



Network Technology
Credential: Wireless Networking Certificate
C25340WN

The Wireless Networking Certificate is a certificate under the curriculum title of Network Technology. This curriculum prepares students to understand and install various models of wireless routers and switches. This curriculum also develops operating skills needed to successfully install, manage, and support these devices.

Course work includes extensive hands-on experience with different network electronics and support tools. Classes cover installation and support of various wireless network electronics, management software, troubleshooting, and administrative responsibilities.

Graduates should qualify for positions such as: LAN/PC administrator, network control operator, network analyst, and information systems specialist. 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 – Night Program

Course Requirements for Wireless Networking Certificate

Required Major Core Courses (12 SHC)		
NET 125	Networking Basics	1-4-3
NET 126	Routing Basics	1-4-3
NET 175	Wireless Technologies	2-2-3
SEC 110	Security Concepts	3-0-3
SEC 240	Wireless Security	<u>2-2-3</u>
		9-12-15

Total Semester Hours Credit: 15

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.

NET 126 Routing Basics 1-4-3

Prerequisites: NET 125

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

NET 175 Wireless Technology 2-2-3

Prerequisites: NET 110 or NET 125

This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.

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 240 Wireless Security 2-2-3

Prerequisites: SEC 110 and NET 175

This course introduces security principles and topics related to the wireless networking environment. Topics include network topologies, network protocols, security issues, and best practices for wireless environments. Upon completion, students should be able to design, setup, manage, and secure a wireless network.