



Network Technology
Credential: Network Security Certificate
C25340SE

The Network Security Certificate is a certificate under the curriculum title of Network Technology. This curriculum prepares students to understand and install various types of security tools and models. This curriculum also develops operating skills needed to successfully manage and support these devices.

Course work includes extensive hands-on experience with different network electronics, operating systems, and security tools. Classes cover installation and support of various security electronics, security and intrusion detection software, troubleshooting, administrative responsibilities, and other security tools.

Graduates should qualify for positions such as: LAN/PC security technician, security control operator, and network security technician. Graduates are also prepared to sit for certification exams that can result in industry-recognized credentials. Credits earned in this certificate program will transfer into the Associate in Applied Science Degree in Network Technology. Students must meet the higher entrance requirements.

Program Length: 2 semesters
 Career Pathway Options: Associate in Applied Science Degree in Network Technology.
 Program Sites: Program Sites: Lee Campus - Day Program and Night "Career Centered" Flexible Program

Course Requirements for Network Security Certificate

Required Major Core Courses (12 SHC)		C-L-SHC
NET 125	Networking Basics	1-4-3
SEC 110	Security Concepts	3-0-3
SEC 160	Security Fundamentals I	2-2-3
SEC 210	Intrusion Detection	<u>2-2-3</u>
		8-8-12

Total Semester Hours Credit: 12

COURSE DESCRIPTIONS

NET 125 Networking Basics 1-4-3

This course introduces the networking field. Emphasis is placed on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols.

SEC 110 Security Concepts 3-0-3

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

SEC 160 Secure Admin I 2-2-3

Prerequisites: SEC 110 and NET 110 or NET 125

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

SEC 210 Intrusion Detection 2-2-3

Prerequisites: SEC 160

This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host based systems.