

Cybersecurity Networking

Degree Type

Associate in Science

The Associate in Science Degree in Cybersecurity Networking is designed to provide students with networking skills focused on network security. It prepares students for entry-level positions as Network Security Specialists or Incident Responders. Students will be able to set up and administer basic computer network systems and secure them against outside intrusion. Students will be presented with materials necessary for Cisco CCNA, CompTIA Security+, CompTIA Linux+ and AWS Cloud Practitioner certifications.

Upon completion of the degree in Cybersecurity, graduates will be able to:

1. Set up basic network security.
2. Monitor for signs of intrusion and handle incident responses.
3. Perform configuration on basic network devices for wired and wireless networks.
4. Perform basic system administration including management of system accounts for Windows and Linux.
5. Create basic configuration scripts (python, bash, bat).
6. Describe the function of the major AWS services and use the AWS console for basic configuration tasks.
7. Discuss network security monitoring data collection and analysis.
8. Apply critical thinking skills in order to resolve troubleshooting and security issues.

In addition, the graduate will be able to demonstrate competency in the general education outcomes.

First Year - Fall Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|----------|--|-------------|-----------|---------|
| ENGL101N | College Composition | 4 | 0 | 4 |
| CSCN101N | Computer Architecture and Operating Systems | 2 | 3 | 3 |
| CSCN104N | Internet of Things | 2 | 2 | 3 |
| CSCN116N | Networking Basics | 2 | 2 | 3 |
| | Behavioral Social Science or History/ Political Science | | | 3 |

First Year - Spring Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|----------|---|-------------|-----------|---------|
| CSCI120N | Introduction to Scripting - Python | 2 | 2 | 3 |
| CSCN150N | Fundamentals of Cybersecurity | 2 | 2 | 3 |
| CSCI170N | Linux Essentials | 2 | 2 | 3 |
| CSCN216N | Switching, Routing, & Wireless Essentials | 3 | 3 | 4 |
| | Quantitative Literacy | | | 4 |

Second Year - Fall Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|----------|--|-------------|-----------|---------|
| CSCN202N | Cloud Computing | 2 | 2 | 3 |
| CSCN211N | Cybersecurity Operations | 2 | 2 | 3 |
| CSCN217N | Enterprise Networking, Security and Automation | 2 | 2 | 3 |
| ENGL122N | Technical Writing | 3 | 0 | 3 |
| | Science Elective | | | 4 |

Second Year - Spring Semester

| Item # | Title | Class Hours | Lab Hours | Credits |
|---------------|---|-------------|-----------|---------|
| CSCN204N | Administering Windows Servers | 2 | 2 | 3 |
| CSCN250N | Network Security Analysis | 2 | 2 | 3 |
| | Elective in Major | | | 3 |
| | Humanities/Fine Arts/Philosophy or Global Awareness | | | 3 |
| Total Credits | | | | 61 |