriate affect when interacting with faculty, staff, peers, and simulated patients.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM164C : Integration Lab IV**

Summative, scenario-driven course designed to challenge team leadership skills and solidify clinical decision-making. Emphasis will be placed on paramedic assessment, diagnostic skills, and treatment aims/outcomes. Students will draw from knowledge and interventions learned in PEM 210C and PEM 278C.

**Credits** 2

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

All senior fall PEM courses

**Corequisite Courses**

PEM210C

PEM278C

**Learning Outcomes**

- Demonstrate the necessary cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to keep in line program goals and to prepare students for the NREMT Paramedic Psychomotor Exams.
- Identify the components of a thorough paramedic assessment related to medical, traumatic, obstetrical, and psychoogical scenarios for geriatric, adult, and pediatric patients.
- Identify priorities in patient care and management during scenario training.
- Demonstrate leadership skills and situational awareness as the primary care provider in diverse EMS scenarios.
- Demonstrate an appropriate affect when interacting with faculty, staff, peers, and simulated patients.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM190C : Introduction to the Clinical Environment**

Prepares students up success within a variety of clinical systems. Emphasis will be placed on topics such as universal precautions, body mechanics, fire procedures, incident prevention, clinical protocols and procedures, as well as a review of the patient-populations which the students will encounter in PEM 194C. Interpersonal and communication skills will also part of the course and students will gain an understanding of the clinical documentation systems.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All first-year PEM courses
**Corequisite Courses**
PEM194C
**Learning Outcomes**

- Understand the evaluation and history-taking for the special population groups of Ob/Gyn, neonatal, pediatric, geriatric, and psychiatric.
- Demonstrate understanding of how to be successful and safe in the hospital-clinic environment.
- Demonstrate understanding of the requirements for the course PEM-194.

**PEM194C : Hospital Clinical**

Comprehensive hospital experience that focuses on medical theory, patient assessments, treatment modalities (skills), and affective behaviors expected of a paramedic. A minimum of 224 hospital hours is required.

**Credits** 5
**Lab/Practicum/Clinical Hours** 18
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All first-year PEM courses
**Corequisite Courses**
PEM190C
**Learning Outcomes**

- Evaluate all required patient populations (ages and pathologies) as listed in the course materials.
- Show competence with all required hospital-based skills, as listed in the course materials.
- Demonstrate an appropriate affect when interacting with faculty, staff, preceptors, patients, and patient-families.

**PEM201C : Special Populations**

Advanced-level course including assessment, paramedic diagnosis, and treatment for all special populations including ob/gyn, pediatric, geriatric, psychiatric, chronic disease, patients with special needs. Pediatric Advanced Life Support certification (PALS) is an integral part of the course.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

All first-year PEM courses

**Corequisite Courses**

PEM163C

**Learning Outcomes**

- Discuss the assessment, recognition, and management of common OB/GYN emergencies, childbirth, and care of the newly born.
- Describe the prehospital assessment, recognition, and management of common pediatric emergencies consistent with Pediatric Advanced Life Support.
- Describe the patterns of emergencies and pathologies in the geriatric population.
- Discuss the special considerations and EMS strategies for managing patients with issues related to hearing, vision, speech, mobility, and obesity.
- Describe the EMS approach to caring for patients with the chronic care diseases of cancer, traumatic brain injury, renal failure, and hospice or homecare patients.
- Recognize and manage patients experiencing psychiatric and behavioral emergencies and those experiencing abuse and/or neglect.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM210C : Field Operations**

Covers all aspects of field operations and practice including roles and responsibilities, medical control, written/oral communications, occupational stress, safety and legal considerations, and MCI. Protocol interpretation and introduction to research design are covered.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

PEM164C

PEM278C

**Learning Outcomes**

- Demonstrate an understanding of the roles and responsibilities of the paramedic in multiple settings/incidents.
- Demonstrate an understanding of the history of emergency medical services – especially as it relates to EMS system design, the role of medical control, protocol development and implementation.
- Demonstrate an understanding of EMS research and how to interpret research findings.
- Discuss legal considerations when assessing and treating patients.
- Safety considerations involved in the EMS profession, including dangers related to working around hazardous materials.

**PEM244C : Advanced Cardiology**

Includes the pathophysiology, clinical manifestations, and treatment of cardiovascular emergencies. Advanced Cardiac Life Support certification (ACLS) is an integral part of the course. Any failure in PEM 126C, PEM 135C, or PEM 244C will trigger a failure in PEM 162C (even if a passing grade in PEM 162C has been achieved).

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All fall PEM courses
**Corequisite Courses**
PEM126C
PEM135C
PEM162C
**Learning Outcomes**

- Synthesize patient history, assessment findings, and ECG analysis to form a treating diagnosis for the patient with a cardiac complaint.
- Describe the incidence, morbidity, and mortality of vascular disorders.
- Understand the pathophysiology of, and identify the risk factors for, coronary artery disease,
- Describe the pathophysiology, signs and symptoms, and pre-hospital management (including drug therapy) for each of the types of cardiac rhythms,
- Identify and administer the supportive measures for delivery of Advanced Cardiac Life Support.

**PEM278C : Advanced Paramedic Practice**

Integrates paramedic knowledge, skills, and behaviors through practice and lecture. Students will hone leadership skills in the management of medical, traumatic, and psychological problems. Emphasis is placed on National Registry written exam preparation as well as career opportunities, affective behaviors, and preparation for entry into the EMS job market. Mental, physical, and financial health will also be discussed.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
PEM210C
PEM164C
**Learning Outcomes**

- Develop a resume and cover letter targeted for the entry-level paramedic position.
- Describe and display the professional behaviors that lead to successful job interviews,
- Recognize the importance of career planning and describe opportunities for professional development and career advancement,
- Draw from previous knowledge of diverse medical, traumatic, obstetrical, pediatric, geriatric and psychological problems to identify areas of strength and weakness .
- Describe the prehospital assessment, recognition and management of common cardiac emergencies consistent with the American Heart Association's Advanced Cardiac Life Support .and Pediatric Advanced Life Support.
- Develop and present a multimedia presentation

**PEM290C : Field Clinic Primer**

An optional/assigned formative field experience where a student will ride 100 hours with an ALS service. This clinic can be utilized any semester a student needs additional ALS time. The same clinical manual and grading criteria will be used as in the other field clinicals. This course may not be taken more than twice. Students electing to enroll in this course must receive a passing grade before progressing in the program.

**Credits** 2
**Lab/Practicum/Clinical Hours** 6
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All first-year courses
PEM194C
**Learning Outcomes**

- Demonstrate an appropriate affect when interacting with faculty, staff, preceptors, patients, and patient-families.

**PEM292C : 12 Lead EKG Interpretation/Difficult Airway Seminar**

Primary certification in the interpretation of 12 lead EKGs including injury and ischemia patterns, normal and abnormal findings, and the 12 lead as a diagnostic tool will be covered. Principles of ACS diagnosis/management will be an integral part of the course. The difficult airway portion of the course will include: RSI, adjunctive airways, difficult and failed airways, and the airway decision process.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
PEM163C
PEM201C
BIOL222C
**Learning Outcomes**

- Demonstrate basic and advanced 12-lead interpretation skills, clinical decision-making, and recognition of acute coronary syndromes (ACS) as well as ACS-imitators.
- Differentiate between ST-Elevation Myocardial Infarction and Non-ST-Elevation Myocardial Infarction.
- Recognize effects different electrolytes have on a 12-lead ECG and identify/understand the heart's axis.
- Identify the settings in which rapid sequence intubation (RSI) is needed and the medications used.
- Identify a potentially difficult airway.
- Identify and manage a failed airway – including the use advanced adjuncts and procedures that can be utilized if the difficult airway.
- Demonstrate mastery of knowledge as required by the National EMS Educational Standards.

**PEM296C : Field Clinical I**

Formative field experience where the student will log at least 150 hours with an ALS service. Successful completion will include minimum hours, preceptor endorsement, completed documentation, a successful mid-semester performance appraisal, a completed end-semester clinic evaluation, and 15 team-leader experiences.
**Credits** 3
**Lab/Practicum/Clinical Hours** 9
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All previous PEM courses
PEM194C
**Corequisites**
All senior fall PEM courses
**Learning Outcomes**

- Evaluate all required patient populations (ages and pathologies) as listed in the course materials.
- Show competence with all required ambulance-based skills, as listed in the course materials.
- Demonstrate an appropriate affect when interacting with faculty, staff, preceptors, patients, and patient-families.

**PEM297C : Field Clinical II**

Summative field experience where the student will log at least 120 hours with an ALS service. Successful completion will include minimum hours, preceptor endorsement, completed documentation, a successful mid-semester performance appraisal, a completed end-semester clinic evaluation, and 20 team-leader experiences.
**Credits** 3
**Lab/Practicum/Clinical Hours** 7
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PEM296C
**Corequisites**
All senior spring PEM courses
**Learning Outcomes**

- Evaluate all required patient populations (ages and pathologies) as listed in the course materials.
- Show competence with all required ambulance-based skills, as listed in the course materials.
- Demonstrate an appropriate affect when interacting with faculty, staff, preceptors, patients, and patient-families.

**PEM298C : Field Clinical III**

Summative field experience and program capstone where the student will log at least 50 hours with an ALS service. Successful completion will include minimum hours, at least 18 of 20 successful team leads, preceptor endorsement as a competent entry-level paramedic, completed documentation, and a completed end-semester summative evaluation.
**Credits** 1
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PEM297C
**Corequisites**
All senior spring PEM courses
**Learning Outcomes**

- Demonstrate an appropriate affect when interacting with faculty, staff, preceptors, patients, and patient-families

**PHIL110C : Introduction to Philosophy**

Introduces the methods, problems, and theories of the main branches of philosophy and the indestructible questions raised in regard to reality, truth, morality, power, meaning, purpose, and valid reasoning. Topics to be considered include the basis for beliefs concerning the nature and existence of God, experience and reason in the development of knowledge, the mind and its place in nature, freedom and determinism, and the basis and nature of morality.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand and asnwer: What is philosophical thinking? Are all persons at heart egoistic? How can truth be established? Are there causal determinants of choice? How does one find purpose and meaning in life?
- Explain classic arguments which illustrate basic philosophical principles.
- Critically discuss the texts in philosophy.
- Write analytically about topics in philosophy.
- Demonstrate knowledge of classic and influential arguments concerning the structures of knowledge.
- Show evidence of their reflection on beliefs and values.
- Critically question several interpretations of basic philosophical positions.

**PHIL112C : Beginning Logic**

Explores the principles of reasoning and development of symbolic techniques for evaluating arguments. The main components of deductive symbolic logic are introduced, and students gain skill using these techniques, which are used in mathematics, logic, computer science, statistics, and linguistics. Introduction to symbolic logic, including sentential and predicate logic, is taught with a focus on translating English statements into symbolic notation and evaluating arguments for validity using formal proof techniques. Students are able to distinguish types of arguments, consequences of claims, inconsistency, and the relationship between truth and logic, and detect and avoid ambiguities in language.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Represent the logical structure of statements and arguments.
- Apply basic concepts of logic, such as formal reasoning, and the relationships of the concepts.
- Demonstrate an introductory knowledge of decidability.
- Provide logical arguments and find errors in incorrect arguments.
- Express the basic concepts of logic and their relevance for fields, including mathematics, computer science, linguistics, and statistics.
- Assess arguments for validity, using deductive reasoning and other methods.
- Apply these methods to real-world arguments.

**PHIL226AC : Comparative World Religions**

Examines major questions or issues addressed by religion in general. It also examines major representative systems of religious beliefs including the practices, historical development, and sociological development and context. The religious systems will be analyzed via specific doctrines and writings of each. Different aspects of religious beliefs and practice such as the absolute, the human problem, the human solution, rituals, the meaning of history, life after death, community and ethics, and attitudes toward other religions will be explored.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Demonstrate knowledge of, and familiarity with at least 10 religious traditions, including Hinduism, Buddhism, The Jains and Sikhs, Confucianism, Shintoism, Zoroastrianism, Judaism, Islam, and Christianity.
- Demonstrate understanding of the tenets of the world's major religions and explain their value to individuals.
- Demonstrate skill in engaging in critical discussion/discourse regarding issues of diversity, particularly as they relate to religious practices throughout the world.
- Provide evidence of a "global consciousness" as it relates to understanding and appreciating religious traditions.

**PHIL242C : Contemporary Ethical Issues**

This course is a philosophical examination of major contemporary ethical issues. Topics may include biomedical ethics, business ethics, environmental ethics, human sexuality, and ethics related to life-and-death decisions. The emphasis is on acquiring the philosophical skills necessary to guide self and others in the process of ethical decision making. Cases are used for study and discussion.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Explain the basic meaning of morality and the importance of moral reasoning in society.
- Identify, describe, and differentiate major ethical theories and moral philosophies.
- Demonstrate an understanding of the principles and functions of moral arguments, recognition of invalid arguments, and the benefits to be gained from respectful engagement of those with differing views.
- Apply ethical theories to contemporary issues on a social and personal level.

**PHYS133C : Physics I (Algebra-based)**

This is a study of classical physics. Topics include linear and projectile motion, vectors, Newton's Laws of Motion, work, energy, momentum, collisions, rotational kinematics and dynamics, translational and rotational equilibrium, and gravity. A graphing calculator will be required.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
MATH124C
**Learning Outcomes**

- State, interpret, and apply the definitions of physical quantities related to kinematics, dynamics, energy, momentum, rotational motion, and gravitation.
- Set up and solve problems, including word problems, in classical mechanics analytically using algebra and trigonometry.
- Solve problems in classical mechanics using numerical methods.
- Solve problems in classical mechanics using graphical methods including the use of position, velocity, and acceleration vs time graphs, graphical vector addition, and free body diagrams.
- Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify and reduce sources of error, analyze and interpret data, and summarize findings in a laboratory report.

**PHYS135C : Physics II (Algebra-based)**

This is a study of classical physics. Topics include oscillations, mechanical waves and sound, fluids, heat, electrostatics, Ohm's law, D.C. circuits, electromagnetism, and geometrical optics. A graphing calculator will be required.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PHYS133C
MATH124C
**Learning Outcomes**

- State, interpret, and apply the definitions of physical quantities related to fluids, thermodynamics, oscillations, waves and sound, electricity and magnetism, and geometrical optics.
- Set up and solve problems, including word problems, analytically using algebra and trigonometry.
- Solve problems using numerical methods.
- Solve problems using graphical methods, including problems in geometrical optics.
- Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify and reduce sources of error, analyze and interpret data, and summarize findings in a laboratory report.

**PHYS231C : Physics I (Calculus-Based)**

This is a study of classical mechanics. Topics include linear and rotational motion, forces, momentum, energy, gravitation, and oscillations. A graphing calculator will be required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

MATH205C

**Learning Outcomes**

- State, interpret, and apply the definitions of physical quantities related to kinematics, dynamics, momentum, energy, rotational motion, gravitation, and oscillations.
- Set up and solve problems, including word problems, in classical mechanics analytically using algebra, trigonometry, and calculus.
- Solve problems in classical mechanics using numerical methods including numerical extremization problems.
- Solve problems in classical mechanics using graphical methods including the use of motion diagrams, position, velocity, and acceleration vs time graphs, graphical vector addition, free body diagrams, and interaction diagrams.
- Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify and reduce sources of error, analyze and interpret data, propagate error, and summarize findings in a formal laboratory report.

**PHYS232C : Physics II (Calculus-Based)**

The second course studying classical physics. Topics include fluids, elasticity, thermodynamics, electricity, and magnetism. A graphing calculator will be required.

**Credits** 4

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PHYS231C

**Learning Outcomes**

- State, interpret, and apply the definitions of physical quantities related to fluids, thermodynamics, and electricity and magnetism.
- Set up and solve problems, including word problems, in fluids, thermodynamics, and electricity and magnetism analytically using algebra, trigonometry, and calculus.
- Solve problems in fluids, thermodynamics, and electricity and magnetism using numerical and graphical methods.
- Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify and reduce sources of error, analyze and interpret data, propagate error, and summarize findings in a formal laboratory report.

**PHYS233C : Physics III (Calculus-Based)**

Topics include sound, optics, electromagnetic waves, relativity, introduction to quantum mechanics, atomic physics, and nuclear physics. A graphing calculator is required.

**Credits** 4
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PHYS232C

**Learning Outcomes**

- State, interpret, and apply the definitions of physical quantities related to sound, optics, electromagnetic waves, relativity, quantum mechanics, and atomic and nuclear physics.
- Set up and solve problems, including word problems, in modern physics analytically using algebra, trigonometry, and calculus.
- Solve problems in modern physics using numerical and graphical methods.
- Set up laboratory equipment safely and efficiently, plan and carry out experimental procedures, identify and reduce sources of error, analyze and interpret data, propagate error, summarize findings in a formal laboratory report, and maintain a laboratory notebook.

