



COMPUTER NETWORKS I

Course Number	EECE 132
Course Name	COMPUTER NETWORKS I
Credit Value (Breakdown of theory and lab credits)	3 credits, 3 Theory + 0 Lab
Catalog Course Description	Students will learn both practical and conceptual skills that build the foundation of networking. They will examine the OSI and TCP/IP layers in detail to understand their functions and services. Students will become familiar with the various network devices, network addressing schemes, and types of media used to carry data across the network. They will gain experience designing and deploying inter-networks of WAN and LANS using static routing. (3, 3T+0L)
Student Learning Outcomes/Objectives /Competencies of the Course	<ol style="list-style-type: none"> 1. Use network protocol models to explain the layers of communication of data networks. 2. Design and build simple Inter-networks WAN/LAN using industrial switches and routers, and devise appropriated IP addressing schemes including subnet masks and addresses. 3. Employ basic cabling and network designs to connect devices, following industry standards guidelines. 4. Use Cisco CLI commands to perform router and switch configuration and verification. 5. Analyze the operation and features of the transport and network layer protocols. 6. Secure routers (terminals and virtual terminals) using password protection encryption.
College-Wide Student Learning Outcomes	<p>Information regarding which of the following college-wide objectives will be addressed in the course along with which assignment will be used to measure this outcome:</p> <ol style="list-style-type: none"> 1. Communication 2. Critical Thought