CIT 161 - CISCO INTERNETWORKING II

Course Description

This course, in conjunction with CIT 160 and CIT 260, provides the necessary preparation to pass the Cisco CCNA Routing & Switching Exam (Cisco Certified Network Associate). The following topics are covered in detail: router and switch configuration, VLANs, inter-VLAN routing, EtherChannel, STP, DHCP, SLAAC, FHRP, WLAN concepts and configuration, routing concepts, LAN security concepts, and static routing. This course utilizes the Cisco Networking Academy "CCNA Routing and Switching: Switching, Routing, and Wireless Essentials" curriculum and integrates online curriculum, classroom activities, hands-on lab exercises, and group projects. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

CIT 160 may be taken concurrently

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

• Describe the mechanics of internetworking protocol layers, devices, subnets, and addressing in IPv4 and IPv6 networks.

Application:

• Create and troubleshoot simple Ethernet networks utilizing Cisco command line interface to work with routers and switches.

Integration:

• Analyze the required components of various IT careers.
• Problem-solve independently.

Human Dimension:

• Collaborate as team members and leaders, building their interpersonal and communication skills.

Caring - Civic Learning:

• Build robust networks to benefit the rest of the IT team.
• Reflect on how their role within an organization and community impact the productivity of others.

Learning How to Learn:

• Acknowledge that technology is constantly changing requiring new skillsets.
• Apply their knowledge to future certification exams.