

# NETWORK INFRASTRUCTURE, COLLEGE CREDIT CERTIFICATE

CTSC 1651	Cisco Router Technology	3
CTSC 2652	Cisco Advanced Router Technology	3
<b>Total Credit Hours</b>		<b>21</b>

**Program Code:** NICC

**Meta-Major:** STEM

**Location(s):** Cocoa, Melbourne, Palm Bay, Titusville, Online

**Delivery Method(s):** On-Campus, Hybrid

**Previous Degree Required:** HS Diploma

**Eligible for Financial Aid:** Yes

**Additional Limited Access Application Process Required:** No

**Program Testing Requirements:**

**Classification of Instructional Programs (CIP) Code:** 11.1001

**Florida Department of Education CIP Code:** 0511100114

This certificate is part of the [Network Systems Technology A.S.](#) degree program.

This certificate program is designed to prepare students for entry-level network sever administrator position. The core courses provide introduction to:

- understanding networking fundamentals
- routing concepts
- routing protocols
- router configuration skills
- LAN design and concepts
- VLAN configuration skills
- basic wireless concepts and configuration
- wide area networks (WAN)
- Wide Area Network configuration skills
- network securit
- Remote Access
- IP Addressing Services

The techniques and skills are introduced in a progressive delivery starting with computer networking, client and server operating systems, security protection and testing methods, and advanced elements of router and switching methods and administration.

Students currently employed in the field can supplement and upgrade their skills through a variety of offerings in computer systems administration, network design and protection, and security methods and techniques. Credits earned in this certificate apply to the [Associate in Science \(A.S.\) degree in Network Systems Technology](#). [Visit the program page for more details and how to apply.](#)

Refer to [course descriptions](#) to determine prerequisites.

## Certificate Requirements

Code	Title	Credit Hours
<b>Major Courses</b>		
CET 1176	Computer Maintenance and Repair <sup>1</sup>	3
CTS 1321	Linux Networking and System Administration <sup>1</sup>	3
CTS 1329	Microsoft Client O/S	3
CTS 1383	Microsoft Server O/S - Installation and Configuration	3
CTSC 1134	Network+	3

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This course has a prerequisite of CGS 1000 Exploring Digital Technology.

## Learning Outcomes: Network Infrastructure, College Credit Certificate

1. Apply subnetting to IP Networks
  - *Supports Core Ability: Think Critically and Solve Problems*
2. Analyze user authentication methods
  - *Supports Core Ability: Think Critically and Solve Problems*
3. Design a group policy strategy
  - *Supports Core Ability: Think Critically and Solve Problems*
4. Install a domain controller
  - *Supports Core Ability: Think Critically and Solve Problems*
5. Contrast absolute and relative pathnames
  - *Supports Core Ability: Think Critically and Solve Problems*
6. Contrast stand-alone utilities and built-in shell commands
  - *Supports Core Ability: Think Critically and Solve Problems*
7. Create a small workgroup environment
  - *Supports Core Ability: Think Critically and Solve Problems*
8. Organize user accounts into logical group accounts
  - *Supports Core Ability: Think Critically and Solve Problems*
9. Analyze the primary functions and features of a router
  - *Supports Core Ability: Think Critically and Solve Problems*
10. Design a hierarchical addressing scheme
  - *Supports Core Ability: Think Critically and Solve Problems*