**PLGL101C : Foundations of Paralegal Studies**

Comprises two sections: the introduction to the legal profession and a pre-employment seminar. The first part covers in detail the legal systems of the U.S. in both the federal courts and the N.H. state courts. Students will be introduced to the federal and N.H. constitutions, to the legislative processes, and to a “how to” approach to the law. Practical experience in drafting court documents, conducting initial client interviews, and investigating cases will be gained. Ethical rules and regulations governing lawyers and paralegals will also be covered. The second part includes writing a resume, drafting a cover letter, refining interview techniques, and conducting an independent job search.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**PLGL103C : Causes of Action in Contract and Tort**

A “cause of action” here is defined as a right the law gives and will enforce for one to recover something from another. It is the legal foundation from which the plaintiff derives the right of action against a defendant. This course is limited to the elements and defenses of various causes of action in contract and tort; it does not address remedies.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PLGL101C

**PLGL104C : Legal Research**

The paralegal will be able to assist in most aspects of legal research in support of the drafting of clear and concise legal writings. Functional skills acquired in this course include a working knowledge of federal and state statutory research including legislative history, federal and state case law reporter systems, the hierarchy of the federal and state court systems, legal form books, law digests, case and statutory citators, legal treaties, legal periodicals, legal encyclopedia, and both local and national standards of citation used in legal writing. An introduction to the use of LEXIS will also be included. Students enrolled in this course will be charged a $125 fee to cover costs associated with ABA dues, Lexis/Nexis, and UNH Franklin Pierce School of Law Library.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL101C

**PLGL106C : Introduction to Legal Studies**

Covers in detail the legal systems of the U.S. in both the federal courts and the N.H. state courts. Students will be introduced to an overview of substantive and procedural law, legal research, and interviewing and investigative skills. Ethical rules and regulations governing lawyers and paralegals will also be covered.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**PLGL107C : Contracts and Torts**

The contract portion of the course will cover contract law from formation, defenses, and remedies for breach. Likewise, various civil wrongs in which the victim is entitled to a remedy in the form of damages, including negligence, product liability, trespass, and defamation are addressed in the Torts section.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL106C

**PLGL110C : Litigation and Trial Preparation**

The student will be able to assist in virtually all phases of litigation. Functional skills acquired include preparing and maintaining the file, gathering information through client interviews, drafting pleadings, organizing and indexing documents, tracing evidence, examining public records, and preparing briefs and memoranda.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL107C

**PLGL221C : Real Estate**

The student will be able to assist in virtually all phases of transactions in real property. Functional skills acquired include conducting title searches; assisting in preparation and drafting of deeds, contracts of sale, leases and abstracts of title; gathering and reviewing documentation necessary in mortgage transactions; recording deeds and mortgages; and organizing and witnessing documents at the closing.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL107C

**PLGL225C : Legal Research and Writing**

The paralegal will be able to assist in most aspects of legal research in support of the drafting of clear and concise legal writings. Functional skills acquired in this course will include a working knowledge of federal and state statutory research including legislative history, federal and state case law reporter systems, the court systems, legal form books, law digest, case and statutory citators, legal treaties, and legal periodicals. In addition, an introduction to the use of LEXIS will be included. The student will develop the specific writing skills necessary for the paralegal. Preparation of trial memorandum and appellate court briefs will also be covered. Emphasis will be on brevity, clarity, and precision of expression together with the refinement of editing skills. Students enrolled in this course will be charged a $125 fee to cover costs associated with ABA dues, Lexis/Nexis, and UNH Franklin Pierce School of Law Library.

**Credits** 4
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL110C

**PLGL231C : Business Organizations and Bankruptcy**

The student will be able to assist in the formation, daily administration, reorganization, and dissolution of a corporate entity. Functional skills acquired include preparing articles of incorporation, satisfying state filing requirements, taking minutes at meetings of board of directors, preparing registration materials for regulatory agencies, and preparing bankruptcy petitions, claims, and other documents.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL107C

**PLGL241C : Family Law**

The student will examine the substantive and procedural law and the legal ethics relating to marriage, divorce, support, and custody issues and will be prepared to assist the attorney in drafting pleadings and completing preliminary research relative to these aspects of family law.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All PLGL courses at 100 level

**PLGL242C : Domestic Relations Law**

The student will examine the substantive and procedural law and the legal ethics relating to marriage, divorce, and custody issues and will be prepared to assist the attorney in drafting pleadings and completing preliminary research relative to these aspects of domestic relations Law.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL107C

**PLGL251C : Probate Estates and Trusts**

The student will be able to assist in the planning and administration of the decedent's estate. Functional skills acquired include assisting with estate planning, collecting assets, notifying beneficiaries, assisting in preparation of federal and state estate tax returns, submitting documentation to the probate court, transferring securities, drawing checks for the executor's signature, and maintaining account records.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL103C
PLGL107C

**PLGL261C : Criminal Process**

The student will examine the various elements of N.H. criminal practice and procedure and will trace the steps by which the process is completed from the initial interview through the post-trial procedure.
**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All PLGL courses at 100 level

**PLGL262C : Criminal Law and Procedures for the Paralegal**

The student will examine the various elements of N.H. criminal practice and procedure and will trace the steps by which the process is completed from the initial interview through the post-trial procedure.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
PLGL110C

**PLGL270C : Internship**

Offers the opportunity to combine the theoretical and practical issues of the classroom in the workplace setting. Students are required to complete a specified number of hours in a law office or law-related environment. Weekly meetings will be held with the internship coordinator to discuss the ongoing experience.
**Credits** 3
**Lab/Practicum/Clinical Hours** 9
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All 100 level PLGL courses

**PLGL271C : Legal Writing**

Focuses on the specific writing skills necessary for the paralegal. The assignments involve practical examples of paralegals' work products as demonstrated in the areas covered in the certificate curriculum. Preparation of a trial court memorandum and an appellate court brief will also be covered. Emphasis will be put on brevity, clarity, and precision of expression together with a refinement of editing skills.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
All other 100 level PLGL courses
**Corequisite Courses**
PLGL110C

**POLS110C : American Government**

Introduces the basic structures of the political process in the U.S. It combines attention to political activity at both the national (federal) and the state and local levels. The topics covered include analyses of the federal and states' constitutions, the American political economy, state/federal relationships, inter-branch matters between the Executive, Legislature and Judiciary branches, the elective process, activities of the public and interest groups, and the governments' handling of the public purse.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand the origins and the evolution of federal and state constitutions, describing the origins of the U.S. Constitution and discussing the ways in which the application of the U.S. Constitution has changed.
- Explain the value of the participatory dimension in American government and provide examples of what it means to have sovereignty rest with the people.
- Understand the impact of American pluralism on the vote and of outside influences on government functions.
- Describe how executive, legislative, and judicial branches interact, along with the respective roles of the three branches of government.
- Identify the major issues of current American government.

**POLS150C : The New Hampshire Primary**

Explores the changing role and nature of the presidential primary election held in N.H from its first implementation in 1916 to the present. Through a combination of readings, taped and live-streamed presentations, archival footage, classroom presentations and interviews, and group activities, students will experience the primary as it takes shape throughout the fall. The goal of the course is not merely to help students understand the nature of the N.H. presidential primary, but to engage students in the process. Just as the presidential primary is an example of direct democracy, this course is an exercise in civic engagement. Course content will cover, but not be limited to, an understanding of the origins of primary elections in American politics, the laws governing the N.H. primary, the role of media in the process, the changing demographics of N.H. the evolving nature of the N.H. electorate, and the impact of the "first in the nation" primary.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand the concept and forms of direct democracy (e.g., primary elections, referenda, recalls), the rationale for its adoption, and the changing roles of political parties and interest groups.
- Demonstrate knowledge of the role, evolution, and changing importance of the presidential primary elections in the nation and New Hampshire.
- Identify changes in New Hampshire from 1916 to the present, including regional differences and the importance of rural, urban, and industrial areas.
- Recognize and differentiate the issues presented in presidential primary elections.
- Analyze the changing role played by media in presidential primaries.
- Identify the interests and the related interest groups that participate in the New Hampshire presidential primary.
- Express the value of the various ways voters can become involved in primary campaigns.

**PSYC105C : Introduction to Psychology**

Focuses on the fundamental facts and principles of psychology within the broader context of contemporary personal and social concerns. Topics may include the historical development of the discipline, scientific methodology, human development, motivational theory, consciousness, sensation and perception, learning, thinking, memory, emotions, biological basis of behavior, personality theory, psychopathology, sexuality, and measurements and statistics.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will be able to demonstrate the following:

- Describe the history of psychology and its scientific basis, identifying key figures and schools of thought in the history of psychology.
- Differentiate between descriptive and experimental research strategies and illustrate how they would be applied..
- Demonstrate understanding of the biological and environmental bases of psychology, including bases for individual and group differences
- Explain theories of human development, including those of Piaget (Cognitive Development), Erikson (Psychosocial Development), and Kohlberg (Moral Development).
- Identify and explain basic concepts related to perception, consciousness, learning, and memory, and intelligence.
- Explain and apply various perspectives on motivation and emotions/stress, including biological, environmental, and cultural influences.
- Identify and explain theories of personality, how behavior is determined to be abnormal, and the treatment of psychological disorders as classified in the DSM-V.
- Describe the field of social psychology.

**PSYC105MC : Introduction to Psychology: Mindful**

An introductory course in psychology that focuses on the fundamental facts and principles of psychology within the broader context of contemporary personal and social concerns. Topics may include the historical development of the discipline, scientific methodology, human development, motivational theory, consciousness, sensation and perception, learning, thinking, memory, emotions, biological basis of behavior, personality theory, psychopathology, sexuality, and measurements and statistics. It features the study of mindfulness and incorporates mindfulness meditation as an optional instructional method while exploring aspects of emotional intelligence as they relate to psychology. (Students who have received credit for PSYC 105MC cannot also receive credit for PSYC 105C.)

**Credits** 3

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Upon completion of this course, students will be able to demonstrate the following:

- Describe the history of psychology and its scientific basis, identifying key figures and schools of thought in the history of psychology.
- Differentiate between descriptive and experimental research strategies and illustrate how they would be applied..
- Demonstrate understanding of the biological and environmental bases of psychology, including bases for individual and group differences
- Explain theories of human development, including those of Piaget (Cognitive Development), Erikson (Psychosocial Development), and Kohlberg (Moral Development).
- Identify and explain basic concepts related to perception, consciousness, learning, and memory, and intelligence.
- Explain and apply various perspectives on motivation and emotions/stress, including biological, environmental, and cultural influences.
- Identify and explain theories of personality, how behavior is determined to be abnormal, and the treatment of psychological disorders as classified in the DSM-V.
- Describe the field of social psychology.
- Recognize and articulate management of mindsets, behaviors, and beliefs to improve well-being, as related to the study of psychology and its intersection with mindfulness.

**PSYC205C : Crisis Intervention**

Focuses on the emotional aspects of individuals involved in a crisis situation. Coverage is given to the theory and management of specific situations such as stress, death and dying, drug abuse, suicide, sexual assault, disasters, and violence. Consideration is also given to the functions and legalities of the mental health system.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PSYC105C

**PSYC210C : Psychological Disorders and Mental Health**

An overview and examination of the characteristics of psychological disorders using the Diagnostic and Statistical Manual of Mental Disorders, 5th ed. Research and issues relating to the nomenclature, incidence, etiology, and treatment of the disorders will be covered. Consideration will be given to physiological, behavioral, social, cultural, and cognitive variables that contribute to each condition and to mental health.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PSYC105C

**Learning Outcomes**

Upon completion of this course, students will be able to do the following:

- Demonstrate a knowledge of the historical and conceptual perspectives underlying psychopathologies.
- Compare and contrast the following perspectives of understanding and treating behavioral issues related to psychological disorders: biological, psychodynamic, behavioral, cognitive, humanistic existential, and community cultural.
- Show an understanding of personal, familial, social, and cultural concepts related to the study of mental health and prevention of psychological disorders and related behavioral issues.
- Demonstrate an understanding of assessment, classification, and therapeutic approaches in dealing with psychopathologies.
- Describe and demonstrate skill in using the DSM-V, including purpose, organization and the multi-axial approach of classifying behavior, including an ability to describe and evaluate the advantages and disadvantages of classifying behavior.
- Demonstrate knowledge of eight major categories of psychological disorders, including describing the dimensions/classification criteria, comparing and contrasting incidence and prevalence, evaluating current etiological understanding, and differentiating between treatment approaches.

**PSYC220C : Human Growth and Development: The Life Span**

A study of the psychological implications of the growth and development of the human person with a special emphasis on the physical, cognitive, social, emotional, and ethical dimension in infancy, childhood, adolescence, and adulthood.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either PSYC105C or PSYC105MC.

PSYC105C
PSYC105MC

**Learning Outcomes**

- Describe human development and the life span approach, contrasting the biosocial, cognitive, and psychosocial contexts of development and explaining how development relates to continuity and change.
- Demonstrate knowledge of the major theoretical perspectives of human development.
- Explain the impact of nature and nurture on human development throughout the life span.
- Explain how various types of research contribute to an understanding of human development by describing commonly used methods in research on human development and evaluating the strengths and weaknesses of longitudinal versus cross-sectional research.
- Demonstrate critical thinking skills through examination, reflection, and questioning aspects of human development from childhood through the aging process to death and dying.

**PSYC225C : Social Psychology**

Offers an overview to the field of social psychology, a branch of psychology that focuses on how an individual's thoughts, feelings, and behavior are influenced by and influence other people. These reciprocal influences include attention to the social and cultural environment. Predominant themes for the course include individual interpretation and social cognition, the influence and power of situations on individuals, and social relationships. Gender and cultural influences are examined from a variety of perspectives as well. Specific topics that will be studied include social cognition and perception, self-knowledge and self-esteem, attitudes, social influence, conformity, obedience, aggression, prejudice, interpersonal attraction, and prosocial behavior.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

PSYC105C

**Learning Outcomes**

- Demonstrate understanding of the historical and conceptual perspectives underlying social psychology.
- Explain central concepts related to social thinking including social cognition, social perception, self-knowledge, the need to maintain a stable self-view, and attitudes and attitude change.
- Analyze issues related to social influence, including concepts related to obedience, conformity, and processes and influences of social groups.
- Demonstrate understanding of concepts related to social relations including attraction, prosocial behavior, aggression, and prejudice.

**PSYC226AC : Sport and Exercise Psychology**

Examines theory and research of psychology as applied to athletics. Students review the history of sport psychology as well as its application in both individual and team sports. Concepts to be discussed include individual philosophies of sports, motivation, personality of coaches and athletes, training and learning principles, mind-body relationships, and the effects anxiety, motivation, arousal, and relaxation have on performance of athletes at the professional, amateur, and youth levels. The sport psychology techniques used by elite athletes to improve sport performance will also be explored. Students will be asked to apply their psychological knowledge and critical thinking abilities through class participation and open discussions on professional, amateur, and youth sports. Outside observations of sports from youth to professional levels will also be required.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take PSYC105C, PSYC105MC, SOCI105C, or other social science course.

PSYC105C

PSYC105MC

SOCI105C

**Learning Outcomes**

- Demonstrate an understanding of the field of sport psychology, including its history, definition, and how it can be applied to improve athletic performance.
- Demonstrate an understanding of how personality as well as thoughts, values, and beliefs influence an individual's participation and performance in sports.
- Demonstrate knowledge of a variety of psychological concepts as they relate to sport.
- Apply a variety of skills, strategies, and practices that can be used to enhance performance.
- Explain psychological concepts and techniques, such as motivation, concentration, relaxation, and mindfulness, related to coaching and the ways in which they relate to individual and team performance.

**PSYC280C : Individual Counseling: Theory and Practice**

Discussion of the most widely used theories of counseling offering students the opportunity to integrate the theories within their own value systems. Counseling practice will consist of peer counseling process, audio and video recording critiques and role-playing in a seminar setting.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MHTH187C
PSYC105C

**Learning Outcomes**

- Describe effective counselor communication skills, including both verbal and non-verbal.
- List and describe the 12 Human Service Skill Standards related to the field of counseling along with the role of each in the counseling process.
- Describe and differentiate among the major theoretical approaches in the field of counseling.
- Understand of how major theoretical approaches are utilized in various treatment areas.
- Understand of adapting the counseling process to specific populations, services and service providers.
- Understand of the application of ethics and professional principles in the counseling process.
- Work in a team environment cooperatively and effectively with interpersonal communication skills and tasks.
- Integrate collective knowledge within the course and its requirements.

**PSYC283C : Group Counseling**

A study of therapeutic intervention as carried out in and through a group. The course design includes academic discussion of group processes and participation in a concomitant lab experience.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MHTH187C
PSYC105C

**Learning Outcomes**

- Communicate personal strengths/challenges and professional knowledge/skills and translate to group leadership.
- Recognize cultural value system with emphasis on how these impact work as a group leader.
- Identify and describe the stages of group work and all aspects involved including leader and member participation.
- Describe the different types of groups used in the profession with accuracy on the purpose.
- Identify the professional organizations for counselors.
- Recognize aspects of cultural competency as this relates to group work.
- Associate mindfulness towards the work as a group leader.

**RADT103C : Radiographic Positioning I**

Introduces the student to the principles of radiography, radiographic terminology, and radiation protection. This course covers the anatomy and radiographic positioning of the thoracic viscera.

**Credits** 2
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
RADT109C
RADT180C
**Learning Outcomes**
(Clinical Portion)

- Define general radiographic and anatomic relational terminology; define and apply various positioning principles in hypothetic clinical situation.
- Describe image quality factors in digital radiography; describe basic radiation protection methods to reduce exposure to the patient and imaging personnel; explain the patient dose terminology for specific regions of the body.
- Demonstrate the routine and special projections for chest radiography and upper airway.
- Evaluate chest radiographs based on established radiographic criteria.

**RADT109C : Introduction to Healthcare in Radiologic Technology**

A series of continuous focused lectures pertinent to each clinical semester. Radiologic science, patient care, image critiques, and imaging methods will be presented and discussed.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
RADT103C
RADT180C
**Learning Outcomes**

- Demonstrate patient transfer and safety techniques.
- Identify characteristics of human diversity and adapt to their needs.
- Identify critical-thinking and problem-solving strategies.
- Understand confidentiality in regards to HIPAA.
- Understand the ARRT Standard of Ethics.

**RADT116C : Radiographic Imaging Technology I**

A discussion of the principles leading to the production of the manifest image. The general design of the x-ray tube as well as x-ray production and emission. Tube rating charts, factors affecting radiographic quality, grids, and accessories.

**Credits** 3

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT103C

RADT109C

RADT180C

**Corequisite Courses**

RADT159C

RADT151MC

**Learning Outcomes**

- Describe the photoelectric effect, Compton effect, their occurrence, and their impact upon the latent image carried by the remnant beam.
- Identify the visibility and geometric components of image quality (brightness, contrast, noise, sharpness, magnification, and shape distortion), and the variables that affect them (kVp, mAs, SID, OID, beam alignment, motion, grids, collimation).
- Describe what mAs and kVp control in the X-ray beam, and why mAs is considered the primary control for beam quantity and kVp is the primary control for beam quality.
- Describe the anode heel effect and the line focus principle and how they relate to visibility qualities of the image.
- Discuss all of the variables affecting exposure level, subject contrast, image noise, sharpness of detail, magnification, and shape distortion at the image receptor.

