

# IT 207 : Advanced Networking and Network Security

**Credits** 5

**Quarter Offered** Fall

Covers advanced networking and network security concepts & skills including routing, switching, virtual LANs, network design, routing protocols, network management and software defined networking. Secure network design, implementation and monitoring/maintenance are taught using hands-on projects for students. This class may include students from multiple sections.

**Prerequisites**

[IT 107](#)

**Course Outcomes**

- Describe how routing and switching work by building a working, multi-zone network
- Demonstrate how to configure routers and switches for specific scenarios
- Describe and demonstrate the best practices in secure network design
- Describe and demonstrate best practices when maintaining a secure network
- Demonstrate how to automate network management tasks
- Demonstrate how to manage and configure network security devices such as firewalls and intrusion detection systems