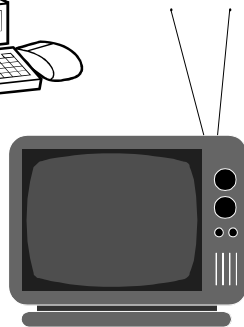
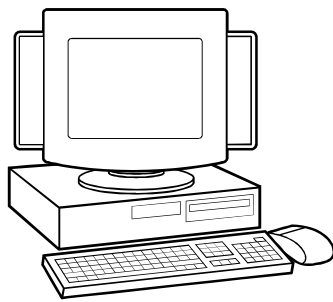


The Trade & Industrial Education Binder



THE TRADE & INDUSTRIAL EDUCATION BINDER
Table of Contents

9/10

Computer Systems Technology I
Computer Systems Technology II
Computer Systems Technology III
TV Production I

Curriculum Guide

Computer Systems Technology I



Computer Systems Technology I

Content Outline

Topic	Competency	Suggested Time Frame
I. INTRODUCTION AND OVERVIEW (Course 2151 Module Zero) A. Lab Rules and Safety B. MCSE Program Overview C. Related Skills D. Communication Skills E. Computer Ethics F. Curriculum and Textbook G. Computer Concepts Review	A, B, C, D, E	3 block/ 6 single periods/ Ongoing
II. INTRODUCTION TO WINDOWS 2000 AND NETWORKING (Course 2151 Module One) A. Windows 2000 Operating Systems B. Introduction to Networks C. Lab A: Identifying Computer Networks D. Windows 2000 Network Implementation E. Lab B: Identifying Features of Win2k Network F. Logging On to Win2K	1, 2, 3	5 blocks/ 10 single periods
III. ADMINISTRATION OF A WINDOWS 2000 NETWORK (Course 2151 Module Two) A. Win2K Help B. Lab A: Using Win2K Help C. Administrative Tasks D. Administrative Tools E. Lab B: Identifying Administrative Tools	4, 5, 6	4 blocks/ 8 single periods
IV. SECURING A WINDOWS 2000 NETWORK (Course 2151 Module Three) A. User Accounts B. Groups C. Lab A: Examining Users and Groups D. User Rights E. Lab B: Examining User Rights F. Permissions G. Lab C: Examining File and Folder Permissions	7, 8, 9, 10	4 blocks/ 8 single periods
V. EXAMINING THE NETWORK (Course 2151 Module Four) A. Scope of Networks B. Basic Connectivity Components C. Network Topologies D. Network Technologies E. Expanding the Network F. Lab A: Examining the Network Architecture	11, 12, 13, 14, 15	6 blocks/ 12 single periods

Topic	Competency	Suggested Time Frame
VI. EXAMINING NETWORK PROTOCOLS (Course 2151 Module Five) A. Introduction to Protocols B. Protocols and Data Transmissions C. Common Protocols D. Other Communication Protocols E. Remote Access Protocols F. Lab A: Identifying Protocol Capabilities	16, 17, 18, 19, 20	4 blocks/ 8 single periods
VII. EXAMINING TCP/IP (Course 2151 Module Six) A. Introduction to TCP/IP B. TCP/IP Protocol Suite C. Lab A: Using TCP/IP Utilities D. Name Resolution E. Examining the Data Transfer Process F. Routing Data G. Lab B: Identifying Processes and Protocols in TCP/IP	21, 22, 23, 24, 25	6 blocks/ 12 single periods
VIII. EXAMINING IP ADDRESSING (Course 2151 Module Seven) A. Classful IP Addressing B. Subnetting a Network C. Lab A: Determining Class Addresses and Subnet Masks D. Planning IP Addressing E. Lab B: Identifying Valid IP Addresses F. Assigning TCP/IP Addresses G. Lab C: Examining the Configuration of TCP/IP	26, 27, 28, 29	5 blocks/ 10 single periods
IX. OPTIMIZING IP ADDRESS ALLOCATION (Course 2151 Module Eight) A. Classless Inter-Domain Routing (CIDR) B. Binary IP Addresses C. Lab A: Using Wincalc to Convert Decimal and Binary Numbers D. Binary Subnet Masks E. Lab B: Determining Local and Remote Destinations F. IP Address Allocation Using CIDR G. Lab C: Allocating IP Addresses	30, 31, 32, 33	8 blocks/ 16 single periods
X. EXAMINING WEB SERVICES (Course 2151 Module Nine) A. Identifying Internet Concepts B. Using Client Technologies C. Lab A: Accessing an FTP Site by Using Internet Explorer D. Connecting to the Internet E. Identifying Web Server Concepts F. Lab B: Identifying Web Concepts	34, 35, 36, 37	4 blocks/ 8 single periods

