

# ETRO 140C : Cisco Networking 2

**Credits:** 3

**Class Hours:** 6 lecture/lab

**Prerequisites:** "C" or higher in ETRO 140B.

**Recommended:** Basic computer and internet usage skills.

**Description:** This course introduces the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches; implement and troubleshoot common issues with static, RIPv2, single-area OSPFv2, and single-area OSPFv3 routing protocols; implement inter-VLAN routing in both IPv4 and IPv6 networks; secure the network with Access Control Lists (ACLs); and apply essential network services such as Dynamic Host Configuration Protocol (DHCP) for IPv4 and IPv6, and Network Address Translation (NAT).

**Semester Offered:** Spring