# **CIT 160 - CISCO INTERNETWORKING I**

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

### **Course Description**

This course, in conjunction with CIT 161 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: basic switch and router configurations, OSI and TCP/IP models, IPv4 and IPv6 routing, and network security fundamentals. This course utilizes the Cisco Networking Academy "CCNA Routing and Switching: Routing and Switching Essentials" curriculum and integrates online curriculum, classroom activities, hands-on lab exercises, and group projects. Group 2 course.

### Credit Hours

**Contact Hours** 

Lecture Hours

## Lab Hours

**Recommended Prerequisites or Skills** 

# **Competencies**

### CIT 213

### **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 simple 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:

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