

Course Description:

CIS-018C - Cisco Local Area Network Design Units: 3

This course covers the design of a LAN and prepares students for the Cisco Certified Network Associate (CCNA) test. Students will design and configure an actual network for a typical LAN. Topics covered include IPX addresses and access lists, advantages of LAN segmentation using bridges, routers, and switches. The course also covers features and benefits of Fast Ethernet connections and VLANs.

Lecture Hours: 2.5 Lab Hours: 1.5 Repeatable: No Grading: O

Prerequisite: CIS 018B

Corequisite: CONCURRENT ENROLLMENT IN CIS 200

CAN: None

Advisory Level: Read: 2 Write: 2 Math:

Transfer Status: CSU Degree Applicable: AA/AS

CSU GE: None District GE: None IGETC: None

Learning Outcomes:

1. List the require IPX address and encapsulation type.
2. Configure IPX access lists and SAP filters to control basic Novell traffic.
3. Enable the Novell IPX protocol and configure interfaces.
4. Monitor Novell IPX operations on the router.
5. Describe LAN segmentation using bridges, routers, and switches.
6. Describe the benefits of LAN segmentation using bridges, routers, and switches.
7. Describe the benefits of network segmentation with bridges, routers, and switches.
8. Describe the features and benefits of Fast Ethernet.
9. Describe the benefit of virtual LANS.
10. Describe the guidelines and distance limitations of Fast Ethernet.
11. Distinguish between cut-through and store-and-forward LAN switching.
12. Describe the operation and benefits of the Spanning Tree Protocol.
13. Set up and configure a LAN and IP access lists.
14. Enable routing for each network.
15. Debug IP commands.
16. Establish an interior gateway routing protocol, such as IGRP.