# Associate Applied Science: Cyber Security

**Program Lead:** Donald Easton, Bldg. 19, Room 148, 541.546.5532, eastond@lanecc.edu

**Learning Outcomes:**

Upon successful completion of this program, students will know or be able to:

- Defend systems against unauthorized access, modification, and/or destruction
- Perform vulnerability and networking scanning assessments
- Monitor network traffic for unusual activity
- Configure and support security tools such as firewalls, anti-virus software, intrusion detection systems, and patch management systems
- Implement network security policies, application security, access control and corporate data safeguards
- Analyze and establish security requirements for your networks
- Train fellow employees in security awareness
- Develop and update business continuity and disaster recovery protocols
- Conduct security audits and make policy recommendations
- Gain fundamental knowledge of key compliance requirements, such as PCI-DSS and HIPAA
- Provide technical security advice

**Course Requirements:**

1. Prerequisites are required for some courses. See course descriptions.
2. All courses must be completed for a letter grade of C-, except for the Communications, Writing, Math, PE/Health, and Human Relations requirements and CS206 which may be completed with a “Pass” grade.
3. All CIT students are required to have a personal laptop. Please contact program lead for options and system requirements.

## First Year

### Fall
- CIS100 .... Computing Career Exploration ............. 1
- CS179 ..... Intro to Computer Networks ................ 4
- MTH 111. College Algebra ..................................... 4
- CIS140W Intro to Operating System: Windows ... 4

### Winter
- CS240W . Advanced Windows: Server Mgmt ...... 4
- CS161C+. Computer Science 1 .............................. 4
- CS206 ..... Co-op Ed: Computer Info Tech Seminar 4
- PE/ Health Requirement ....................................... 3
- CS189 ..... Routing and Switch Essentials.......... 4

### Spring
- CG203 .... Human Relations at Work............... 3
- CS162C+. Computer Science 2 ......................... 2
- CS273 ..... Intro to Cloud Computing ................. 4
- WR121 ... Academic Composition ..................... 4

## Second Year

### Fall
- CS260 .... Data Structures 1 ..............................4
- CIS140U . Intro to Unix/Linux ......................... 4
- CS284 .... Network Security Fundamentals ........... 4
- CS188 .... Wireless Networking ......................... 4

### Winter
- WR227 ... Technical Writing ......................... 4
- CS240U .. Advanced Unix/Linux: Server Mgmt ...... 4
- CS125D . Software Tools 1: Databases ............... 4
- Any CS/Math Course ............................................. 4

### Spring
- CS280CN. Co-op Ed: Computer Network Op ........ 3
- CS285 .... Cybersecurity Operations ................... 4
- CS286 .... Firewalls and VPNs .......................... 4
- CS288 .... Network Monitoring and Mgmt ........... 4

**TOTAL CREDITS:** ..................................................92