

COMPUTER SCIENCE: NETWORKING

Associate of Science Degree

Program Description

Computer and communication networks are a critical part of our world. The Computer Science Networking Program is designed to prepare students for a variety of entry-level positions in the computer science industry. The program includes the general education curriculum, general computer science courses, and courses specific to networking.

Program Outcomes

At the completion of this program, the student should be able to:

- Describe the major hardware and software components of a computer system.
- Describe networking technologies used in computer networks.
- Compare and contrast various types of computer operating systems.
- Identify network boundaries and topologies within a network diagram.
- Explain the operation of various networking protocol features.
- Demonstrate the use of network monitoring and troubleshooting tools.
- Demonstrate configuration of networking devices, such as switches and routers.
- Analyze a given set of network diagnostic test results in order to identify a network problem.
- Design a network given a set of requirements and constraints.

General Education Requirements – see p. 98	
25 credits total	
Computer Science	3 credits
ENG 101 English Composition I	3 credits
ENG 102 English Composition II ¹	3 credits
History/Government	3 credits
IDS 167 First Year Seminar	3 credits
Math	3 credits
Natural Science w/ Lab ²	4 credits
Social Science/Psychology	3 credits

Program Requirements – 36 credits total	
Credits	
CSI 104 Introduction to Programming with Python	3 credits
CSI 217 Introduction to Operating Systems (F)	3 credits
CSI 226 UNIX with Linux	3 credits
CSI 235 Computer Architecture ¹	3 credits
CSI 242 Computer Systems Security ¹ (F)	3 credits
CSI 244 Networking I	3 credits
CSI 245 Networking II ¹	3 credits
CSI 246 Networking III ¹ (S)	3 credits
SOC 112 Interpersonal Communication	3 credits
Business Elective ³	3 credits
Program Electives (see below)	6 credits

Total credits required for graduation

61 credits

Program Electives	
Credits	
CSA 213 Database Management	3 credits
CSI 265 Linux System Administration ¹	3 credits
CSI 267 Amazon Web Services Academy Cloud Foundations (S) ¹	3 credits
CSI 311 Computer Organization ¹ (F)	3 credits
Math Elective (MAT 107 or higher)	3 credits
EXP 297 Internship I	3 credits

Additional Information

1. Indicates course requires the completion of a prerequisite.

2. Natural Science: Recommended to complete PHY 111 General Physics w/lab

3. Business Elective: Complete either BUS 202 or BUS 220.

NOTE: All classes are offered in the fall and the spring unless otherwise designated:

F=Class is only offered in the Fall

S=Class is only offered in the Spring

Prior Learning Assessment Opportunity

CompTIA and QC Courses

Network+ is equivalent to CSI 244 Networking I

Security+ is equivalent to CSI 242 Computer Systems Security

Students with proof of completion please contact Division Dean.

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Semester 1	Credits	Pre-Requisites
Computer Science	3 credits	
ENG 101 English Composition I	3 credits	
IDS 167 First Year Seminar	3 credits	
Math	3 credits	
Natural Science w/ Lab	4 credits	
Total	16 credits	

Semester 2	Credits	Pre-Requisites
CSI 104 Introduction to Programming with Python	3 credits	
CSI 244 Networking I	3 credits	
ENG 102 English Composition II	3 credits	ENG 101
History/Government	3 credits	
Social Science/Psychology	3 credits	
Total	15 credits	

Semester 3	Credits	Pre-Requisites
CSI 235 Computer Architecture	3 credits	CSI 104 or CSI 116
CSI 217 Introduction to Operating Systems	3 credits	
CSI 226 UNIX with Linux	3 credits	
CSI 245 Networking II	3 credits	CSI 244
CSI 242 Computer System Security	3 credits	CSI 244
Total	15 credits	

Semester 4	Credits	Pre-Requisites
BUS 202 Principles of Customer Service	3 credits	
Program Elective	3 credits	
CSI 246 Networking III	3 credits	CSI 245
Program Elective	3 credits	
SOC 112 Interpersonal Communication	3 credits	
Total	15 credits	

Semester Path:

Recommended course of study for a full-time student. It is recommended that students speak to an Academic Advisor before registering for courses each semester.

Student Resources:

Academic Advising
617-984-1720

**Dean's Office of Arts and Sciences
& Professional Programs**
617-405-5920

Dean's Office of Allied Health
617-405-5960

Dean's Office of Nursing
617-405-5990

Financial Aid Office
617-984-1620

Registrar's Office
617-984-1650

**Student Accessibility and Academic
Support Services**
617-405-5915