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? Contact Amy VonKadich, department chair, at avonkadich@ccsnh.edu or 603-271-6484 x4332.

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 at NHTIadmissions@ccsnh.edu by the deadline.

Fall 2023 Admission

The application deadline is March 3, 2023.

Fall 2024 Admission

The application deadline is March 1, 2024.

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 Health Services.
- A personal interview with qualified applicants will be arranged by the department after the application deadline

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	3
RDTH110C	Principles and Practice of Radiation Therapy I	3	2	4
RDTH200C	Radiation Protection and Biology	3	0	3
RDTH210C	Principles and Practice of Radiation Therapy II	3	2	4
RDTH290C	Clinical Practice III	0	24	5
	Subtotal Credits	**12**	**28**	**19**

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
RDTH205C	Treatment Planning	3	0	3
RDTH215C	Sectional Anatomy and Pathology	3	0	3
RDTH220C	Radiation Therapy Physics	3	0	3
RDTH293C	Clinical Practice IV	0	24	5
	Subtotal Credits	**9**	**24**	**14**

Summer Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
RDTH295C	Clinical Practice V	0	23	5
	Subtotal Credits	**0**	**23**	**5**

Second Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
RDTH280C	Registry Review	1	0	1
RDTH296C	Clinical Practice VI	0	32	7
	Subtotal Credits	**1**	**32**	**8**
	Total Credits			**46**

Additional Information

Accreditation

NHTI's Radiation Therapy degree is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The Radiation Therapy Program has been awarded 8 years of accreditation with the next site visit scheduled for 12/1/2027. The program will assure continued excellence through accreditation by JRCERT. For further information, please contact:

JRCERT
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606

Tel: 312-704-5300; fax: 312-304-5304
Email: mail@jrcert.org
www.jrcert.org

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

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: 2022	3 of 3—100%
Year 1: 2021	7 of 8—87.5%
Year 2: 2020	6 of 6—100%
Year 3: 2019	4 of 7—57%
Year 4: 2018	4 of 4—100%
Program 5-Year Average	**24 of 28—86%**

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: 2022	3 of 3—100%
Year 1: 2021	8 of 8—100%
Year 2: 2020	6 of 6—100%
Year 3: 2019	6 of 6—100%
Year 4: 2018	4 of 4—100%
Program 5-Year Average	**27 of 27—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: 2022	3 of 4–75%
Annual Completion Rate	**75%**

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.