**RADT123C : Radiation Protection**

Topics covered in this course include radiation quantities and units; interaction of radiation with the body tissues; molecular, and cellular radiation biology; dose limits; equipment design for radiation protection; early and late effects of radiation; management of patient and imaging personnel doses during diagnostic x-ray procedures; and methods of monitoring.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT180C

RADT151MC

RADT116C

RADT203C

**Corequisite Courses**

RADT294C

**Learning Outcomes**

(Clinical Portion)

- Discuss ionizing radiation in the healing arts, justification and responsibility for imaging procedures, and patient education. List different forms of ionizing radiation and identify the units of measurement. Explain how ionizing radiation can cause biologic damage in body tissue.
- Describe the process of absorption of ionizing radiation and explain the events that occur when ionizing radiation passes through matter. List x-ray photon interactions with matter and describe the effect of kVp on image quality and patient dose. Describe the radiation quantities and units used to measure and limit radiation exposure.
- Describe the various monitoring devices and their functions. Discuss the importance of cell biology and the effects of ionizing radiation on the human body. Discuss the effects of ionizing radiation on living systems and the sequence of events occurring after the absorption of energy from ionizing radiation; the action of the living system to compensate for consequence of x-ray absorption and the injury to the living system that may occur from irradiation.
- List the early tissue reactions, stochastic effects, and late tissue reactions of radiation and their effects on organ systems. Discuss and explain dose limits for exposure to ionizing radiation in order to limit the stochastic and late tissue reactions of ionizing radiation exposure.
- Describe the radiographic equipment design and how they can optimize image quality and reduce radiation exposure to the patient. Identify ways to manage patient and imaging personnel radiation dose during diagnostic x-ray procedures. List the special considerations on radiation safety in computed tomography and x-ray breast imaging.

**RADT151MC : Patient Care**

Teaches patient care and safety skills necessary for a radiographer in a hospital setting. Topics covered include hospital organizational structure, ethics, patient assessment,
safety, medical emergencies, infection control, asepsis, medical terminology, pharmacology, and venipuncture. Students will learn proper patient communication and care through a variety of lectures and interactive exercises.

**Communicating Mindfully Capstone**

This capstone course will review and build upon key elements of mindful communication that students have been studying throughout their degree program. Students will practice applying mindful communication skills in the workplace and reflect on those experiences to improve interactions with colleagues, customers, clients, and others. Students will work in groups with peers from different majors. Through online discussion posts, students will use mindful communication techniques to practice attending to others, confirming understanding, and providing feedback that is respectful, insightful, and useful in meeting others' needs. Students will be encouraged and given the opportunity to engage in regular contemplative practices such as mindfulness meditation.

**Credits** 2

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT109C

RADT103C

**Corequisite Courses**

RADT159C

**Learning Outcomes**

- Identify the needs of various types of patients according to age group, status, and patient type; and how to appropriately interact and communicate with those patients and their families.
- Describe the role of the radiographer in taking patient history and the skills necessary to obtain an appropriate patient history.
- Discuss the establishment of infectious disease and factors involved in the spread of disease and chain of infection.
- Describe standard precautions and relate types of transmission-based precautions with clinical situations.
- Differentiate between systems of ethics, law, and morals, and explain ethics of the radiologic technology profession.

**RADT159C : Radiographic Positioning II and Clinical Procedures I**

Examines the radiographic positioning of the osseous system. Topics in this course include positioning, radiographic exposure factors, medical terminology, pathology, radiographic anatomy, radiation protection, and special considerations for the pediatric and geriatric patients. The clinical experience is an extension of the classroom where the student will develop the theory into practical skills through instruction, application, critique, and evaluation on common procedures. All students enrolled in in this course will be charged a $500 per semester clinical surcharge.

**Credits** 9

**Lab/Practicum/Clinical Hours** 26

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT151MC

RADT180C

**Corequisite Courses**

RADT116C

**Learning Outcomes**

(Clinical Portion)

- Demonstrate effective interpersonal skills, including the ability to identify the impact of non-verbal communication.
- Identify patient appropriately and review clinical history, while maintaining patient confidentiality and dignity in all interactions.
- Adhere to concepts that focus on organization theories, roles of team members, and conflict resolution.

(Didactic Portion)

- Identify the anatomy and topographic landmarks of the osseous system.
- Explain all radiographic positioning considerations and clinical indications.
- Demonstrate routine and special projections.
- Evaluate radiographs based on established radiographic criteria.

**RADT164C : Radiographic Positioning III and Clinical Procedures II**

Examines the radiographic positioning of the cervical, thoracic, and lumbar spine along with routine positioning of the biliary tract, upper and lower gastrointestinal system, urinary system, and the study of radiographic contrast media. Topics in this course include positioning, radiographic exposure factors, medical terminology, radiation protection, and special considerations for the pediatric and geriatric patients. Clinical experience is continued in this course. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 9

**Lab/Practicum/Clinical Hours** 26

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT116C

RADT159C

**Corequisite Courses**

RADT220C

**Learning Outcomes**

(Clinical Portion)

- Demonstrate comprehensive and didactic knowledge of concepts needed to produce quality radiographs in line with the didactic component of the course.
- Comprehend verbal and written instructions to correctly perform procedures within the clinical setting.
- Use critical thinking skills for problem solving.
- Display awareness of and sensitivity to diverse population of peers, hospital staff, and medical personnel.

(Didactic Portion)

- Identify the structures demonstrated on routine radiographic and/or fluoroscopic images of the cervical spine, thoracic spine, lumbar spine, sacrum, coccyx, urinary system, biliary tract, upper gastrointestinal system, and lower gastrointestinal system and identify the specific structures, radiographic topographic landmarks, reference points, su-tures, and positioning lines of the 8 cranial bones and 14 facial bones.
- Explain the patient preparation necessary for contrast studies of the urinary system, biliary tract, upper gastrointestinal system, and lower gastrointestinal system.
- Explain the routine and special positions and projections for all radiographic and/or fluoroscopic procedures of the cervical spine, thoracic spine, lumbar spine, sacrum, coccyx, urinary system, biliary tract, upper gastrointestinal system, and lower gastrointestinal system.
- Explain the purpose for the use of contrast media for the urinary system, biliary tract, upper gastrointestinal system, and lower gastrointestinal system.
- Evaluate images for the positioning, centering, appropriate anatomy and overall image quality for radiographic procedures of the cervical spine, thoracic spine, lumbar spine, sacrum, coccyx, urinary system, biliary tract, upper gastrointestinal system, and lower gastrointestinal system.

**RADT165C : Radiographic Clinical Procedures III**

A continuation of the clinical component of RADT 164C. Students will complete their first clinical assignment and build on the procedures taught in previous courses. Four 8-hour clinical days per week over 11 weeks is required. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 5
**Lab/Practicum/Clinical Hours** 23
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
RADT164C
**Corequisite Courses**
RADT203C
**Learning Outcomes**

- Use critical thinking skills for problem solving.
- Demonstrate patient advocacy for a diverse patient population.
- Recognize the impact of non-verbal communication and emotional responses during interactions and modify behavior based on these interactions.

**RADT180C : Radiographic Physics**

A basic review of the physical principles of matter, leading to tube production of electricity with its ramifications pertinent to the field of radiologic technology. Basic radiation producing circuitry is discussed including closed circuit television along with digital radiography.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Corequisite Courses**
RADT103C
RADT109C
**Learning Outcomes**

- Explain the basic characteristics of the atom, subatomic particles and discuss ionization and the emission of alpha, beta, and gamma radiation, and their effects on the nucleus.
- Define the characteristics of waves, with particular attention to electromagnetic waves, their electrical and magnetic components, and magnetism and electrostatics.
- Define electrical current, circuits, power, and frequency; and distinguish between AC and DC waveforms, and describe electromagnetic induction and transformers.
- Describe the basic layout of an X-ray machine circuit and explain the various components of the circuit, to include the materials, components, and function of the X-ray tube including the cathode, high speed rotating anode, glass envelope, and induction motor, and explain the process of thermionic emission and the creation of the space charge.
- Describe the Bremsstrahlung and characteristic interactions, their effects on the X-ray beam spectrum and impact on the image, and describe the effects of target material, mAs, filtration, kVp, and the type of generator used on the X-ray beam spectrum.

**RADT203C : Advanced Radiographic Procedures**

A continuation of RADT 164C and examines the radiographic positioning of the cranium, facial bones, and paranasal sinuses. Other topics include trauma, mobile and surgical radiography, pediatric radiography, arthrography, biliary duct procedures, hysterosalpingography, myelography, conventional tomography and digital tomosynthesis.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT103C

RADT109C

RADT164C

**Corequisite Courses**

RADT165C

**Learning Outcomes**

- List and identify the anatomy and topographic landmarks of the cranium, facial bones, and sinuses
- List and explain all radiographic positioning considerations and clinical indications for cranium, facial bones, sinuses, pediatric radiography, trauma, mobile and surgical procedures, arthrography, biliary procedures, hysterosalpingography, myelography, long bone measurement, skeletal survey, conventional tomography and digital tomosynthesis
- Explain the routine and special projections for cranium, facial bones, sinuses, pediatric radiography, trauma, mobile, surgical radiography, arthrography, biliary procedures, hysterosalpingography, myelography, long bone measurement, skeletal survey, conventional tomography and digital tomosynthesis
- Define and describe special immobilization techniques used in pediatric radiography, radiation protection for the pediatric patient, nonaccidental trauma and the role of radiographer in pediatric imaging.
- Understand mobile x-ray equipment and radiation protection for Trauma, mobile and surgical radiography and describe the role and responsibilities of the radiographer in the surgical suite. Define essential surgical terminology, surgical radiographic equipment, various orthopedic fixation devices, and common surgical procedures that require radiographic support

**RADT209C : Pathology and Cross-Sectional Anatomy**

Introduces concepts related to disease with etiological considerations. Included in this course is the understanding of how the disease process works and recognizing the radiographic appearance of specific diseases. Gross anatomical structures will be located and identified in axial (transverse), sagittal, coronal, and orthogonal (oblique) planes.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Corequisite Courses**

RADT295C

**Learning Outcomes**

- Differentiate pathologic conditions affecting the respiratory system, skeletal system, gastrointestinal system, urinary system, nervous system, endocrine system, and reproductive system.
- Explain the changes in technical factors required for obtaining optimal quality radiographs in patients with various underlying pathologic conditions.
- Discuss the stages of disease: pathological, traumatic, surgical, healing, complications, and genetic versus heredity.
- Classify the more common disease in terms of their attenuation of x-rays.

**RADT220C : Digital Processing and Computerized Tomography**

An understanding of the components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving, and retrieval are discussed as well as quality assurance and maintenance.

**Credits** 3
**Lab/Practicum/Clinical Hours** 2
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
RADT116C
RADT180C
**Corequisite Courses**
RADT164C
**Learning Outcomes**

- Discuss and explain different types of image receptors.
- Describe the parts of a digital fluoroscopy system and their functions.
- Define and discuss the components and function of the PACS, RIS, and HIS, and the DICOM standard.
- Explain the characteristics of digital images, specifically image matrix, bit depth, and dynamic range, and the application of preprocessing and postprocessing to the digital image.
- Explain the construction of the image histogram, general types of histogram analysis, and why they must be matched to the actual acquired histogram.

**RADT294C : Radiographic Clinical Procedures IV**

Students will be required to rotate through a second clinical affiliate for the purpose of learning other procedures, protocols, and technology. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 4
**Lab/Practicum/Clinical Hours** 16
**Lecture Hours** 0
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
RADT203C
**Corequisite Courses**
RADT123C
**Learning Outcomes**

- Build upon comprehensive and didactic knowledge of concepts needed to produce quality radiographs.
- Display awareness of and sensitivity to diverse population of peers, hospital staff, and medical personnel.
- Display organization of work; seen with the ability to coordinate positions in sequence for proper protocol, utilize equipment fluently, and maintain and organized clinical binder.
- Understand and communicate hospital protocol through performance of exams, processing of images, documenting of information in radiology information systems and other pertinent information by demonstrating sound reasoning and logic independently.

**RADT295C : Radiographic Clinical Procedures V**

Students will refine their skills in preparation for the workplace and complete all required clinical competencies for the program. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 4

**Lab/Practicum/Clinical Hours** 16

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT294C

**Corequisite Courses**

RADT209C

**Learning Outcomes**

- Use critical thinking skills for problem solving.
- Identify patient appropriately and review clinical history, while maintaining patient confidentiality and dignity.
- Communicate with patients and family members through appropriate oral and nonverbal communication.
- Display awareness of and sensitivity to diverse population of peers, hospital staff and medical personnel.

**RAET205C : PLC Programming**

Students will develop a thorough understanding of modern, industry-standard PLC hardware and software to enable them to use PLCs effectively. Topics include the PLC as a task specific computer, program scan, relay ladder logic, digital and analog, sequencers/drums, functions and function blocks, RLL, SCL, FBD, human machine interface, and other industry related topics. Numerous industry examples will be explored and discussed. Labs will emphasize program organization, documentation, audience awareness, maintainability, robustness, fault tolerance, and debugging.

**Credits** 3

**Lab/Practicum/Clinical Hours** 3

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH124C

CPET107C

ELET101C

**Learning Outcomes**

- Describe PLC architecture.
- Describe PLC input/output wiring.
- Use descriptive tags and comments.
- Write code in relay ladder logic, graph programing, statement list, and function block diagrams.
- Effectively use timers and counters to solve programming problems.
- Understand and use PLC memory and registers.
- Describe and use a PID loop.
- Describe and use a master control relay.
- Effectively use functions and function blocks.
- Write clear and easy to understand code.
- Describe and use edge trigger contacts.
- Understand and use the binary, hexadecimal, octal number systems.
- Use analog input/output.
- Setup and use a human machine interface.

**RAET210C : Robotics and Automation I**

Introduces fixed and flexible automation equipment. An emphasis is placed on flexible equipment components such as the industrial robot. Robot topics include history, geometric configuration, component subsystems, robot safety, basic programming and operation, and end effector design. Lab work includes the use of industrial robot arms to perform various independent functions such as assembly and material handling processes. Other equipment studied includes motion control devices, such as motors and sensors, conveyors and parts feeder mechanisms, and use of vision systems and other automation equipment used in manufacturing. Students enrolled in this course will be charged a $50 materials fee.

**Credits** 4

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

MATH140C

MFET111C

CPET107C

**Learning Outcomes**

- Briefly trace the historical evolution of the industrial robot.
- Define the term industrial robot.
- Describe the characteristics of robots that make them an important part of industrial automation.
- Describe the following robotic system components: controller, manipulator, power supply, and end effector.
- List and describe the basic robot motion configurations.
- Define the term degrees of freedom as applied to industrial robots.
- Describe the most common robotic work envelope configurations and match these work envelopes with specific robot applications.
- Describe basic programming methods used with industrial robots.
- Program an industrial robot to perform a prescribed task and demonstrate.
- List industrial applications where teach pendant programming and off-line programming are most commonly used.
- Describe pneumatics as used with industrial robots.
- Design and build an end effector.
- Describe machine vision systems and give examples of their uses with robots.
- Describe these applications of industrial robots: die casting, spray painting, welding, assembly, finishing, inspection, loading and unloading, service applications, and automated guided vehicles.
- Describe important safety considerations when applying robots in industry.
- List factors to consider when selecting robots for industrial applications.
- Describe and demonstrate a pneumatic and hydraulic fluid power system.
- List the advantages and disadvantages of preventive maintenance.
- Discuss the implications of robotics technology on society to include job displacement, retraining of workers, and the need for computer literacy.

**RAET220C : Robotics and Automation II**

Covers advanced topics that include the integration of robots and CNC machines into manufacturing cells. The integration of automation equipment such as PLCs, motion control devices, and vision systems is also covered. The lab work includes the use of PLCs, robots, CNC machines, and other automation equipment. Students enrolled in this course will be charged a $50 materials fee.

**Credits** 4

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RAET205C

RAET210C

**Learning Outcomes**

- Discuss the use of electromechanical systems with robots.
- Explain the function of control systems used with robots.
- Describe the type of motion that rotary electric actuators produce.
- Discuss image processing functions of acquisition, preprocessing, analysis, and interpretation used with machine vision systems.
- Discuss the implications of robotics technology on society to include job displacement, retraining of workers, and the need for computer literacy.
- Describe and perform the integration of robots and CNC machines into manufacturing cells.
- Describe and use motion control devices, such as motors and sensors, conveyors and parts feeder mechanisms
- Set up and use of vision systems as well as other automation equipment used in manufacturing.
- Demonstrate and integration of automation equipment such as PLCs, motion control devices, and vision systems.

**RDTH101C : Introduction to Radiation Therapy**

Provides an overview of the foundations of radiation therapy and the practitioner's role in the healthcare delivery system. Principles, practices, and policies of the educational program, healthcare organizations, principles of radiation and health safety and professional responsibilities, and ethics, law, and medical terminology of the radiation therapist will be discussed and examined.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Incorporate current medical terminology in the field of radiation therapy.
- Describe the positional infrastructure with the radiation oncology department.
- Analyze the ethical and legal issues present in the radiation oncology clinic.
- Compare and contrast the four modalities used for treatment of cancer.

**RDTH110C : Principles and Practice of Radiation Therapy I**

Provides an overview of cancer and the specialty of radiation therapy. The medical, biological, pathological, physical, and technical aspects will be discussed. The roles and responsibilities of the radiation therapist, the treatment prescription, the documentation of treatment parameters, and delivery will also be discussed.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Describe historical treatment methods in radiation therapy and compare to current treatment methods.
- Discuss a simulation plan for a tumor, including necessary steps before, during and after the procedure.
- Explain the patient care process to include side effects, modifications, and patient education.
- Analyze and evaluate the procedure for radiation treatment delivery.
- Discuss tumor classification based on histology pathogenesis and tumor characteristics.

**RDTH115MC : Patient Care**

Discussion of the foundation concepts and competencies in assessment and evaluation of the patient for service delivery. Psychological and physical needs and factors affecting treatment outcome will be presented and examined. Routine and emergency care procedures will be presented. This capstone course will review and build upon key elements of mindful communication students have been studying throughout the degree program. In particular, students will practice applying mindful communication skills in the workplace and reflect on those experiences to improve interactions with colleagues, customers, clients, and others. Students will work in groups with peers from different majors. Through online discussion posts, students will use mindful communication techniques to practice attending to others, confirming understanding, and providing feedback that is respectful, insightful, and useful in meeting others' needs. Students will be encouraged and given the opportunity to engage in regular contemplative practices such as mindfulness meditation.

