CENTRAL CAROLINA COMMUNITY COLLEGE

Program Planning Guide
Network Infrastructure Certificate (C25590NI)

Program Length: 2 Semesters
Career Pathway Options: Associate in Applied Science Degree in Information Technology Network Management; Diploma in Information Technology Network Management; Certificate in Network Infrastructure.
Program Sites: Program Sites: Lee Main Campus (Evening, Selected Distance, Day- Schedule differs)

Suggested Course Schedule:		HOURS			Grade	Semester	Notes
		Class	Lab	Credit			
1st Semester (fall)							
CTI 120	Network and SEC Foundation	2	2	3			
NET 125	Introduction to Networks	1	4	3			
		2	8	6			
2nd Semester (spring)							
NET 126	Routing Basics	1	4	3			
NET 225	Routing & Switching I	1	4	3			
		2	8	6			

Total Semester Hours Credit: 12

Course Descriptions:

CTI 120   Network and SEC Foundation   2-2-3
This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards, Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

NET 125   Introduction to Networks   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
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 225   Routing and Switching I   1-4-3
This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in prerequisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP.