

Networking and Cybersecurity Operations

Degree Type

Associate of Science

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 Aaron Conn, department chair, at aconn@ccsnh.edu or 603-271-6484 x4143.

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

Curriculum

First Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
	ENGL120MC/COMM120MC	3	0	3
IST104C	PC/Mobile Hardware and Networking	2	2	3
IST106C	IT Career Topics	1	0	1
IST120C	Programming Essentials in Python	2	2	3
MATH120C	Quantitative Reasoning	4	0	4
	Subtotal Credits	12	4	14

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL101MC	English Composition: Mindful	4	0	4
IST154C	Introduction to Networks	2	2	3
IST109C	PC OS Security and Cloud Fundamentals	2	2	3
IST170C	Introduction to Linux	2	2	3
	PSYC 105C or SOCI 105C	3	0	3
	Subtotal Credits	13	6	16

Second Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ENGL102MC	Introduction to Literature: Mindful	3	0	3
IST180C	Cloud Services and Windows Server	2	2	3
IST254C	Switching, Routing, and Wireless Essentials	2	2	3
IST290C	IT Career Development	1	2	2
IST265C	Information Security	2	2	3
	Subtotal Credits	10	8	14

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
COMM294MC	Communicating Mindfully Capstone	1	0	1
IST256C	Enterprise Networking, Security, and Automation	2	2	3
IST260C	CyberOps	2	2	3
IST268C	Cybersecurity Analysis	2	2	3
IST294C	Senior IT Internship	0	8	2
	Networking: Science elective			4
	Subtotal Credits	7	14	16
	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
- Demonstrate interpersonal skills needed to obtain and sustain a career in information technology
- Identify and resolve technical problems using research techniques and troubleshooting
- Create, install, and manage networks while adhering to industry standards
- Implement solutions that provide common business functions in a secure environment
- Evaluate best practices to maintain confidentiality, integrity, and availability of computer systems