**Credits** 1

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Explain the dynamics of communicating with the cancer patient and family.
- Recognize medical emergencies and complications and select appropriate medical intervention.
- Assess the physical condition of the patient before, during, and after treatment delivery.
- Assess the nutritional status of the cancer patient to provide nutritional education or intervention.
- Provide appropriate patient education following patient assessment.

**RDTH150C : Medical Imaging and Processing**

Establishes a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning, and treatment verification in radiation oncology. Radiation oncology imaging equipment and related devices will be emphasized. Content will also include quality management programs and continuing quality improvements in radiation oncology.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
RDTH101C
RDTH110C
**Learning Outcomes**

- Discuss fundamentals of digital imaging, distinguishing between cassette and cassetteless systems.
- Analyze relationships of technical factors affecting image contrast, density, and resolution to determine optimal image quality.
- Describe the components and the operation of a simulator, to include the radiographic, fluoroscopic and CT units.
- Explain the basic principles of image formation for each of the following modalities: CT, MRI, ultrasound, nuclear medicine, PET, fusion imaging, and hybrid imaging.

**RDTH180C : Radiation Physics for the Radiation Therapist**

Establishes a basic knowledge of physics pertinent to developing an understanding of radiation use in the clinical setting. Fundamental physical units, measurements, principles, atomic structure, and types of radiation are emphasized. Also presented are the fundamentals of x-ray generating equipment, x-ray production, and interaction with matter.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Discuss the properties implemented for radiation protection.
- Explain the process of electricity and its relationship to electromagnetism.
- Discuss electrical current and electrification.
- Identify properties of photons and their interactions with matter.

**RDTH190C : Clinical Practice I**

Provides sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development will be discussed, examined, and evaluated. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 4

**Lab/Practicum/Clinical Hours** 16

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH101C

RDTH110C

**Learning Outcomes**

- Perform simulation, localization, and therapeutic radiation therapy procedures in accordance with national patient safety standards.
- Deliver patient-centered care.
- Demonstrate the principles of radiation protection.
- Construct and prepare immobilization, beam alignment, and beam modification devices.
- Evaluate and verify treatment plan prior to treatment delivery.
- Demonstrate appropriate and effective written, oral, and nonverbal communication with patients and other members of the healthcare team.
- Execute approved treatment plan in accordance with prescription.
- Assess patient side effects and complications to create and interdisciplinary management strategy that fosters prevention, healing, and comfort.
- Perform quality assurance procedures for all treatment delivery equipment, accessories, and treatment room doors.

**RDTH195C : Clinical Practice II**

Requires two 8-hour days of clinical over 11 weeks to provide sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development will be discussed, examined, and evaluated. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 4

**Lab/Practicum/Clinical Hours** 18

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH190C

**Learning Outcomes**

- Perform simulation, localization, and therapeutic radiation therapy procedures in accordance with national patient safety standards.
- Deliver patient-centered care.
- Demonstrate the principles of radiation protection.
- Construct and prepare immobilization, beam alignment, and beam modification devices.
- Evaluate and verify treatment plan prior to treatment delivery.
- Demonstrate appropriate and effective written, oral, and nonverbal communication with patients and other members of the healthcare team.
- Execute approved treatment plan in accordance with prescription.
- Assess patient side effects and complications to create and interdisciplinary management strategy that fosters prevention, healing, and comfort.
- Perform quality assurance procedures for all treatment delivery equipment, accessories, and treatment room doors.

**RDTH200C : Radiation Protection and Biology**

Presents basic principles of radiation protection and safety for the radiation therapist. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and healthcare organizations are incorporated. Specific responsibilities of the radiation therapist are discussed, examined, performed, and evaluated. Content also includes basic concepts and principles of radiation biology. The interactions of radiation with cells, tissues and the body as a whole, and resultant biophysical events will be presented. Discussion of the theories and principles of tolerance dose, time dose relationships, fractionation schemes, and the relationship to the clinical practice of radiation therapy will be discussed, examined, and evaluated.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH101C

RADT180C

RDTH150C

**Learning Outcomes**

- Identify all components of a cell discussing the radiosensitivities of each.
- Discuss the early and late effects of radiation on the cells and tissues.
- Compare somatic and genetic effects of radiation.
- Compare the relationship of time, dose, fractionation, volume, and site to radiation effects.
- Evaluate the principles of radiation protection for the occupational worker.

**RDTH205C : Treatment Planning**

Establishes factors that influence and govern clinical planning of patient treatment. Encompassed are isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation, and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams. Sterotactic and emerging technologies are presented.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH101C

RDTH110C

**Learning Outcomes**

- Describe influencing factors of radiation.
- Perform dosimetric calculations.
- Describe moving beam techniques.
- Discuss the importance of preventing overdose and underdose and the techniques used to do so.
- Evaluate and assess a treatment plan.

**RDTH210C : Principles and Practice of Radiation Therapy II**

Examines and evaluates the management of neoplastic disease using knowledge in arts and sciences while promoting critical thinking and the basis of ethical clinical decision making. The epidemiology, etiology, detection, diagnosis, patient condition, treatment, and prognosis of neoplastic disease will be presented, discussed, and evaluated in relationship to histology, anatomical site, and patterns of spread. The radiation therapist's responsibility in the management of neoplastic disease will be examined and linked to the skills required to analyze complex issues and make informed decisions while appreciating the character of the profession.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH101C

RDTH110C

**Corequisite Courses**

RDTH290C

**Learning Outcomes**

- Discuss the clinical presentation for each anatomic neoplastic site.
- Explain preventative methods and screening tools associated with each neoplastic site.
- Explain detection, diagnosis, grading, and staging systems for each neoplastic site.
- Discuss the role of radiation therapy in the management of oncology emergencies.

**RDTH215C : Sectional Anatomy and Pathology**

Studies normal sectional anatomy via diagrams and radiologic images. The pathology content is broken into two parts: general pathology and neoplasia. General pathology introduces basic disease concepts, theories of disease causation, and system-by-system pathophysiologic disorders most frequently encountered in clinical practice. Neoplasia provides an in-depth study of new and abnormal development of cells. The processes involved in the development and classification of both benign and malignant tumors and site-specific information on malignant tumors is presented.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

BIOL195C

**Corequisite Courses**

BIOL196C

**Learning Outcomes**

- Identify the pros and cons, image formation and image orientation of CT, MR, PET, and ultrasound.
- Identify and discuss the use of topographic anatomy and sectional anatomy with regard to radiation oncology, of the head and neck, chest, abdomen, pelvis, spine, and extremities.
- Identify basic structures and common abnormalities.
- Discuss pathology in relation to cancer presence in the head, neck, chest, abdomen, pelvis, spine, and extremities.

**RDTH220C : Radiation Therapy Physics**

Reviews and expands concepts and theories in the radiation physics course. Detailed analysis of the structure of matter, properties of radiation, nuclear transformations, x-ray production, and interactions of ionizing radiation are emphasized. Also presented are treatment units used in external radiation therapy, measurement and quality of ionizing radiation produced, absorbed dose measurement, dose distribution, and scatter analysis.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RADT180C

RDTH150C

**Corequisite Courses**

RDTH293C

**Learning Outcomes**

- Describe atomic structure and composition among the elements, including but not limited to particles (their location, energy level and charge), atomic number and mass.
- Explain nuclear stability and types of radioactive decay.
- Describe x-ray production for linear accelerators including the factors that influence production and output.
- Compare the characteristics of betatron, cyclotron, microtron, and other accelerated particles.
- Explain charged particle interactions with matter, describing dose deposition, energy loss, and shielding requirements.

**RDTH280C : Registry Review**

Prepares the radiation therapy student to take the national certification examination through the American Registry of Radiologic Technologists. Various topics will be addressed each week with a practice registry exam given to complete the program.

**Credits** 1

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH220C

RDTH210C

**Learning Outcomes**

- Present and discuss current therapy topic to the professional community.
- Prepare and distribute a professional resume

**RDTH290C : Clinical Practice III**

Provides sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development will be discussed, examined, and evaluated. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 5

**Lab/Practicum/Clinical Hours** 24

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH190C

RDTH195C

**Learning Outcomes**

- Perform simulation, localization, and therapeutic radiation therapy procedures in accordance with national patient safety standards.
- Deliver patient-centered care.
- Demonstrate the principles of radiation protection.
- Construct and prepare immobilization, beam alignment, and beam modification devices.
- Evaluate and verify treatment plan prior to treatment delivery.
- Demonstrate appropriate and effective written, oral, and nonverbal communication with patients and other members of the healthcare team.
- Execute approved treatment plan in accordance with prescription.
- Assess patient side effects and complications to create and interdisciplinary management strategy that fosters prevention, healing and comfort.
- Perform quality assurance procedures for all treatment delivery equipment, accessories, and treatment room doors.

**RDTH293C : Clinical Practice IV**

Builds on the sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development will be discussed, examined, and evaluated. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 5

**Lab/Practicum/Clinical Hours** 24

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH290C

**Learning Outcomes**

- Perform simulation, localization, and therapeutic radiation therapy procedures in accordance with national patient safety standards.
- Deliver patient-centered care.
- Demonstrate the principles of radiation protection.
- Construct and prepare immobilization, beam alignment, and beam modification devices.
- Evaluate and verify treatment plan prior to treatment delivery.
- Demonstrate appropriate and effective written, oral, and nonverbal communication with patients and other members of the healthcare team.
- Execute approved treatment plan in accordance with prescription.
- Assess patient side effects and complications to create and interdisciplinary management strategy that fosters prevention, healing, and comfort.
- Perform quality assurance procedures for all treatment delivery equipment, accessories, and treatment room doors.

**RDTH295C : Clinical Practice V**

Requires 32 hours per week over 11 weeks and builds on the sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development will be discussed, examined, and evaluated. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 5

**Lab/Practicum/Clinical Hours** 23

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH293C

**Learning Outcomes**

- Perform simulation, localization, and therapeutic radiation therapy procedures in accordance with national patient safety standards.
- Deliver patient-centered care.
- Demonstrate the principles of radiation protection.
- Construct and prepare immobilization, beam alignment, and beam modification devices.
- Evaluate and verify treatment plan prior to treatment delivery.
- Demonstrate appropriate and effective written, oral, and nonverbal communication with patients and other members of the healthcare team.
- Execute approved treatment plan in accordance with prescription.
- Assess patient side effects and complications to create and interdisciplinary management strategy that fosters prevention, healing and comfort.
- Perform quality assurance procedures for all treatment delivery equipment, accessories, and treatment room doors.

**RDTH296C : Clinical Practice VI**

Designed to perfect the content of the previous didactic and clinical courses. The content is designed to provide sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development will be discussed, examined, and evaluated. All students enrolled in this course will be charged a $500 per semester clinical surcharge.

**Credits** 7

**Lab/Practicum/Clinical Hours** 32

**Lecture Hours** 0

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

RDTH295C

**Learning Outcomes**

- Perform simulation, localization, and therapeutic radiation therapy procedures in accordance with national patient safety standards.
- Deliver patient-centered care.
- Demonstrate the principles of radiation protection.
- Construct and prepare immobilization, beam alignment, and beam modification devices.
- Evaluate and verify treatment plan prior to treatment delivery.
- Demonstrate appropriate and effective written, oral, and nonverbal communication with patients and other members of the healthcare team.
- Execute approved treatment plan in accordance with prescription.
- Assess patient side effects and complications to create and interdisciplinary management strategy that fosters prevention, healing and comfort.
- Perform quality assurance procedures for all treatment delivery equipment, accessories, and treatment room doors.

**SCI104C : Astronomy and Space**

Acquaints students with the complexities of the universe. The theoretical portion of the course is divided into four topics: the history of astronomy and telescopes; the planets and moons of our solar system; the birth, life, and death of stars; and galaxies and the large-scale structure of the universe. The lab portion of the course consists of in-class activities, outdoor observations during class, and independent labs in which the student makes observations of objects in the night sky.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Recommended Prerequisites**

High school Algebra I or equivalent

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Describe Earth's place in the solar system, the Milky Way galaxy and the universe.
- Be able to explain the tides, seasons, eclipses and the phases of the moon.
- Identify the main characteristics of each planet and some of the moons revolving around them.
- Demonstrate an understanding of the Big Bang Theory.
- Demonstrate an understanding of the formation of the solar system.
- Distinguish among various aspects of the universe: galaxies, black holes, dark matter, etc.
- Describe the process that powers the stars.
- Explain the various characteristics of stars and their life cycles.
- Identify the major constellations and develop a familiarity with the night sky.
- Demonstrate an understanding of comets, meteors, asteroids and auroras.
- Identify those scientists who have contributed major research information to our ideas of the universe.
- Explain the history, difficulties and rewards of the space program.

**SCI107C : Introduction to Meteorology**

Introduces the fundamentals of weather and climate. Topics include observing weather, physical properties and processes of the atmosphere, weather systems, hazardous weather (thunderstorms, tornadoes, and hurricanes), basics of forecasting, clouds, air pollution, and climate change. The lab component consists of group exercises, hands-on experiments, and use of the internet to explore the topics of weather. This course requires regular student access to the internet.

**Credits** 4

**Lab/Practicum/Clinical Hours** 2

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Describe, measure, and interpret the basic physical properties of the atmosphere, and relate them to observed weather phenomena.
- Understand daily and seasonal weather changes and the daily weather reports and forecasts provided by the media.
- Analyze, interpret, and evaluate numerical weather data, maps of surface, upper-air and forecast weather, and satellite and radar images.
- Understand that apparently random weather conditions are related to organized weather systems that develop and move in ways that can be understood and predicted.
- Compare and contrast the structure and development of basic weather systems, and relate them to associated weather conditions.
- Describe forms of severe weather, articulate the hazards associated with each, and prescribe safety practices to protect life and property.
- Relate the science of meteorology to real-life experiences.
- Discuss the intricacies and limitations of weather forecasting.
- Discuss and appreciate the complexity of Earth's climate system and uncertainties regarding global climate change.

**SOCI105C : Introduction to Sociology**

Introduces the concepts, principles, and applications of the social science method in general and of sociology in particular, including a review of some of the crucial sociological problems of today, involving the relationship of the individual to society and groups of individuals to one another. Some topics included are culture, race, gender, class, social mobility, health, and social change. Historical and economic forces in the U.S. will also be examined in relation to sociological concepts.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Explain the value of the sociological perspective and the new and different ways of looking at familiar worlds, including through symbolic interactionism, functional analysis, and conflict theory.
- Demonstrate an understanding of culture and its formation as well as an appreciation of what one culture can learn from the other, including its material and nonmaterial component and the importance of cultural relativism how it helps to avoid an ethnocentric approach to understanding other cultures.
- Explain the importance of the socialization process and the role interaction plays in the social construction of the individual and society.
- Analyze the social structure (society's framework) and social interaction (face-to-face/personal space) in defining the nature of the human experience, differentiating between macro-sociological and micro-sociological approaches to understanding social life.
- Demonstrate knowledge of social stratification and social inequalities and the ways in which they impact relationships between nations and an individual's life chances.
- Provide examples of the significance of the sweeping changes in society brought about by the social evolutionary process of technology, capitalism, globalization, and other catalysts.

**SOCI180C : Environment and Society**

Society and the natural environment are vitally linked in a number of ways. In this course, students will explore these connections at various levels from the local to the global, but with a focus on the students' lives and local communities as important case studies. This course focuses on the social causes of environmental problems, the social consequences of environmental degradation, and social responses to environmental issues. The course is designed to provide students with the sociological tools and hands-on experiences that will help them gain a better understanding of local and global earth systems related to food, energy transportation housing, waste, and water, as well as the qualities of ecological integrity, social and racial justice, resilient communities, and economic well-being.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Explain the value of a social ecological perspective and the new and different ways of looking at familiar worlds.
- Demonstrate an understanding of the role institutions and human actions play in shaping relationships with the non-human environment.
- Explain the importance of key environmental sociology concepts and terms to develop and understanding of social/environmental issues, defining the importance of place and community, sustainability, consumption and production, externalities, social construction of nature, and environmental justice.
- Evaluate the importance of the social structure (society's framework) and social interaction (face-to-face/personal space) in defining the nature of the human experience and the relationship to the natural world.
- Demonstrate understanding of the significance of the sweeping changes in society and the environment brought about by the social evolutionary process of technology, capitalism, globalization, and other catalysts.

**SOCI214C : Race and Ethnic Relations**

Examines social and historical experiences of the major minority groups to better understand their social, cultural, and economic status, and group relations in the U.S. Contemporary topics will include diversity, assimilation, ethnic identity, prejudice, discrimination, racism, class, gender, immigration, inequality, and poverty. This course provides an opportunity to examine ideas relating to such diverse issues as the relationship between attitudes and behaviors, the complexity of class, power, and conflict, and the interplay between economic and political systems.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
SOCI 105C
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Distinguish between the meaning of race and ethnicity as well as the ideology of racism, the social construction of race and ethnicity, and their roles in multiracial and multiethnic society.
- Analyze majority/minority relations from a sociological perspective as socially constructed concepts.
- Demonstrate an understanding of the role of power and the way dominant group status is created and maintained.
- Analyze the importance of racial and ethnic diversity to contemporary American society.
- Explain how social, cultural, and economic conditions and experiences affect racial and ethnic minority groups in the U.S.

**SOCI240C : Marriage, Family, and Personal Relationships**

Examines concepts and issues associated with family life and personal relationships. A variety of social problems that impact personal relationships, marriage, and the family will be addressed, relating them to social, cultural, political, and economic changes in society. Such issues as diversity of families, cross-cultural perspectives, work and economics, social class, reproductive and parenting rights, partner selection, the internal dynamics of relationships, gender and sexuality, relationship violence, marital dissolution, and future family trends will be examined. Altogether, such changes in the world outside the family have profound impact on what happens inside the family and profound consequences on how individuals conduct their personal and social lives together. The questions that this course will raise and attempt to answer will hopefully enable us to live together in adulthood with considerably more ease than many currently experience. (An introductory sociology or psychology course is recommended.)

