

Course Description

EEV0554 | Networking Essentials | 2.50 credits

This course is designed to provide students who are preparing to become network support technician's fundamental preparation in network concepts. Students will learn the skills necessary to identify the type, components, and design of a Local Area Network most appropriate for a given site. Prerequisite: CTS0050.

Course Competencies

Competency 1: The student will demonstrate proficiency in understanding network concepts by:

- 1. Analyzing different types of networks and their applications
- 2. Evaluating the components of a Local Area Network (LAN)
- 3. Comparing various network design methodologies

Competency 2: The student will develop skills in identifying network requirements by:

- 1. Assessing the specific needs of a given site for network implementation
- 2. Identifying critical factors influencing network performance and reliability
- 3. Documenting network specifications based on site assessments

Competency 3: The student will apply principles of network design by:

- 1. Designing a Local Area Network layout that meets specified requirements
- 2. Utilizing software tools to simulate network configurations
- 3. Implementing best practices for network security within the design

Competency 4: The student will enhance troubleshooting skills for network issues by:

- 1. Diagnosing common network problems using systematic approaches
- 2. Developing strategies for resolving connectivity issues in a LAN
- 3. Testing and validating network performance post-implementation

Learning Outcomes

- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Use computer and emerging technologies effectively