



**Academic Plan**  
**Network & Telecommunications Administration**  
**Certificate**  
**EFFECTIVE CATALOG YEAR 2018-2019**



**Required Courses**

**CSC 105- Introduction to Computers – 3 credits**

Overview of computer applications with emphasis on word processing, spreadsheets, database, presentation tools and internet-based applications.

**CIS 350- Computer Hardware, Data Communication and Networking – 3 credits**

An introduction to computer hardware, data communications, and networking fundamentals and theory. Computer design, components, voice and data communications and LAN design and operation issues are addressed in both lecture and hands-on formats. Emphasis is given to network design using the OSI model as well as network operations and setup issues.

**CSC 383- Networking I – 3 credits**

LAN topologies, media choices, protocols and transmission techniques are addressed. Overview of LAN planning and installation considerations. LAN hardware and software offerings and problem determination procedures are presented.

**CSC 385- Networking II – 3 credits**

This class focuses on the technical networking essentials of the development, maintenance and use of e-commerce sites. Topics include coverage of network concepts and theory, intranets, extranets, server issues, enterprise computing, virtual hosting, and security considerations. Prerequisite: CSC 383