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Recommended Prerequisites**
An introductory sociology or psychology course
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**
Upon completion of this course, students will be able to do the following:

- Explain the value of the sociological perspective as it applies to the socially constructed meaning of families and relationships.
- Demonstrate an understanding of why an analysis of gender is critical to the sociological study of families and relationships.
- Explain the importance of how race and ethnicity can play powerful roles in people's family and relationship experiences.
- Evaluate the importance and influence of broad economic forces on relationship and family dynamics, access to important resources and life chances, and structure across the economic spectrum in respect to class distinctions.
- Demonstrate an understanding of the personal and cultural development of intimate relationships and the role of love, sexuality, and attraction in marriage and cohabitation.
- Demonstrate the understanding of the cultural importance of parenthood and the cultural and historical context of the transition to parenthood.
- Evaluate the significance of sweeping social changes in society on the future of relationships and families.

**SOCI250C : Conflict Resolution in Modern Society**

Provides an overview of theories and research concerning the nature of conflict and methods for resolving conflict. The foundation of the course is social systems theory; the course examines conflicts among social institutions and conflicts among diverse populations. The effects of conflict on the individual are considered. The course provides the student/practitioner with the theoretical framework for analyzing and resolving conflict. This course does not meet the minimum Social Science requirement for NHTI's associate degrees or professional certificate programs.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**SOCI298C : Travel/Study Abroad Experience**

Students will learn about another country through on-site study that may include visitation to historic sites, libraries, archives, cultural events, and museums. The history, culture, economy, and politics of the host country will be examined. Students will increase their cultural awareness and cross-cultural sensitivity through exposure to people from different countries and cultures. As a school-sponsored travel/study abroad experience (at student's expense), this course combines the equivalent of 3 credits of classroom and field experience. A project is required to document the learning experience. May be repeated for credit with permission of the department chair.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

- Students must take either PSYC105C, PSYC105MC, or SOCI105C, or gain permission of the department chair.

PSYC105C
SOCI105C
**Learning Outcomes**

- Identify personal learning goals associated with the culture and area they will be visiting. Describe specific issues related to traveling to the specific country of the trip. Demonstrate familiarity with the basics of intercultural communication and identify problems that could arise. Explain the relationship between the U.S. and host country.
- Demonstrate awareness of how ethnocentrism influences attitudes and openness to new experiences. Demonstrate and appreciate diversity in the culture, politics, and belief systems of the host country.

**SPAN111C : Elementary Spanish I**

A fully integrated introductory Spanish course. The course is designed for beginning Spanish students whose learning objectives and needs are in any of the following categories: continued language study, business purposes, or travel. The emphasis is to develop proficiency in communicative skills concentrating on the dynamic application of the living language taught through dialog, phonetics, and vocabulary. A strong grammar foundation and other basic language skills are taught through actual phrases and sentences, helping the student develop an instinctive sense of the correct usage. These objectives will be achieved through the following approaches: speaking, listening, reading, writing, and cultural studies.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify features of everyday life and culture in multiple countries where the language is spoken.
- Orally communicate short messages and ask questions on a variety of everyday topics with novice-level pronunciation.
- Meet the demands of practical writing situations at a novice level, using basic vocabulary and grammatical structures.
- Identify key words, aural cognates, and formulaic expressions that are highly contextualized.

**SPAN112C : Elementary Spanish II**

A fully integrated intermediate Spanish course. The course is designed for intermediate Spanish students whose learning objectives and needs are in any of the following categories: continued language study, business purposes, or travel. The emphasis is to consolidate and reinforce the language skills acquired in Elementary Spanish I or the equivalent and to continue building communicative skills and cultural appreciation. The course continues to offer a comprehensive review of basic first year grammar structures, while developing proficiency and advancement in communicative skills concentrating on the dynamic application of the living language taught through dialog, phonetics, and vocabulary. A strong grammar foundation and essential language skills are taught through actual phrases and sentences, helping the student develop an instinctive sense of the correct usage. These objectives will be achieved through the following approaches: speaking, listening, reading, writing, and cultural studies.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

SPAN111C

**Learning Outcomes**

- Identify nuanced features of everyday life and culture in multiple countries where the language is spoken.
- Orally communicate and handle a variety of tasks essential to survival in the target-language culture.
- Meet the demands of practical writing situations using discrete sentences, situational vocabulary, varying syntax, and grammatical structures.
- Accurately identify key phrases, sentences, and paragraphs, including aural cognates and a variety of formulaic and quotidien expressions in multiple social contexts.

**SPTS101C : Introduction to Sports Management**

Emphasizes basic management principles as they relate to sports management. A variety of management techniques and approaches are analyzed to broaden students' background in this area and to better allow them to develop effective and comprehensive sports management plans.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand market forces creating need for sound sport marketing strategy.
- Understand obstacles to sport marketing strategy.
- Recognize components of sport product and sport industry.
- Learn what makes sport marketing unique.

**SPTS170C : Sports and Recreation Marketing**

Focuses on marketing issues as they relate to sports-related enterprises. A variety of marketing techniques and approaches are analyzed to broaden students' backgrounds in this area and to better allow them to develop effective and comprehensive sports marketing plans.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
SPTS101C
MATH106C
**Learning Outcomes**

- Understand market forces creating need for sound sport marketing strategy.
- Understand obstacles to sport marketing strategy.
- Recognize components of sport product and sport industry.
- Learn what makes sport marketing unique.

**SPTS180C : Public Relations and Advertising for the Sports Industry**

Provides a cross-disciplinary approach to a variety of promotional issues that sport managers routinely confront. Public relations and advertising professionals offer insights into how sports-related endeavors and businesses can raise public awareness about products and services.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
SPTS101C
ENGL101C

**SPTS195C : Sports Tourism**

A branch of the hospitality and tourism industry has developed to focus on the needs of these clients. Youth sport tourism, for example, has become a $7 billion industry in the U.S. alone. The study of sports tourism draws on the disciplines of management, finance, economics, event planning, and marketing.
**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Identify the interrelationships between sport and tourism.
- Explain the interdisciplinary program of study of sport and tourism.
- Identify the relationship between sport and tourism.
- Identify the infra-structured needed for sporting events.
- Identify the various methods to estimate sport tourism economic impact on the local/regional/state.
- List the planning steps to bid to host a sport tourism event.
- Identify the role marketing plays in planning a sporting event.
- Ability to prepare and plan a sporting event.
- Write a site inspection on sport/convention facilities.
- Identify career opportunities in sports tourism.

**SPTS210C : Sports and Fitness Facilities Management**

Exposes students to the many elements and dynamics associated with managing a sports or fitness facility. Students will visit a variety of structures, arenas, and facilities and will gain an understanding of what is required to develop and successfully administer and market such facilities.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Create budgets for sport and fitness facilities.
- Develop job descriptions for positions within sports and fitness facilities and on sports-related projects and create staffing schedules.
- Discuss concepts and principles of facility design, management, and construction.
- Explain risk management concerns related to sports and fitness facilities and projects.
- Identify revenue streams, and revenue opportunities, for sports and fitness facilities.
- Demonstrate best practices in event booking for various types of indoor and outdoor facilities.

**SPTS250C : Sports and Society**

Raises awareness with regard to the sociology of sport and how cultural practices in the world of sport can have significant social, economic, and political consequences. Discussion and research should give future sport managers a broader understanding of how sport impacts different groups of people in different ways throughout this country and beyond.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**TECP50C : Introduction to Exceptionalities**

Introduces the exceptionalities and related topics in the field of special education including definitions, prevalence, assessment, and intervention. It includes discussion of strategies for facilitating students' independence, learning, social connections, and self-advocacy skills. Curriculum emphasizes the philosophical and practical applications of valuing students' abilities and diversity and collaborating with educators and families. It will explore curriculum modifications and accommodations, problem-solving strategies, and transition issues. Ten hours of field work are required in this course. A $25 fee will be assessed to all students to cover the cost of clinical practice.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Identify children with diverse learning needs and the effects of diverse learning needs on children and families.
- Explain the principles of inclusion and integration of children in the school environment.
- Demonstrate an understanding of the federal and state laws governing services for students with diverse learning needs including the Individuals with Disabilities Education Act; Sections 504 and 508 of the Rehabilitation Act; and Americans with Disabilities Act.
- Identify appropriate strategies to respond to children with diverse learning needs.
- Demonstrate an understanding of how learners develop, recognizing that patterns of learning and development vary individually within and across the personal, physical, social, and academic dimensions.
- Demonstrate an understanding of learner differences as demonstrated by an understanding of individual differences and diverse cultures and communities
- Demonstrate an understanding of collaboration as demonstrated by collaborating as a member of the larger learning community with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well being.

**TECP51C : Foundations of Education**

Investigates the philosophical, historical, and social/cultural character of education in the U.S. It is intended to be an examination of how schools function organizationally. Discussions will include the role of education, system philosophy, and trends that have shaped contemporary education; field observations are included. This course is a concentration requirement for both Special Education and Education Associate Degree programs. It is intended to be the first in a series of learning experiences for those interested in careers as teachers. Ten hours of classroom observation required. A $25 fee will be assessed to all students to cover the cost of clinical practice.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Discuss current issues and their implications in education.
- Describe how historical, philosophical, social, and cultural perspectives influence educational practice.
- Identify ways in which the larger community works collaboratively to leverage resources that contribute to student growth, development, learning, and well being.
- Describe personal learning and teaching styles and preferences and educational philosophy.
- Present as a professional demonstrating appropriate demeanor and communication skills.
- Conduct focused classroom observations analyzing the effectiveness of instructional methods.
- Identify the roles and functions of schools, school systems, the local, state, and federal governments, and other agencies in public education.
- Discuss ethical and legal issues in education including teacher and student rights and the professional code of ethics.
- Identify the roles of curriculum, standards, and assessment in student learning.

**TECP52C : Internship I: Methods for ESOL Teachers**

Prepares educators for ESOL teaching. This course is the first part of a two-semester sequence. Students document their work in the school, including planning, teaching, and consultation and aiding with transition issues. Students assume the full range of teaching responsibilities while supervised in the field. Seminars meet weekly throughout the semester. Students document their internship hours. This course also focuses on communicative interactions between and within different culture groups. We explore issues related to effective cross-cultural communication and miscommunication. An examination of how one's own cultural values and norms affect and guide intercultural interactions will guide class discussions and projects. Concepts such as power distance, hierarchy, uncertainty avoidance, non-verbal communication, and other intercultural communicative features are explored, and ethnocentrism, stereotyping, and other value-based judgments are addressed.

**Credits** 7
**Lab/Practicum/Clinical Hours** 15
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the ESOL Conversion Program, completion of the previous ESOL coursework, and department head approval

**TECP53C : Internship II: Methods for ESOL Teachers**

Prepares educators for ESOL teaching. This course is the second part of a two-semester sequence. This is a field-based course that integrates and applies previous course work in ESOL certification. Students document their work in the school, including planning, teaching, and consultation and aiding with transition issues. Students assume the full range of teaching responsibilities while supervised in the field. Seminars meet weekly throughout the semester. Students document their internship hours. This course also focuses on communicative interactions between and within different culture groups. We explore issues related to effective cross-cultural communication and miscommunication. An examination of how one's own cultural values and norms affect and guide intercultural interactions guides class discussions and projects. Concepts such as power distance, hierarchy, uncertainty avoidance, non-verbal communication, and other intercultural communicative features are explored, and ethnocentrism, stereotyping, and other value-based judgments are addressed.

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the ESOL Conversion Program, completion of the previous ESOL coursework, and department head approval

**TECP60C : Supporting Students with Challenging Behaviors**

This course will focus on the knowledge and skills necessary for supporting students with challenging behaviors in various learning environments, using the framework of positive behavioral supports. Students will gain knowledge of the basic assumptions about the context, function, and role of behavior. Students will learn to use a variety of positive behavior intervention techniques to control targeted behavior, support learning, and maintain the attention of students. Ten hours of field observation required. A $25 fee will be assessed to all students to cover the cost of clinical practice.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Demonstrate an understanding of the complex nature of children's behavior and create plans for a positive learning environment; establish supportive relationships with children, and design, implement, and evaluate strategies, including positive behavioral supports and interventions.
- Demonstrate ways to promote children's independence and self-advocacy, respecting family and cultural norms.
- Demonstrate an understanding of the impact of children's health status (e.g. medications, nutrition, fitness) on learning and behavior and takes these factors into account all aspects of educational programming.
- Develop ways to work with learners to create and access learning environments that support self-directed individual and collaborative learning, based on each learner's interests and passions.

**TECP61C : Legal and Ethical Issues in Education**

Predicated on legislative requirements such as the Individuals with Disabilities Education Act, this course considers theories and issues in the context of inclusive instructional settings. Students will develop an understanding of the various legal and ethical requirements as well as effective instructional strategies for curriculum adaptation and delivery within the context of federal and N.H. state special education and education laws and procedures.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

EDU104C
TECP51C

**Learning Outcomes**

- Understand collaboration as a member of the larger learning community, with learners, families, colleagues, other professionals, and community members to leverage resources that contribute to student growth and development, learning, and well-being.
- Understand the American legal system, the role of the government and the pertinent legislative and legal and ethical requirements regarding education.

**TECP62C : Teaching Strategies for Diverse Learners**

Focuses on practical instructional strategies for designing developmentally appropriate and challenging learning experiences based on the unique needs of individual learners. Students use differentiated instruction and universal design for learning as frameworks for designing lessons that meet the needs of diverse learners. Methods for adapting instruction and supporting students through modifications, accommodations, and assistive technology are explored. Students will collect a repertoire of evidence-based strategies for identifying and addressing the reading, writing, math, and study skills of students with disabilities. Through field experience, students have the opportunity to observe in the classroom and gain practical experience planning, delivering, adapting, and reflecting on a series of individualized lessons. Ten hours of field work are required. Ten hours of field observation required. A $25 fee will be assessed to all students to cover the cost of clinical practice.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Facilitate developmentally appropriate and challenging learning experiences based on the unique needs of each learner.
- Ensure inclusive learning environments that allow each learner to reach his or her full potential.
- Employ universal design principles and ability to work with learners to create and access learning environments that support self-directed individual and collaborative learning, based on each learner's interests and passions.
- Understand how to use multiple methods of assessment to: engage learners in their own growth; document learner progress; provide learner feedback; and inform the educator's ongoing planning and instructional practices.
- Use a diverse range of students' approaches to learning and the range of modifications and accommodations that can be used to support learning.
- Create and use lesson plans that demonstrate a repertoire of evidence- based instructional strategies to individualize instruction for students with disabilities.
- Identify reading, writing, math, and study skills of students with disabilities and address those learning needs.
- Use instructional methods to strengthen and compensate for deficits in perception, comprehension, and memory.

**TECP63C : Instructional Technology**

Presents the theory and strategies for effective integration of technology resources and technology-based methods of instruction and assistive technology designed for students with disabilities. A background of mediated instruction will be provided along with a review of the qualities and benefits of technology options, including assistive technology, available to instructional settings. Opportunities to apply instructional delivery using common forms of media, multimedia, computers, and specialized programs for students with disabilities will be integral to this course, in addition to contemplation of future issues of integration of technology and matters of time and place of the learning experience.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

EDU104C

**Learning Outcomes**

- Prepare an instructional design and lesson plan that demonstrates the effective use of technology in instruction based on national standards.
- Identify and use the hardware and software appropriate to an educational environment.
- Evaluate the effectiveness of educational software.
- Describe and demonstrate the application of key Internet and Web 2.0 resources in teaching and learning.
- Understand the critical educational, ethical, and social issues relating to technology in instruction.
- Identify and describe how key emerging technologies are likely to have impact on education.

**TECP66C : Curriculum and Assessment**

Focuses on designing appropriately challenging learning experiences based on curriculum standards and individual needs. Students will learn strategies for direct and indirect instruction, supporting self-directed and collaborative learning, and promoting critical thinking and problem solving through questioning. Classroom management strategies that promote student engagement and a positive learning climate will be explored. Students will learn how to select, design, conduct, interpret, and use the results of formative and summative assessments. Use of the common core state standards in the planning, instruction, and evaluation process will be examined. 10 hours of classroom observation are required. A $25 fee will be assessed to all students to cover the cost of clinical practice.

**Credits** 4
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 4
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

TECP51C
TECP50C

**Learning Outcomes**

- Understand and apply instructional modalities and educational delivery systems.
- Develop behavioral objectives based on standards and compose instructional plans for lessons.
- Design an interdisciplinary unit.
- Identify the prior knowledge and sub skills necessary for learning new information or skills.
- Describe how the classroom environment, routines and procedures engage students and encourage appropriate behavior and develop a classroom management plan.
- Use formative and summative assessments to make instructional decisions.
- Interpret data and standardized test scores to make informed instructional decisions.
- Identify sources for research-based instructional strategies and professional learning.

**TECP67C : Reading and Language Development**

Focuses on assessing and addressing student literacy skills. Students will learn about the language development process and demonstrate their ability to use a variety of assessments to identify the language skills and needs of individual learners. Using data driven, collaborative decision making, students will plan appropriate interventions. Research-based methods for teaching phonics, vocabulary, spelling, fluency, reading comprehension, and writing will be explored. Students will learn how to guide readers and writers in developing effective strategies for reading, writing, speaking, and listening. Authentic, evidence-based, differentiated instruction linked to the common core standards will be emphasized.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

TECP51C

**Learning Outcomes**

- Administer and interpret informal reading and spelling inventories.
- Identify strengths and weaknesses in writing, word identification, and comprehension skills and strategies based on reading conferences, running records, and writing samples.
- Use knowledge of language development, text level, assessment data, and standards to set individualized literacy goals and plan appropriate instruction for children in grades K-6.
- Identify the knowledge, skills, and strategies utilized in the reading and writing processes.
- Understand research-based strategies for teaching phonics, high frequency words, and fluency.
- Understand knowledge of research-based strategies for teaching reading comprehension and vocabulary.
- Understand knowledge of organizational models of instruction and intervention and the role of collaboration and family literacy.

