CIT 260 - CISCO INTERNETWORKING III

Course Description

This course, in conjunction with CIT 160 and CIT 161 prepares the student for the Cisco CCNA Exam (Cisco Certified Network Associate). Describes the architectures and considerations related to designing, securing, operating, and troubleshooting enterprise networks. Students will configure and troubleshoot routers and switches and resolve common issues with OSPF, ACLs, NAT, VPNs, and QoS for IPv4 and IPv6 networks, while also implementing network management, design, troubleshooting, virtualization, and automation techniques. This course utilizes the Cisco Networking Academy "CCNA Routing & Switching: Enterprise Networking, Security, and Automation" 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 161

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:

- Engineer advanced Ethernet networks.

Integration:

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

Human Dimension:

- Collaborate as team members and leaders using soft skills to achieve desired outcomes.

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.