

PROGRAMS

INFORMATION TECHNOLOGY - CYBER SECURITY

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

The IT: Cyber Security curriculum provides students with comprehensive knowledge and skills in information security, preparing them to protect data and systems from cyber threats. Coursework covers topics such as network security, database concepts, introduction to programming and logic, system analysis and design and Linux/UNIX single user. Students will learn to implement security measures, conduct vulnerability assessments, and respond to security incidents. The program emphasizes the importance of maintaining confidentiality, integrity, and availability of information, equipping graduates for roles such as security analysts, cybersecurity specialists, and information security managers in various industries.

Associate (A25590S)

Fall Semester 1

| | | Lec | Lab | Clinic | Credit |
|---------|-----------------------------|-----|-----|---------------|-----------|
| ACA-115 | Success & Study Skills | 0 | 2 | 0 | 1 |
| CCT-110 | Introduction to Cyber Crime | 3 | 0 | 0 | 3 |
| CIS-110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| ENG-111 | Writing and Inquiry | 3 | 0 | 0 | 3 |
| SEC-110 | Security Concepts | 2 | 2 | 0 | 3 |
| | | | | Total: | 13 |

Spring Semester 1

| | | Lec | Lab | Clinic | Credit |
|---------|---|-----|-----|---------------|-----------|
| CTI-110 | Web, Programming, and Database Foundation | 2 | 2 | 0 | 3 |
| CTI-120 | Network and Security Foundation | 2 | 2 | 0 | 3 |
| DBA-110 | Database Concepts | 2 | 3 | 0 | 3 |
| SEC-160 | Security Administration I | 2 | 2 | 0 | 3 |
| MAT-143 | Quantitative Literacy | 2 | 2 | 0 | 3 |
| | | | | Total: | 15 |

Summer Semester 1

| | | Lec | Lab | Clinic | Credit |
|----------------------------|--|-----|-----|---------------|----------|
| Social & Behavioral Option | Social & Behavioral Science Options Listed Below | 3 | 0 | 0 | 3 |
| Communications Option | Communications Options Listed Below | 3 | 0 | 0 | 3 |
| | | | | Total: | 6 |

Fall Semester 2

| | | Lec | Lab | Clinic | Credit |
|---------|---------------------------------------|-----|-----|--------|--------|
| CCT-240 | Data Recovery Techniques | 2 | 3 | 0 | 3 |
| CIS-115 | Introduction to Programming and Logic | 2 | 3 | 0 | 3 |
| CTI-140 | Virtualization Concepts | 1 | 4 | 0 | 3 |

Fall Semester 2

| | | Lec | Lab | Clinic | Credit |
|---------|---------------------------------------|------------|------------|---------------|---------------|
| CTS-115 | Information Systems Business Concepts | 3 | 0 | 0 | 3 |
| CTS-120 | Hardware/Software Support | 2 | 3 | 0 | 3 |
| | | | | Total: | 15 |

Spring Semester 2

| | | Lec | Lab | Clinic | Credit |
|-------------------|---|------------|------------|---------------|---------------|
| CCT-250 | Network Vulnerabilities I | 2 | 2 | 0 | 3 |
| CTS-285 | Systems Analysis & Design | 3 | 0 | 0 | 3 |
| NOS-120 | Linux/UNIX Single User | 2 | 2 | 0 | 3 |
| NOS-130 | Windows Single User | 2 | 2 | 0 | 3 |
| Humanities Option | Humanities and Fine Arts Options Listed Below | 3 | 0 | 0 | 3 |
| | | | | Total: | 15 |

Total Credit Hours: 64**Communications: Choose One of the following:**

| | | Lec | Lab | Clinic | Credit |
|---------|---|------------|------------|---------------|---------------|
| COM-120 | Intro to Interpersonal Communication | 3 | 0 | 0 | 3 |
| COM-231 | Public Speaking | 3 | 0 | 0 | 3 |
| ENG-112 | Writing and Research in the Disciplines | 3 | 0 | 0 | 3 |

Social and Behavioral Sciences Choices for AAS Degree Programs Unless Otherwise Noted:

| | | Lec | Lab | Clinic | Credit |
|---------|------------------------------|------------|------------|---------------|---------------|
| ECO-251 | Principles of Microeconomics | 3 | 0 | 0 | 3 |
| ECO-252 | Principles of Macroeconomics | 3 | 0 | 0 | 3 |
| POL-120 | American Government | 3 | 0 | 0 | 3 |
| PSY-150 | General Psychology | 3 | 0 | 0 | 3 |
| SOC-210 | Introduction to Sociology | 3 | 0 | 0 | 3 |

Humanities/Fine Arts Choices for AAS Degree Programs Unless Otherwise Noted:

| | | Lec | Lab | Clinic | Credit |
|---------|------------------------|------------|------------|---------------|---------------|
| ART-111 | Art Appreciation | 3 | 0 | 0 | 3 |
| HUM-110 | Technology and Society | 3 | 0 | 0 | 3 |
| HUM-115 | Critical Thinking | 3 | 0 | 0 | 3 |
| MUS-110 | Music Appreciation | 3 | 0 | 0 | 3 |

Certificate (C25590S)**Fall Semester 1**

| | | Lec | Lab | Clinic | Credit |
|---------|-----------------------------|------------|------------|---------------|---------------|
| CCT-110 | Introduction to Cyber Crime | 3 | 0 | 0 | 3 |
| SEC-110 | Security Concepts | 2 | 2 | 0 | 3 |
| CIS-110 | Introduction to Computers | 2 | 2 | 0 | 3 |
| | | | | Total: | 9 |

Spring Semester 1

| | |
|---------|---------------------------------|
| CTI-120 | Network and Security Foundation |
| SEC-160 | Security Administration I |

| Lec | Lab | Clinic | Credit |
|--------|-----|--------|--------|
| 2 | 2 | 0 | 3 |
| 2 | 2 | 0 | 3 |
| Total: | | | 6 |

Total Credit Hours: 15