**TECP68C : Content Literacy**

Focuses on methods for integrating explicit instruction of effective reading comprehension strategies into content area teaching. Before, during, and after reading strategies that will help students to comprehend challenging content area reading material will be introduced and practiced. Mentor texts will be used to demonstrate text structure and make the connection between reading and writing in the content areas. Students will learn strategies for motivating and engaging students with reading, modeling effective reading and writing strategies, guiding comprehension, facilitating metacognitive discussions, and teaching vocabulary and study skills. Methods for assessing and developing skills in reading, writing, listening, and speaking will be explored. Methods for differentiating and accommodating for struggling readers and writers including the use of assistive technology will also be explored.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

TECP51C

**Learning Outcomes**

- Model metacognitive reading strategies through think-alouds.
- Demonstrate knowledge of research-based methods for teaching reading comprehension strategies.
- Demonstrate knowledge of research-based methods for teaching vocabulary.
- Facilitate construction of knowledge and critical thinking through discussion of reading content.
- Identify the knowledge, skills, and strategies used in content specific reading and writing processes.
- Analyze the demands of complex texts.
- Identify the academic language demands of learning tasks and design instruction to promote academic language development.
- Employ universal design principles, differentiated instruction, and assistive technology to meet the needs of struggling readers.

**TECP69C : Cross-Cultural Education Seminar**

Offers candidates a professional forum for researching, reviewing, and discussing socio-cultural contexts and topics in language teaching and education. In the course candidates will develop a broad-based understanding of cross-cultural education and discover appropriate practices and techniques for the multi-cultural classroom. The course is a requirement for all education and TECP candidates.

**Credits** 2
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Engage in research, observation, and discussion related to sociocultural contexts of language teaching.
- Converse on issues related to current cross-cultural education best practice and bilingual and ESOL education.
- Use terms and concepts in sociology and linguistics to advocate for their ESOL students.
- Analyze current readings and research pertinent to language learning and acquisition.
- Demonstrate cultural competence necessary to communicate with colleagues and community on behalf of language students.

**TECP70C : Special Education Assessment**

Prepares pre-service and in-service teachers to assess the achievement of students with special needs. It examines various assessment strategies. It includes the examination of the N.H. state curriculum frameworks, N.H. rules for students with disabilities, IDEIA regulations, and informal and formal assessment methods. Students will apply the assessment techniques in a case study format. They will utilize the assessment results to implement successful teaching/learning strategies in education settings for students with disabilities. This course addresses specific N.H. state standards for certification in the area of general special education.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the General Special Education Conversion program or approval of TECP director

**Learning Outcomes**

- Collect and use data to assess student achievement, student learning strengths and weaknesses, and learning style.
- Administer formal and informal assessments and use assessment information for developing and evaluating individual education plans.
- Use knowledge of those federal, state, and local laws, regulations, and policies and procedures that govern the education assessment of persons with disabilities up to the age of 21.
- Demonstrate an understanding of assessment terminology.
- Demonstrate skills necessary in the completion of an entire assessment procedure including test administration, scoring, report writing, and report presentation.

**TECP71C : Consultation/Collaboration and Individual Education Plans**

An examination of the collaborative/consultative model in education and the skills necessary for that approach. It focuses on the state curriculum frameworks, the N.H. state rules for students with disabilities, and federal and local guidelines regarding the education of students with special needs. This course includes examination of the concepts and skills necessary for IEP and team development such as, the development of student profiles, goals, objectives, communication and collaboration skills, leadership skills, and knowledge of the theories of change. This course addresses specific N.H. state standards for certification in the area of general special education.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the General Special Education Conversion program and/or approval of TECP director

EDU101C

EDU200C

EDU203C

**Learning Outcomes**

- Demonstrate the understanding of the functions of schools, school systems, and other agencies and their relationships to general and special education.
- Describe the similarities and differences in human development of students with and without disabilities within and across cognitive, social, emotional, and physical areas and the impact and educational implications of the disability.
- Understand learning differences and use the diverse range of students' approaches to learning and the range of modifications and accommodations to support learning; demonstrate the understanding of students with disabilities within the broader context of their families, cultural backgrounds, socioeconomic classes, languages, communities, and peer and social groups. Understand a student's learning differences in the development of the IEP and transition needs; and how information processing skills can impact student learning.
- Demonstrate an understanding of legal policies and ethical principles of assessment related to the special education process and the range of formal assessment instruments and their purposes in the special education process.
- Use instructional planning and strategies, co-teaching, and planning for for students with special needs.
- Demonstrate the knowledge of all stages of the IEP process including the N.H. state rules for students with disabilities, and federal and local guidelines regarding the education of students with special needs.
- Understand the collaborative/consultative model in special education and the skills necessary for that approach.

**TECP73C : Field Experience in Education**

Provides opportunities for the practical application of teaching skills and dispositions. Observation, analysis, and guided interaction of the teaching/learning experience within elementary, middle, and/or secondary or post-secondary educational settings. Students are assigned to observe and perform specific teaching duties within a variety educational settings. Psychological, philosophical, and historic educational theories are analyzed in light of current best practice as they occur in contemporary educational environments. Students are required to complete 60 hours of assigned field work during the semester.

**Credits** 5

**Lab/Practicum/Clinical Hours** 12

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Interview and permission of the department chair

**Learning Outcomes**

- Demonstrate the skills and dispositions necessary for observation, analysis, and guided interaction of teaching and learning experience.
- Demonstrate an understanding of the existence of various instructional modalities and educational delivery systems.
- Develop knowledge about various learning styles as it applies to the students in the field placement.
- Develop learning goals and objectives as it applies to the lessons to be delivered in the field placement.
- Compose instructional plans for a unit and lesson.
- Demonstrate familiarity with the importance of managing the learning environment.
- Recognize the various methods for assessing learners.

**TECP80C : Methods/Student Teaching for Middle/Secondary School Mathematics**

Prepares prospective teachers with the methods for teaching mathematics at the middle/secondary school level. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in student teaching placement. This course requires a full-time placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practice for successful teaching. Supervision is provided a by college supervisor and a field-based professional. This course addresses specific N.H. state standards for certification in the following content areas: Mathematics 5-8 and Secondary Mathematics 7-12 and Professional Education Standards (N.H. Standard Ed 610).

**Credits** 12

**Lab/Practicum/Clinical Hours** 30

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Permission of TECP director

**Learning Outcomes**

- Demonstrate strategies used to make mathematics accessible to students.
- Support students in learning to read, write, and use academic language in mathematics.
- Analyze the strategies used to connect students with the mathematics content.
- Examine the effects of instructional design and teaching practices on student learning with attention to students' diverse cultural, language, and socio-economic backgrounds and learning needs.

**TECP81C : Methods/Student Teaching for Middle/Secondary School Science Teachers**

Prepares prospective teachers for teaching science at the middle/secondary school level. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the student teaching placement. This course also requires a full-time placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Biology, Chemistry, General Science, Earth Science, Physical Science, Physics, and Professional Education Standards (N.H. Standard Ed 610).

**Credits** 12

**Lab/Practicum/Clinical Hours** 30

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Completion of previous coursework in TECP and permission of TECP director

**Learning Outcomes**

- Plan for learning facilitation, drawing upon knowledge of content area standards, cross- disciplinary skills, learners, the community, and appropriate pedagogy to plan learning experiences in science.
- Apply central concepts, tools of inquiry, and the structure of the discipline of science teaching.
- Ensure an inclusive Science learning environment that allows each learner to reach his or her full potential.
- Use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Understand learning facilitation strategies by using of a variety of strategies and tools to encourage learners to develop deep understanding of the content areas and their connections to other disciplines.
- Reflect on professional practice as demonstrated by being a practitioner using evidence to continually evaluate his or her practice.

**TECP82C : Methods and Practicum in General Special Education**

Prepares prospective teachers for teaching in general special education K-12. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the student teaching placement. This course also requires a semester-long placement in an educational setting appropriate for the intended general special education area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. Students document a minimum of 300 hours of work in the schools, including referral, observations, teaching, assessment, remediation, aiding with transition issues, IEP development and implementation, consultation, collaboration, and designing and implementing behavioral programs. Seminars meet weekly throughout the semester. This course addresses specific N.H. state standards for certification in the area of general special education.

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the General Special Education Conversion program, completion of previous general special education coursework, acceptance into student teaching, and approval of TECP director

**Learning Outcomes**

- Understand the functions of schools, school systems, and other agencies and their relationships to general and special education.
- Describe the similarities and differences in human development of students with and without disabilities within and across cognitive, social, emotional, and physical areas and the impact and educational implications of the disability.
- Use the diverse range of students' approaches to learning and the range of modifications and accommodations that can be used to support learning; demonstrate the understanding of students with disabilities within the broader context of their families, cultural backgrounds, socioeconomic classes, languages, communities, and peer and social groups; and understand a student's learning differences in the development of the IEP and transition needs and how information processing skills can impact student learning.
- Design learning environments to meet student's needs based on abilities and disabilities.
- Understand legal policies and ethical principles of assessment related to the special education process.
- Administer and write a report for a formal academic assessment instrument, and demonstrate the understanding and use of assessment tools for making educational decisions and the impact on learning and state assessment.
- Use instructional planning and strategies to co-teach and plan for instruction-appropriate education for students with special needs.
- Understand the effect of language development on academic and social development.
- Demonstrate educational practice within the code of ethics, including confidentiality and other standards of the profession.
- Understand the federal law, state law, local policies, and New Hampshire Standards for the Education and apply that to assessment, IEP development, and instructional practice.
- Collaborate with families, school personnel, agencies, and community members in culturally responsive ways to facilitate access for students with disabilities in a variety of settings.

**TECP83C : Methods and Student Teaching in General Special Education**

Prepares prospective teachers for teaching in general special education K-12. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the student teaching placement. This course also requires a full time, semester-long placement in an educational setting appropriate for the intended general special education area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. Students document the hours of work in the schools, including referral, observations, teaching, assessment, remediation, aiding with transition issues, IEP development and implementation, consultation, collaboration, and designing and implementing behavioral programs. Seminars meet weekly throughout the semester. This course addresses specific N.H. state standards for certification in the area of general special education.

**Credits** 12

**Lab/Practicum/Clinical Hours** 30

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the General Special Education Conversion program, completion of previous general special education coursework, acceptance into student teaching, and approval of TECP director

**Learning Outcomes**

- Understand the functions of schools, school systems, and other agencies and their relationships to general and special education.
- Describe the similarities and differences in human development of students with and without disabilities within and across cognitive, social, emotional, and physical areas and the impact and educational implications of the disability.
- Use the diverse range of students' approaches to learning and the range of modifications and accommodations that can be used to support learning; demonstrate the understanding of students with disabilities within the broader context of their families, cultural backgrounds, socioeconomic classes, languages, communities, and peer and social groups; and understand a student's learning differences in the development of the IEP and transition needs and how information processing skills can impact student learning.
- Design learning environments to meet student's needs based on abilities and disabilities.
- Understand legal policies and ethical principles of assessment related to the special education process.
- Administer and write a report for a formal academic assessment instrument, and demonstrate the understanding and use of assessment tools for making educational decisions and the impact on learning and state assessment.
- Use instructional planning and strategies to co-teach and plan for instruction-appropriate education for students with special needs.
- Understand the effect of language development on academic and social development.
- Demonstrate educational practice within the code of ethics, including confidentiality and other standards of the profession.
- Understand the federal law, state law, local policies, and New Hampshire Standards for the Education and apply that to assessment, IEP development, and instructional practice.
- Collaborate with families, school personnel, agencies, and community members in culturally responsive ways to facilitate access for students with disabilities in a variety of settings.
- Demonstrate the understanding of curriculum planning and assessment.

**TECP84C : Practicum and Methods for Teaching Middle/Secondary School Mathematics**

Prepares prospective teachers for teaching mathematics at the middle/secondary school level. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the teaching placement. This course also requires placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Mathematics grades 5-8 and mathematics grades 7-12 and Professional Education Standards (N.H. Standard Ed 610).

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Completion of previous coursework in TECP and permission of TECP director.

**Learning Outcomes**

- Demonstrate strategies used to make mathematics accessible to students.
- Support students in learning to read, write, and use academic language in mathematics.
- Analyze the strategies used to connect students with the mathematics content.
- Examine the effects of one's instructional design and teaching practices on student learning with attention to students' diverse cultural, language and socio-economic backgrounds and learning needs.

**TECP85C : Practicum and Methods of Teaching Middle/Secondary School Science**

Prepare prospective teachers for teaching science at the middle/secondary school level. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the teaching placement. This course also requires placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Life Sciences, Chemistry, General Science, Earth/Space Science, Physics and Professional Education Standards (N.H. Standard Ed 610).

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Completion of previous coursework in TECP and permission of TECP director

**Learning Outcomes**

- Plan for learning facilitation, drawing upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and appropriate pedagogy.
- Demonstrate content knowledge by applying the central concepts, tools of inquiry, and the structure of the discipline of science teaching.
- Ensure an inclusive Science learning environment that allows each learner to reach his or her full potential.
- Use of multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Employ learning facilitation strategies by using of a variety of strategies and tools to encourage learners to develop deep understanding of the content areas and their connections to other disciplines.
- Reflect on professional practice and evaluate the effects of choices and actions on students, families, and other professionals in the learning community.

**TECP86C : Introduction to Linguistics**

Focuses on linguistics, the scientific study of language. We will explore the properties of language and the linguistic challenges faced by English language learners. The course will expand on the subfields within linguistics: phonetics and phonology, morphology and syntax, and semantics and pragmatics. Concepts relevant to teaching English will be taught: pronunciation, grammar, and vocabulary. Language variation and written discourse will also be addressed as well as how to apply this knowledge to the English language classroom. Linguistic principles and features of both English and other languages will be examined to promote familiarity with the language experiences of English language learners. A native speaker of a world language will act as a "grammar text" as we decipher an unknown grammar in a field methods format. This course is required for those in the TECP: ESOL certification program.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ENGL101C

**Learning Outcomes**

- Use the major theories and research related to the structure and acquisition of language to provide ELs the skills to become proficient in language and literacy to achieve in the content areas.
- Demonstrate the metalinguistic knowledge of language as a system, including phonology, morphology, syntax, semantics, sociolinguistics, and pragmatics for ELs to develop oral, aural, reading, and writing skills in English.
- Demonstrate the knowledge of the historical development of the English language.
- Relate knowledge of English to languages spoken by students in their communities.
- Demonstrate ability to build on similarities between English and the student's home language and to anticipate any difficulties that learners may have with English.

**TECP87C : Language, Reading, and Literacy in ESOL**

Designed to assist student educators in constructing a welcome and supported learning environment for their English learners (ELs) regarding reading and literacy across the content areas. Appropriate literacy strategies, theorists, instruction, and assessments will be evaluated, and various aspects of first and second language acquisition will be examined. All aspects of English language development will be considered such as phonemic awareness, vocabulary, fluency, comprehension, and writing. Strategies to facilitate reading comprehension for ELs in K-12 will be addressed. Students will learn to adjust language instruction to meet the language developmental literacy needs of the ELs from various socio-cultural, educational, and linguistic backgrounds. Ten observation hours required.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Apply concepts and theories of first and second language acquisition to facilitate ELs' development of social and academic English language.
- Demonstrate the uses of major theories and research related to the nature and role of culture in instruction and social awareness.
- Understand how cultural groups and individual cultural identities affect language learning and school achievement by identifying and using the major principles, theories, and research related to the nature and role of culture on language learning, school achievement, and acculturation.
- Understand the nature and role of culture to construct learning environments to support Els' cultural identities and academic needs, demonstrating the understanding of how cultural groups in the community, including the majority group, affect language learning, social adjustment, school achievement and acculturation.
- Use evidence-based practices and strategies to plan, implement, and manage standards-based ESOL and content instruction.
- Use performance-based assessment tools and techniques to inform instruction for classroom assessment.
- Demonstrate knowledge of history, research, and educational public policy.

**TECP88C : Curriculum and Design and Assessment in ESOL**

presents theories, tools, techniques, and materials in the development of curricula which address the language and content needs of English language learners. The methodology for teaching such learners will be covered as well as how to plan and implement an adapted or differentiated curriculum to meet student needs. Strategies that promote student success such as scaffolding and that create an effective learning environment for both the language and content classroom will be examined. Students will become familiar with SIOP: Sheltered Instruction Observation Protocol. Additionally, students will work with authentic formal and informal pre- and post-instructional assessments and will explore methods by which language proficiency, acculturation, and content may be measured. Students will create, judge, and adapt their own assessment tools as questions regarding standardized assessments will be raised. Appropriate testing accommodations for English language learners will also be considered.

The role the NH Department of Education plays in ensuring that schools maintain legal compliance and equitable, accessible education for English language learners will be discussed as well as the rights and responsibilities of NH's ESOL programs under Title III funding. The state's K–12 EL approved placement and proficiency monitoring assessments, such as the Screener, MODEL and ACCESS for ELLs, will be outlined. The State's adoption of the WIDA English Language Proficiency Standards and how to adapt curriculum will be explored.

Required for those in the TECP: ESOL certification program. Others must have permission from the Director of TECP. Requires 10 hours of field work may include time spent interviewing ELL professionals in the field.

**Credits** 4

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 4

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Demonstrate how to construct learning environments that support ESOL students' language and literacy development and academic achievement.
- Use scientifically-based practices and strategies related to planning, implementing, and managing ESOL and content instruction.
- Apply concepts, research, and best practices to plan instruction in a supportive learning environment, including knowledge of how to construct effective lessons for diverse multilevel groups of ESOL students.
- Select and adapt resources, design original lessons for ESOL instruction, modify mainstream content lessons, and align ESOL curricula with standards-based content curricula.
- Implement standards-based teaching strategies and techniques for integrating English listening, speaking, reading, and writing into the core curriculum.
- Use a wide range of standards-based materials, resources, and technologies.
- Use diagnostic, language proficiency, and academic evaluations for ESOL students.
- Assist colleagues in distinguishing among normal second language development, language differences, and learning problems in procedures for special needs, monitoring, and classroom evaluations.
- Use a variety of standards-based language proficiency instruments to inform instruction and for identification, placement, and demonstration of language growth of ESOL students
- Use a variety of performance-based assessment tools and techniques in the classroom to evaluate students and inform instruction.
- Understand current state- and federally-mandated assessments and their implications for ESOL students.

