

ETRO 240C : Cisco Networking 4

Credits: 3

Class Hours: 6 lecture/lab

Prerequisites:

"C" or higher in ETRO 240B or approval of instructor.

Recommended:

Basic computer and internet usage skills.

Description:

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network.

Semester Offered: Fall, Spring

Course Student Learning Outcomes (CSLOs):

1. Describe and differentiate network architectures to support borderless networks, data centers, virtualization, and collaboration technology solutions.
2. Describe the benefits of Wide Area Networks (WAN) and explain the differences between WAN technologies.
3. Describe the benefits of Virtual Private Networks (VPNs) and tunneling.
4. Compare, configure, and implement Virtual Private Networks (VPNs).
5. Explain, configure, and troubleshoot tunneling operations.
6. Explain, configure, and troubleshoot Network Address Translation (NAT) operations.
7. Monitor and troubleshoot network operations using industry accepted software based tools.