

Local Area Networks (LANs): Learning Center Instructor Guide Table of Contents

Course Description	xiii
ComputerPREP Courseware.....	xv
Course Objectives	xv
Classroom Setup	xvii
Lesson 1: Overview	1-1
Pre-Assessment Questions.....	1-2
Introduction	1-3
Local Area Networks	1-4
LAN Advantages.....	1-7
LAN Elements	1-9
LAN Users	1-12
The LAN Market	1-13
Lesson Summary	1-15
Lesson 1 Review	1-17
Lesson 2: Topologies.....	2-1
Pre-Assessment Questions.....	2-2
Introduction	2-3
Bus Topologies.....	2-3
Ring Topologies.....	2-8
Tree Topologies	2-11
Star Topologies.....	2-13
Mesh Topology.....	2-18
Wireless (Cell) Topology.....	2-20
Hybrid Topologies.....	2-23
Lesson Summary	2-24
Lesson 2 Review	2-26
Lesson 3: Information Transfer.....	3-1
Pre-Assessment Questions.....	3-2
Data Transport and Protocols	3-3
Access Method Overview	3-7
CSMA/CD (Ethernet).....	3-9
Token Ring.....	3-17
Token Bus.....	3-24
Summary	3-25
Lesson Summary	3-27
Lesson 3 Review	3-29
Lesson 4: Transmission Techniques	4-1
Pre-Assessment Questions.....	4-2



Order Now!
800.228.1027
602.275.7700

www.computerprep.com

Analog and Digital Transmissions.....	4-3
Baseband Transmission.....	4-5
Broadband Transmission.....	4-7
Hybrids.....	4-12
Fiber Optic Transmission.....	4-13
Wireless Transmission.....	4-14
Comparison.....	4-15
Lesson Summary.....	4-16
Lesson 4 Review.....	4-18
Lesson 5: Transmission Media.....	5-1
Pre-Assessment Questions.....	5-2
Overview of Transmission Media.....	5-3
Twisted Pair Cable.....	5-6
Coaxial Cable.....	5-15
Fiber Optic Cable.....	5-18
Infrared.....	5-24
Short-Range Wireless.....	5-26
Microwave.....	5-28
Satellite.....	5-31
Lesson Summary.....	5-35
Lesson 5 Review.....	5-38
Lesson 6: LAN Standards.....	6-1
Pre-Assessment Questions.....	6-2
The Elements of a LAN Standard.....	6-3
OSI Reference Model.....	6-5
TCP/IP.....	6-9
SNA.....	6-12
IEEE Committees.....	6-14
IEEE 802.x Standards.....	6-16
Lesson Summary.....	6-30
Lesson 6 Review.....	6-32
Lesson 7: LAN Components.....	7-1
Pre-Assessment Questions.....	7-2
Networking Components.....	7-3
Servers.....	7-7
Network Operating System (NOS).....	7-17
Local Networking Components.....	7-22
Internetworking Components.....	7-25
Lesson Summary.....	7-33
Lesson 7 Review.....	7-36
Lesson 8: Network Management.....	8-1
Pre-Assessment Questions.....	8-2
Network Trends.....	8-3
Network Management.....	8-7
User Management.....	8-21
Network Hardware and Software Management.....	8-23
Functional Areas of Network Management.....	8-33
Management Protocols.....	8-46
Planning a Network.....	8-53
Lesson Summary.....	8-57
Lesson 8 Review.....	8-59

Lesson 9: Advanced LAN Technologies	9-1
Pre-Assessment Questions.....	9-2
From LANs to WAN	9-3
Basic WAN Technologies.....	9-5
Advanced WAN Technologies.....	9-17
Frame Relay	9-18
SONET.....	9-20
Cell Relay: ATM/SMDS/BISDN.....	9-25
Virtual Private Networks(VPNs)	9-36
Lesson Summary	9-37
Lesson 9 Review	9-40
Glossary	Glossary-1
Index	Index-1