**TECP90C : Supervised Student Teaching/Theory, Practice, and Methods/Materials in ESOL Education**

Designed for those candidates who have not held a previous teaching license. Students document their work in the school, including planning, teaching, and consultation and aiding with transition issues. This is a semester-long, field-based course designed to integrate and apply previous course work in ESOL certification. Students assume the full range of teaching responsibilities while supervised in the field. Seminars meet weekly throughout the semester. Students document their student teaching or practicum hours. This course also focuses on communicative interactions between and within different culture groups. We will explore issues related both to effective cross-cultural communication and to miscommunication. An examination of how one's own cultural values and norms affect and guide intercultural interactions will guide class discussions and projects. Concepts such as power distance, hierarchy, uncertainty avoidance, non-verbal communication, and other intercultural communicative features will be explored, and ethnocentrism, stereotyping, and other value-based judgments will be addressed. (Prerequisites: acceptance in the ESOL Conversion Program, completion of the previous ESOL coursework and department head approval. Candidates enrolling in TECP 91
hold a teaching certification.)

**Credits** 12

**Lab/Practicum/Clinical Hours** 30

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the ESOL Conversion Program, completion of the pervious ESOL coursework and department chair approval. Candidates should hold a teaching certification.

**Learning Outcomes**

- Demonstrate the pedagogical knowledge, methods and approaches to lead a self-contained ESOL class.
- Evaluate personal classroom management skills and content area knowledge.
- Identify artifacts that demonstrate fulfillment of national teaching standards.
- Develop a standards-based teaching portfolio organized in a professional manner and with the implementation of technology.

**TECP91C : Practicum, Methods/Materials, and Culture in ESOL Education**

This is a semester-long, field-based course designed for those who already hold a teaching license and are adding an endorsement, to integrate and apply previous course work in ESOL certification. Students document their work in the school, including planning, teaching, and consultation and aiding with transition issues. Students assume the full range of teaching responsibilities while supervised in the field. Seminars meet weekly throughout the semester. Students document their student teaching or practicum hours. This course also focuses on communicative interactions between and within different culture groups. We will explore issues related both to effective cross-cultural communication and to miscommunication. An examination of how one's own cultural values and norms affect and guide intercultural interactions will guide class discussions and projects. Concepts such as power distance, hierarchy, uncertainty avoidance, non-verbal communication, and other intercultural communicative features will be explored, and ethnocentrism, stereotyping, and other value-based judgments will be addressed. (Prerequisites: acceptance in the ESOL Conversion Program, completion of the previous ESOL coursework and department head approval. Candidates enrolling in TECP 91 hold a teaching certification.)

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the ESOL Conversion Program, completion of the previous ESOL coursework, and department chair approval. Candidates should hold a teaching certification.

**Learning Outcomes**

- Demonstrate the pedagogical knowledge, methods and approaches to lead a self-contained ESOL class.
- Evaluate personal classroom management skills and content area knowledge.
- Identify artifacts that demonstrate fulfillment of national teaching standards.

**TECP92C : The Teaching Portfolio**

Offered to continue to assist TECP candidates with their professional portfolio development. The portfolio is a program requirement for certification. In this course candidates will continue to add coursework and practicum (or student-teaching) evidence and reflections to the portfolio. Candidates will prepare their portfolio for review before application for certification. All coursework and practicum and student teaching work is aligned to N.H. state standards and TECP goals. Offered every semester.

**Credits** 1
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 1
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Permission of department chair

**TECP93C : Internship Clinical Practice I: Methods/Clinical Practice for Middle/Secondary School Science Teachers**

Prepares prospective teachers for teaching science at the middle/secondary school level. Students take this course as a part of a two-semester sequence. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation. This course also requires a full-time placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Biology, Chemistry, General Science, Earth Science, Physical Science, Physics and Professional Education Standards (N.H. Standard Ed 610).

**Credits** 7
**Lab/Practicum/Clinical Hours** 15
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
Successful completion of previous coursework in TECP, internship interview, and permission of TECP director
**Learning Outcomes**

- Plan for learning facilitation, drawing upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and appropriate pedagogy in science that support every learner in meeting rigorous learning goals.
- Demonstrate content knowledge by applying the central concepts, tools of inquiry, and the structure of the discipline of science teaching.
- Ensure an inclusive science learning environment that allows each learner to reach his or her full potential.
- Use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Use strategies and tools to encourage learners to develop deep understanding of the content areas and their connections to other disciplines.
- Reflect on professional practice using evidence to continually evaluate practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community.

**TECP94 : Internship Clinical Practice II: Methods/Clinical Practice for Middle/Secondary School Science Teachers**

Prepares prospective teachers for teaching science at the middle/secondary school level. This is the second part of the clinical practice/internship experience for science certification. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the internship II placement. This course also requires a full-time placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Biology, Chemistry, General Science, Earth Science, Physical Science, Physics and Professional Education Standards (N.H. Standard Ed 610).

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Successful completion of previous coursework in TECP, an internship interview, and permission of TECP director

TECP93C

**Learning Outcomes**

- Plan for learning facilitation, drawing upon knowledge of content area standards, cross-disciplinary skills, learners, the community, and appropriate pedagogy in science that support every learner in meeting rigorous learning goals.
- Demonstrate content knowledge by applying the central concepts, tools of inquiry, and the structure of the discipline of science teaching.
- Ensure an inclusive science learning environment that allows each learner to reach his or her full potential.
- Use multiple methods of assessment to engage learners in their own growth, document learner progress, provide learner feedback, and inform the educator's ongoing planning and instructional practices.
- Use strategies and tools to encourage learners to develop deep understanding of the content areas and their connections to other disciplines.
- Reflect on professional practice using evidence to continually evaluate practice, particularly the effects of choices and actions on students, families, and other professionals in the learning community.

**TECP95 : Internship Clinical Practice I: Methods/Clinical Practice for Middle/Secondary School Mathematics Teachers**

Prepares prospective teachers for teaching mathematics at the middle/secondary school level. Candidates take this course as a part of a two-semester sequence. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation. This course also requires a full-time placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Mathematics 5-8 and Mathematics 7-12 and the Professional Education Standards (N.H. Standard Ed 610).

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Successful completion of previous coursework in TECP, internship interview, and permission of TECP director

**Learning Outcomes**

- Demonstrate strategies used to make mathematics accessible to students.
- Support students in learning to read, write, and use academic language in mathematics.
- Explain the thinking underlying their teaching decisions.
- Analyze the strategies used to connect students with the mathematics content.
- Examine the effects of one's instructional design and teaching practices on student learning with attention to students' diverse cultural, language and socio-economic backgrounds and learning needs.

**TECP96 : Internship Clinical Practice II: Methods/Clinical Practice for Middle/Secondary School Mathematics Teachers**

This is the second part of the clinical practice/internship experience for science certification. Candidates take this course as a part of a two-semester sequence after successful completion of Internship I. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the internship II placement. This course also requires a full-time placement in an educational setting appropriate for the intended certification area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. This course addresses specific N.H. state standards for certification in the following content areas: Mathematics 5-8 and Mathematics 7-12 and the Professional Education Standards (N.H. Standard Ed 610).

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Successful completion of previous coursework in TECP, internship interview, and permission of TECP director)

TECP93C

**Learning Outcomes**

- Demonstrate strategies used to make computer science accessible to students.
- Support students in learning to read, write, and use academic language.
- Explain the thinking underlying teaching decisions for teaching the K-12 learners.
- Analyze the strategies used to connect students with computer science content.
- Examine the effects of one's instructional design and teaching practices on student learning with attention to students' diverse cultural, language, socio-economic backgrounds, and learning needs.

**TECP98C : Internship Clinical Practice I: Methods/Clinical Practice for Special Education**

The first part in a two-part methods course sequence that prepares prospective teachers for special education teaching at K-12 school level. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the internship placement. Seminars meet weekly throughout the semester. This course also requires a full-time, semester-long placement in an educational setting appropriate for the intended general special education area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. Candidates document the hours of work in the schools, including referral, observations, teaching, assessment, remediation, aiding with transition issues, IEP development and implementation, consultation, collaboration, and designing and implementing behavioral programs. This course addresses specific N.H. state standards for certification in the area of general special education.

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the General Special Education Conversion program, completion of previous general special education coursework, acceptance into internship, and approval of TECP director

**Learning Outcomes**

- Understand the functions of schools, school systems, and other agencies and their relationships to general and special education.
- Describe the similarities and differences in human development of students with and without disabilities within and across cognitive, social, emotional, and physical areas and the impact and educational implications of the disability
- Understand learning differences and use the diverse range of students' approaches to learning and the range of modifications and accommodations that can be used to support learning; demonstrate the understanding of students with disabilities within the broader context of their families, cultural backgrounds, socioeconomic classes, languages, communities, and peer and social groups; understand a student's learning differences in the development of the IEP and transition needs and how information processing skills can impact student learning.
- Design learning environments to meet student's needs based on abilities and disabilities.
- Understand legal policies and ethical principles of assessment related to the special education process.
- Use instructional planning and strategies, to co-teach and plan for plan instruction appropriate for students with special needs.
- Understand the effect of language development on academic and social development.
- Demonstrate educational practice within the code of ethics, including confidentiality and other standards of the profession.
- Understand the federal law, state law, local policies, and the New Hampshire Standards for the Education and apply that to assessment, IEP development, and instructional practice.
- Collaborate with families, school personnel, agencies, and community members in culturally responsive ways to facilitate access for students with disabilities in a variety of settings.
- Understand curriculum planning and assessment.

**TECP99C : Internship Clinical Practice II: Methods/Clinical Practice for Special Education**

The second part in a two-part methods course sequence that prepares prospective teachers for special education teaching at K-12 school level. Developmentally appropriate content, strategies, and methods of instruction will be discussed with emphasis on the implementation in the internship placement. Seminars meet weekly throughout the semester. This course requires a full-time, semester-long placement in an educational setting appropriate for the intended general special education area. Students work toward mastery of attitudes, techniques, and professional practices for successful teaching. A college supervisor and a field-based professional provide supervision. Candidates document the hours of work in the schools, including referral, observations, teaching, assessment, remediation, aiding with transition issues, IEP development and implementation, consultation, collaboration, and designing and implementing behavioral programs. This course addresses specific N.H. state standards for certification in the area of general special education.

**Credits** 7

**Lab/Practicum/Clinical Hours** 15

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Acceptance in the General Special Education Conversion program, completion of previous general special education coursework, acceptance into internship, and approval of TECP director

TECP93C

**Learning Outcomes**

- Understand the functions of schools, school systems, and other agencies and their relationships to general and special education.
- Describe the similarities and differences in human development of students with and without disabilities within and across cognitive, social, emotional, and physical areas and the impact and educational implications of the disability
- Understand learning differences and use the diverse range of students' approaches to learning and the range of modifications and accommodations that can be used to support learning; demonstrate the understanding of students with disabilities within the broader context of their families, cultural backgrounds, socioeconomic classes, languages, communities, and peer and social groups; understand a student's learning differences in the development of the IEP and transition needs and how information processing skills can impact student learning.
- Design learning environments to meet student's needs based on abilities and disabilities.
- Understand legal policies and ethical principles of assessment related to the special education process.
- Use instructional planning and strategies, to co-teach and plan for plan instruction appropriate for students with special needs.
- Understand the effect of language development on academic and social development.
- Demonstrate educational practice within the code of ethics, including confidentiality and other standards of the profession.
- Understand the federal law, state law, local policies, and the New Hampshire Standards for the Education and apply that to assessment, IEP development, and instructional practice.
- Collaborate with families, school personnel, agencies, and community members in culturally responsive ways to facilitate access for students with disabilities in a variety of settings.
- Understand curriculum planning and assessment.

**THTR101C : Acting I**

Introduces drama as a performing art, with emphasis on physical movement and the use of voice in the development of characterization. Students will learn to use improvisation and theatre games to make feelings accessible to the student actor for the purpose of performance. The class will take a functional approach to the basic techniques of acting with an in-class performance final. Students will be introduced to the fundamentals of acting that include action, relaxation, objective, spontaneity, emotion, monologues, texts, projection, presence, substitution, referential movement, character analyses, and heightened diction. It will include ideas about the rehearsal process, play scripts, scenes, staging, and performance.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**VRTS101C : Introduction to Drawing**

Students in this course will gain the basic skills and insights necessary to create drawings that are both accurate and expressive. Explorations of line, value, and form will engage the eye and the hand as well as the heart. Students will gain confidence in their own vision and their ability to draw what they see.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand and apply design elements and principles.
- Demonstrate design/composition skills.
- Describe proportions and spatial relationships between forms.
- Demonstrate various drawing techniques.
- Use spatial conventions.
- Demonstrate hand-eye coordination skills.
- Use of vocabulary of art terms and concepts.
- Demonstrate critical skills as they pertain to creating and evaluating studio work.
- Demonstrate a personal drawing style through expressive technique and subject matter.

**VRTS102C : Introduction to the Visual Arts**

Introduces the languages, concepts, and practices of art through visual and art historical perspectives. Students will be engaged in discussion about the elements of art, such as content, composition, style, method, and materials. Students will also be introduced to all of the visual art practices, including drawing and painting, sculpture, printmaking, photography, conceptual and installation art, video art, earthworks, and performance art, as well as craft and graphic design.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Analyze pictorial compositions using visual language terms in a concise and informed manner.
- Develop professional studio habits and creative processes that reflect careful planning and appropriate use of artistic media.
- Use critical thinking and creative problem solving to overcome technical challenges when working with 2D and 3D art materials.
- Identify connections to work with art historical influences, including specific artists and artistic periods.

**VRTS103C : Two-Dimensional Design**

Provides a solid foundation in 2-D design and color theory. Students will learn the basic elements needed to form visual patterns and proceed to explore a variety of approaches relating to visual organization and pictorial composition. A section of the course will be dedicated to the fundamentals of color theory, its function, and application.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Achieve a masterful competency of composition and the above 2D design objectives.
- Develop an accomplished portfolio of 2D assignments.
- Use design element vocabulary to successfully describe and execute strong designs.

**VRTS104C : Three-Dimensional Design**

Introduces the technical and conceptual elements for the organization and development of 3-D structures. Beginning projects will address the basic elements needed to explore a variety of approaches relating to form and space, then move to more complex issues involving the relationships between form and function.

**Credits** 3
**Lab/Practicum/Clinical Hours** 3
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Understand the design process by creating unique solutions to complex 3D design problems.
- Recognize and apply 3D design principles.
- Understand materials and construction techniques and how to use tools correctly and safely.
- Understand the plastic properties of clay and plaster including how to mix plaster correctly, make molds, and use positive casting techniques, direct carving, and additive and subtractive modeling techniques.
- Understand cross sectional analysis of organic and mathematical forms, the enlargement process, slice form pop up kinetic design, and planal analysis of complex organic forms.

**VRTS111C : Survey of Western Art History I**

Examines the history of western civilization through the study of objects created by people from various western cultures from the cave paintings of the pre-historic era to the great cathedrals of Europe during the 12th and 13th centuries. Students will study the artifacts, architecture, painting, and sculpture that inform understanding of a culture's way of life, beliefs, and priorities. In turn, students will gain a deeper understanding of today's culture and society. Students will also develop the basic skills and vocabulary necessary to critique a work of art.

**Credits** 3
**Lab/Practicum/Clinical Hours** 0
**Lecture Hours** 3
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Visually identify key monuments – painting, sculpture, and architecture – dating from Ancient Egypt through the 13th century in Western Europe.
- Understand classical foundations of art-making against which modern art-makers will revolt.
- Use orally, and in writing, discipline-specific vocabulary, terminology and critical skills necessary for the historical study and visual analysis of Western works of art dating from Ancient Egypt through the 13th century.
- Use interdisciplinary approaches and various art historical methodologies when completing written analyses of works of art within an historical and cultural context.

**VRTS112C : Survey of Western Art History II**

Examines the history of painting sculpture and architecture created by Western Europeans from the early 14th century through the 19th century (and beyond, if time permits). These works of art will be studied as a way to understand the way of life, beliefs, and priorities of these societies, as well as contemporary culture. Students will also continue to develop the basic skills and vocabulary necessary to critique a work of art.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Identify key monuments – painting, sculpture, and architecture – dating from the early 14th century through the mid-20th century in Western Europe.
- Recognize key elements of the form, subject matter, and content of the works of art they study and understand the foundations of modern art-making.
- Use orally, and in writing, discipline-specific vocabulary, terminology, and critical skills necessary for the historical study and visual analysis of Western works of art dating from the early 14th century through the mid-20th century.
- Understand and use interdisciplinary approaches and art historical methodologies when completing written analyses of works of art within an historical and cultural context.

**VRTS115C : History of Modern Art**

Examines the origins and development of modern art from the French Revolution in 1789 to the outbreak of World War II in 1939. Late 20th century art, including Postmodernism, and trends in contemporary art are introduced. Emphasis is placed on 2-D art, sculpture and architecture, and the creative processes employed by modern artists. Students explore individual works of art within their cultural and historical context.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Identify seminal works and their makers from the French Revolution to the 20th century and place them within an historical and cultural context.
- Understand some of the major purposes of and ideas behind modern art-making.
- Understand and use interdisciplinary approaches and various art historical methodologies used in the study of modern art when completing written analyses of works of art within an historical and cultural context.

**VRTS120C : Introduction to Painting**

This course is an introduction to the basic fundamentals and techniques of traditional painting to students with little or no previous
formal training in this medium. Students will develop a working knowledge of the physical properties of water-based paint by exploring the materials, methods and varied painting approaches that this medium brings to the fundamental issues of painting. Students with prior experience will benefit from the in-depth approach to the subject as it is presented. Both historical and contemporary Master artists in painting will be referenced to enhance this rich experience.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

Learning Outcomes

- Understand basic tools and traditional methods of oil painting.
- Synthesize drawing and composition through preliminary studies to the finished paintings.
- Translate light and interpret value and color through observation and practiced applications.
- Use traditional preparatory and under-painting methods, as well as layered and direct painting.
- Understand the tradition of painting and its genres with respect to still life, portrait, and landscape
- Critique artwork using formal analysis and historical perspectives.

