CSCI 106R: Communication Infrastructure

This course provides a hands-on guide to planning, designing, installing, and maintaining the infrastructure used to support voice, video, and data communication. The communication media covered includes copper cabling, fiber optic cabling, and wireless transmission. The subject matter corresponds to that of industry-wide structured cabling standards, with particular emphasis on the standards published by the American National Standards Institute (ANSI), National Electric Code (NEC), and topics covered in the Certified Wireless Network Administrator (CWNA) certification. Topics include safety considerations, transmission media, testing procedures, system components, installation techniques, and customer support phases. Coverage of wireless networks with a focus on IEEE 802.11 standards, design considerations, security, best practice, and troubleshooting methodology are reviewed. The material is reinforced with projects using equipment from a variety of vendors, such as Cisco, Aruba, and Ubiquiti.

Credits: 3
Lab Hours: 2
Lecture Hours: 2
Program: Computer Technology