

# ETRO 287 : Computer Systems and Networking

**Credits:** 4

**Class Hours:** 3 lecture and 3 lab

**Prerequisites:** "C" or higher in ETRO 105 or ETRO 280.

**Description:** This course prepares students for work in maintaining, servicing, troubleshooting, and repairing PCs, peripheral devices, operating systems, as well as communication systems and networks. Students will build, upgrade, install, maintain, and troubleshoot computer and networking hardware. Topics include cabling of voice and data networks, LANs and WANs architecture and protocols, networking devices, wireless networking, and network security.

**Semester Offered:** Spring

**Course Student Learning Outcomes (CSLOs):**

1. Describe the history and nature of the science of computers and the technological advances that led to the evolution of modern computers, software, and network systems.
2. Explain the proper procedures and steps to assemble computers from hardware components and install additional advanced hardware to enhance performance and functionality.
3. Identify and describe how to install and configure system and network operating systems.
4. Describe diagnostic and troubleshooting procedures when assembling, installing, or repairing hardware or software problems.