**VRTS121C : Introduction to Watercolor**

Introduces the basic watercolor techniques and use of materials. It is a sequential program of study, applying the elements and principles of 2-D design to the watercolor discipline. Students will study still life, landscape, and the human form. Reference will be made to past and contemporary masters of the watercolor medium.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

VRTS101C

**Learning Outcomes**

- Understand the basic tools and methods of watercolor, developing an appropriate growth of expertise with these traditional materials.
- Synthesize the use of drawing and composition through preliminary studies to the finished paintings.
- Use line, value, and color to create watercolors that depict light, transparency, color richness, chiaroscuro, and perspective.
- Understand traditional and contemporary watercolor painting methods.
- Understand the tradition of watercolor painting and its contemporary genres with respect to still life, portrait, and landscape.
- Critique artwork using formal analysis and historical perspectives.

**VRTS130C : Introduction to Photography**

Familiarizes students with basic film photography and beginner darkroom techniques. Students are instructed in the use and care of a 35mm manual film camera, film developing and darkroom printing techniques. Assignments are designed to cover a variety of shooting situations and the expectation is that students will apply the elements of composition, capture expressive content, and demonstrate proficient technical ability in the making of photographs. Students should expect to provide their own 35mm film camera with full manual controls. A $20 fee will be assessed for all students in this course to cover the cost and disposal of chemicals used in this class.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**VRTS133C : Introduction to Figural Sculpture**

Introduces the basic human figural sculpture, designed to develop the student's understanding of the anatomical structures of the human figure, gestural forms, and constructive methods and application of this knowledge to create unique character and figural sculptures in traditional sculpting media, such as wire, wax, plaster, and clay. The emphasis in imagery will be direct live-model observations, translating 2-D sources into form, developing hand-eye coordination, technical discipline, and evolving a personal expressive use of materials, technique, and subject matter. All projects are designed to combine related technical, visual, and historical components. A $20 fee will be assessed for all students in this course to cover the cost of live modeling.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
VRTS101C
VRTS104C
**Learning Outcomes**

- Understand the techniques of sculpting the human form from observation.
- Understand various clays and tools used in figurative sculpture.
- Understand the human skeletal system and human anatomy as it relates to figurative sculpture, specifically superficial muscles.
- Understand how figurative sculpture has changed due to cultural differences and historical events.
- Critique artwork using formal analysis and historical perspectives.

**VRTS135C : Introduction to Ceramics**

Focuses on studio work leading to the completion of five projects. Students will learn the basics of handbuilding, the potter's wheel, kiln firing, glazing, and surface embellishment. Class time will be made up of instructor's demonstrations, group critiques, and individual studio work. Projects will stress the sculptural potential of clay with a visit into the aesthetic merit of functional vessel making. A research project, introducing students to the work of historical clay artists, will provide inspiration and direction. A $50 ceramic studio fee will be assessed.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
**Learning Outcomes**

- Understand the workings of a clay studio and its equipment.
- Create work with good craftsmanship through focused work time.
- Understand the potential and limits within the medium of clay.
- Critique work.
- Recognize ceramic artists past and present.
- Understand how to develop a personal and unique voice; use research and documentation skills; use wheel throwing, handbuilding, and plaster mold techniques; use self-discipline and time management; and understand ceramics studio safety.

**VRTS140C : Digital Photography**

Addresses digital camera operation, a variety of file types, digital photo editing, and printing procedures. Digital camera capabilities will be learned through a series of project-based assignments, lectures, demonstrations, and critiques. Formal emphasis is placed on the creative use of camera controls, composition, exposure, digital imaging software (including Lightroom and Adobe Photoshop®), and an awareness of critical issues in contemporary photography. Scanning and printing techniques will also be included. Students are required to provide their own digital camera and media cards for storing image files; the camera must be capable of full manual control and capturing RAW files. Although all work can be accomplished on campus computers, a laptop computer suitable for viewing/editing images and Adobe Photoshop software will facilitate additional work outside of the scheduled lab time but is not required.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

**Learning Outcomes**

- Operate a digital camera using auto, aperture priority, shutter priority, and manual modes.
- Configure a camera's settings based on the lighting situation.
- Create imagery with strong compositions in color and black and white with aesthetic awareness.
- Understand how to process files in post-production effectively and establish a workflow.

**VRTS193C : Introduction to Photoshop**

Introduces students to the powerful tools of Photoshop for manipulating digital images, photomontage and page layout applications. The course topics cover Photoshop tools, photo corrections, working with selections, and layer basics. The use of masks and channels, typographic design, and vector drawing techniques are also covered. In addition, assignments will include advanced compositing, basic video editing, digital painting, and working with 3D images/text. Textbook and portable media storage device required. Students will need access to Adobe Creative Cloud that includes Photoshop.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Working knowledge of Microsoft Windows environment

**Learning Outcomes**

- Navigate and configure the Photoshop CC interface to find the tools needed to complete a given task.
- Identify common image file formats and select the correct format based on project specifications.
- Modify the contents of a layer using layer styles, adjustment layers, layer effects and layer masks.
- Perform a variety of photo corrections.
- Complete simple graphic design projects with vector drawing and text elements.

**VRTS195C : Introduction to Illustrator**

Introduces students to the powerful tools of Adobe Illustrator (Ai) for manipulating images, building multimedia online graphics, and creating page layout applications. Students learn skills and techniques for editing images and creating effective digital graphics for a variety of online and print applications. The course topics cover Illustrator tools, layers, typography, digital painting, symbols/shapes, brushes, and graphic styles/effects. Students will need access to Adobe Creative Cloud that includes Illustrator.

**Credits** 3

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 3

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Working knowledge of Microsoft Windows environment

**Learning Outcomes**

- Understand Adobe Illustrator as a tool to make images and comprehending the power of images to communicate ideas and express feelings.
- Create a professional web portfolio to host ideas.
- Display proficient Ai image editing techniques, layers, compositing, typography, digital painting and graphic effects.
- Use Adobe Creative Cloud for multiple programs to enhance Illustrator projects.

**VRTS197C : Introduction to Graphic Design**

Graphic design is art and practice of marrying words and images to communicate unique ideas or experiences. There are applications for design across the print and digital worlds, and students explore key design programs including Adobe Illustrator, Photoshop, and InDesign. Focusing on creating self-promotional materials, students learn how to develop and refine concepts, understand file requirements for print and digital products, create basic typography, and design final usable products. Students develop thoughtful solutions that they produce as final products in Adobe Illustrator, InDesign, and Photoshop.

**Credits** 3

**Lecture Hours** 3

**Recommended Prerequisites**

Experience with Adobe products

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Working knowledge of Microsoft Windows environment

**VRTS201C : Drawing II**

Builds on the aesthetic, technical, and conceptual foundation established in VRTS 101C. This observational drawing course will develop greater technical facility with materials and explore methods for translating and interpreting one's environment onto a drawing. As conceptual options and skill with materials increase, drawing will become a stronger outlet for personal and creative expression. Students will expand their understanding and use of color and work more extensively from the human figure. The historical foundation of drawing will be explored, as well as contemporary and historical trends.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Recommended Prerequisites**
Experience with Adobe products
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
VRTS101C
**Learning Outcomes**

- Use line and value to create drawings depicting volume, texture, perspective, and still lifes.
- Create a drawing from life with accurate proportions, correct perspectives, and seven midtones.
- Create a composition based on clearly defined content.
- Sight size and use grid thinking and measuring systems in observational drawings to create effective visual illusions.
- Understand art history, comprehend symbolism in subject matter, and respond articulately to critiques.
- Develop an accomplished portfolio of observational drawings.
- Describe and execute strong drawings that communicate effectively.
- Analyze artwork from different cultures, past and present, to study content.

**VRTS210C : Life Drawing**

Builds on the aesthetic, technical, and conceptual foundation established in VRTS 101C with an emphasis on the human form. The student will aim to develop a knowledge of and a sensitivity to the structure, anatomy, and expressive qualities of the human form in a variety of ways including line, place, value, mass, and shape. Composition will be a consideration at all times. A $20 fee will be assessed for all students in this course to cover the cost live modeling.

**Credits** 4
**Lab/Practicum/Clinical Hours** 4
**Lecture Hours** 2
**Prerequisites**
Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.
VRTS101C
**Learning Outcomes**

- Demonstrate mastery of scale, placement, tonal range, gesture and proportions.
- Understand human anatomy and anatomical terminology.
- Use standard measuring techniques.
- Capture posture and motion through gesture drawing.
- Capture the shape of human subjects, utilize line, contour, shading, perspective, and mass conception
- Create classical figure drawings using different approaches and techniques.
- Critique artwork objectively.
- Understand how figuration changes because of cultural differences and historical events.

**VRTS220C : Painting II**

This course is designed to expand on the formal introduction in Introduction to Painting and/or Introduction to Watercolor, students will further refine observational, technical and critical skills. Projects will negotiate challenges with a view toward increasing two dimensional complexity and advancing technique as well as concept. An academic studio approach will be used with the emphasis on adept handling of water-based painting media and methods, applied color theory, and continued development of solid drawing skills.

Abstraction and mark making will be discussed and applied as students begin to develop a personal painterly vocabulary. A high level of consistency is expected for both in and out of class assignments. Students will explore painters from Historical tradition and those of Modern and Contemporary realms.

**Credits** 4

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of D or higher. Exceptions apply; please consult your department chair.

VRTS120C Introduction to Painting or VRTS121C Introduction to Watercolor.

**Learning Outcomes**

Learning Outcomes

- Explore issues of image development and placement through master painter copies, and preliminary drawing studies to the finished paintings.
- Develop an accomplished portfolio of paintings that reflect expertise in issues of craft, color translation, and composition.
- Expand knowledge of art historical traditions of painting to that of contemporary realms with respect to still life, portrait, figure, and landscape.
- Use color theory and design vocabulary to critique artwork objectively.

**VRTS230C : Photography II**

Helps the student who has basic darkroom and exposure/development skills further their understanding of the principles and techniques of black and white photography. Assignments will focus on both technical and aesthetic concerns. Class topics include still life composition, the use of fiber paper, toning, studio lighting, portraiture, street photography, photojournalism, medium format film, and low light photography. In-class critiques provide feedback on students' work. Students should expect to provide their own 35mm film camera with full manual controls and be able to independently operate studio lighting equipment. A $20 fee will be assessed for all students in this course to cover the cost and disposal of chemicals used in class.

**Credits** 4

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

VRTS130C

**Learning Outcomes**

- Use photo printing expertise with use fiber paper and toners.
- Use film processing knowledge with medium format film and film speeds.
- Set up and use studio lighting backdrops, studio lights, light modifiers, and handheld light meters for still life compositions and portraiture.
- Compose and shoot in-camera medium format double exposure images.

**VRTS235C : Ceramics II**

Students will be asked to develop a body of artwork that reflects a growing understanding of building techniques and surface treatment. The development of personal direction and an individual artistic voice will be stressed. Projects will be concept driven, expecting students to be able to visually and verbally demonstrate the intent of the work. Focused time on the potter's wheel will open up a new creative tool and begin a dialogue on design and function. Students will have the opportunity to explore work and techniques of contemporary clay artists. A $50 ceramic studio fee will be assessed for all students taking this course.

**Credits** 4

**Lab/Practicum/Clinical Hours** 4

**Lecture Hours** 2

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

VRTS135C

**Learning Outcomes**

- Understand the workings of a clay studio and its equipment.
- Create work with good craftsmanship through focused work time.
- Understand the potential and limits within the medium of clay.
- Critique work.
- Recognize ceramic artists past and present.
- Understand how to develop a personal and unique voice; use research and documentation skills; use wheel throwing, handbuilding, and plaster mold techniques; use self-discipline and time management; and understand ceramics studio safety.

**VRTS290C : Visual Arts Capstone Practicum**

A capstone experience in which students will create an independent body of work and demonstrate their ability, present it in a professional manner, document the artwork photographically, curate their exhibition, and write their artist statement. The work from the capstone exhibition will be included in the student's program exit portfolio. The student will select a member of the Visual Arts faculty to oversee their capstone progress through weekly scheduled critiques, demonstrations, and discussions. Emphasis will be on the marriage of conceptual content with technical competence in the selected mediums.

**Credits** 1

**Lab/Practicum/Clinical Hours** 0

**Lecture Hours** 1

**Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

Successful completion of 52 credit hours in the Visual Arts degree program and permission of the department chair

**Learning Outcomes**

- Create an independent body of work that demonstrates ability and present it in a professional manner.
- Document the artwork photographically.
- Curate an exhibition.
- Write an artist statement.

# Addenda

# Addenda

| Page | Revision Description | Revision Date |
|---|---|---|
| Course Substitution/Waiver | Previous version:<br><br>A student may be eligible to substitute a higher-level course for the one prescribed in the curriculum if indicated by an evaluation of the student's competencies. The substitution can be made only with the joint approval of the student's department chair and the department chair of the area offering the course. The Approval Form is available in the Registrar's Office. A student may substitute a comparable course from another program to meet degree requirements with the common agreement of the department chairs and the approval of the VPAWE.<br><br>A course may be waived by the director of Admissions in consultation with the department chair only if a higher-level course has been completed at another accredited college or university with a grade of C or higher. Waivers apply only to transfer of credits from accredited colleges or universities and not prerequisites for a given program. A waiver is for the course only; credit will not be awarded for the waived course. All students must complete a minimum of 60 credits to be awarded an Associate in Science or Associate in Arts degree. Students with fewer than 64 credits as a result of a waiver must make up the credits. Any make-up credits must have the approval of the student's department chair | 10/08/2025 |
| Class Cancellation | Previous version:<br><br>NHTI reserves the right to cancel a class that it deems under-enrolled. Occasionally, a day class may be cancelled for insufficient enrollment, and students will be asked to attend that same class, if it is also available, in the evening. NHTI recognizes its obligation to run courses in the semesters indicated in the program curriculum and will not cancel a day class unless the same or a comparable course is available in the same semester in the evening. | 10/08/2025 |
| Limited X-ray Machine Operator (LXMO) | Program was created. | 10/08/2025 |
| RADT151MC | Course name was changed.<br><br>Previous version:<br><br>Patient Care for the Radiographer | 10/15/2025 |
| RADT103C | Course description was changed. | 10/15/2025 |

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|---|---|---|
| | Previous version:<br><br>Introduces the student to the principles of radiography, radiographic terminology, and radiation protection. This course<br>covers the anatomy and radiographic positioning of the thoracic and abdominal viscera. | |
| RADT116C | Course description was changed.<br><br>Previous version:<br><br>A discussion of the principles leading to the production of the manifest image. The general design of the x-ray tube as well as x-ray production and emission. Tube rating charts, factors affecting radiographic quality, grids, and accessories as well as fluoroscopy will be covered. | 10/15/2025 |
| RADT220C | Course description was changed.<br><br>Previous version:<br><br>An understanding of the components, principles, and operation of digital imaging systems found in diagnostic radiology. Factors that impact image acquisition, display, archiving, and retrieval are discussed as well as quality assurance and maintenance. Also included in this course are concepts designed to provide entry-level radiography students with a basic understanding of the operation of a computed tomography device. | 10/15/2025 |
| Applied Career Fundamentals for Advanced Manufacturing | Applied Career Fundamentals for Advanced Manufacturing program was eliminated. | 10/15/2025 |
| Advanced Manufacturing Processes Certificate | Advanced Manufacturing Processes program was eliminated. | 10/15/2025 |
| Manufacturing Engineering Technology – Automation | Manufacturing Engineering Technology – Automation program was eliminated. | 10/15/2025 |
| Computer Technology Programming | Computer Technology Programming program was eliminated. | 10/15/2025 |
| Electronic Technology | Electronic Technology program was eliminated. | 10/15/2025 |
| IT – Networking | IT – Networking program was eliminated. | 10/15/2025 |
| Linux | Linux program was eliminated. | 10/15/2025 |
| Information Technology – Hardware and Software | Information Technology – Hardware and Software program was eliminated. | 10/15/2025 |
| Digital Communications | Digital Communications program was eliminated. | 10/15/2025 |
| LXMO103C | Course was created. | 10/17/2025 |
| LXMO109C | Course was created. | 10/17/2025 |
| LXMO180C | Course was created. | 10/17/2025 |

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|---|---|---|
| LXMO151C | Course was created. | 10/17/2025 |
| LXMO159C | Course was created. | 10/17/2025 |
| LXMO116C | Course was created. | 10/17/2025 |
| LXMO220C | Course was created. | 10/17/2025 |
| LXMO201C | Course was created. | 10/17/2025 |
| LXMO164C | Course was created. | 10/17/2025 |
| VRTS120C | Course title and description were changed. | 10/17/2025 |
| VRTS220C | Course description was changed. Prerequisites were changed. | 10/17/2025 |
| Information Technology – VoIP | Information Technology – VoIP program was eliminated. | 10/20/2025 |
| Computer-Aided Design – Architectural Concentration | Computer-Aided Design – Architectural Concentration program was eliminated. | 10/20/2025 |
| ENGL120C | Change to: Students who have received credit for this course cannot also receive credit for ENGL 120MC or COMM 120C or COMM 120MC. | 11/25/2025 |
| ENGL120MC | Change to: Students who have received credit for this course cannot also receive credit for for ENGL 120C, COMM 120MC OR COMM 120C. | 11/25/2025 |
| COMM120C | Change to: Students who have received credit for this course cannot also receive credit for COMM 120MC, ENGL 120C, ENGL 120MC. | 11/25/2025 |
| COMM120MC | Change to: Students who have received credit for this course cannot also receive credit for COMM 120C, ENGL 120MC ENGL 120C. | 11/25/2025 |
| COMM 205C | Course was created. | 11/25/2025 |
| Communications | Program map was changed. | 11/25/2025 |
| Military Personnel | Page added. | 12/11/2025 |
| Sustainable Agriculture | Program map was updated. | 01/07/2026 |
| Credit Waiver | Policy was created. | 02/06/2026 |
| Credit by Exam | Policy was created. | 02/06/2026 |
| Mindful Communication | Program map was edited. | 02/19/2026 |