IT 107 : Introduction to Networking

Credits 5
Quarter Offered Fall
This course is an introduction to technologies, terminology, and skills used in the world of data networking. Emphasis is on practical applications of networking and computer technology to real-world problems, including home and small-business network setup. You will perform a variety of hands-on and case project activities combined with your reading activities that will reinforce each of the course objectives. This course maps to CTCITC 115: Introduction to Networking. This class may include students from multiple sections.
Course Outcomes
Describe the basic hardware, software and services components used in network systems.
Compare and contrast the alternatives in LAN media, topologies, access methods, and media.
Demonstrate a layered approach to networking. (For example the open connection (OSI) reference model).
Identify and evaluate appropriate media for networks (such as cabling, wireless, fiber, etc.).
Evaluate appropriate network media topologies.
Describe the major network layer protocols with an emphasis on IPv4 and/or IPv6, including addressing, subnetting, network address translation and IP configuration.
Given a scenario, perform subnetting.
Describe the major functions of network operating systems and directory services.
Troubleshoot networks using standard troubleshooting tools.
Describe the advantages/disadvantages of various network protocols.
Select or determine appropriate network security process or approach for given situations.
Build a (simple) network using routers and switches.