Topic	Competency	Suggested Time Frame
XI. INSTALLING OR UPGRADING TO WINDOWS 2000 (Course 2152 Module One) A. Preparing for Installation B. Installing Windows 2000 Professional From a Compact Disc C. Installing Windows 2000 Advanced Server From a Compact Disc D. Lab A: Installing Windows 2000 E. Upgrading to Windows 2000 Professional F. Upgrading to Windows 2000 Advanced Server G. Identifying Setup Errors	38, 39, 40, 41, 42, 43	10 blocks/ 20 single periods
XII. CONFIGURING THE WINDOWS 2000 ENVIRONMENT (Course 2152 Module Two) A. Configuring and Managing Hardware B. Lab A: Creating and Using Hardware Profiles C. Configuring Display Options D. Configuring System Settings E. Configuring the Desktop Environment F. Lab B: Modifying Startup and Recovery Options G. Configuring Internet Options for Client Computers H. Lab C: Configuring Internet Options	44, 45, 46, 47	10 blocks/ 20 single periods
XIII. CONNECTING WINDOWS 2000-BASED CLIENTS TO NETWORKS (Course 2152 Module Three) A. Windows 2000 Connectivity B. Connecting to a Microsoft Network C. Lab A: Configuring and Testing IP Addresses D. Connecting to a Novell NetWare Network E. Lab B: Installing and Configuring Gateway (and Client) Service for NetWare	48, 49, 50	10 blocks/ 20 single periods
XIV. CREATING AND MANAGING USER ACCOUNTS (Course 2152 Module Four) A. Introduction to User Accounts B. Guidelines for New User Accounts C. Creating Local User Accounts D. Lab A: Creating Local User Accounts E. Creating and Configuring Domain User Accounts F. Setting Properties for Domain User Accounts G. Customizing User Settings with User Profiles H. Lab B: Creating and Modifying Domain User Accounts I. Best Practices	51, 52, 53, 54, 55, 56, 57	9 blocks/ 18 single periods

Computer Systems Technology I

Competencies/Objectives

1. The student will describe the features of the Windows 2000 operating system and its different versions.
2. The student will define different networks and describe their advantages.
3. The student will describe how Windows 2000 implements networking.
4. The student will use Windows 2000 Help to locate specific information.
5. The student will describe routine administrative tasks required for network maintenance.
6. The student will associate the Windows 2000 administrative tools with the tasks they perform.
7. The student will describe the role and purpose of different user accounts.
8. The student will describe the role and purpose of different types of groups.
9. The student will identify common user and group rights.
10. The student will describe file, folder, and shared folder permissions.
11. The student will describe the scope of a network.
12. The student will describe some of the components used in a network.
13. The student will describe the topologies used in a network.
14. The student will describe the technologies used in a network,
15. The student will describe the components used in expanding the network.
16. The student will define a protocol and describe the types of protocols.
17. The student will describe the protocol characteristic that determines if a computer can communicate with other computers in a network.
18. The student will name the common network protocols supported by Windows 2000 and describe their characteristics.
19. The student will name the communication protocols and technologies that are compatible with Windows 2000 and describe their characteristics.
20. The student will describe the protocols used for remote access: dial-up protocols and virtual private network (VPN) protocols.
21. The student will describe the TCP/IP communication process.
22. The student will name the protocols in the TCP/IP protocol stack and describe the services they provide.
23. The student will describe the process for resolving user-friendly computer names by mapping them to an IP address.
24. The student will describe the process for sending data packets from one computer to another.
25. The student will describe how the process of routing passes information between two segments so that computers can communicate on a larger scope.
26. The student will define IP address classes and describe the features of each class.
27. The student will define subnetting and describe the components used to subnet a network.
28. The student will describe the issues involved in planning the IP addresses to be used in a network.
29. The student will describe the methods used to assign an IP address by using the tools provided by Microsoft Windows 2000.
30. The student will describe the features of Classless Inter-domain routing (CIDR).
31. The student will convert IP addresses from decimal to binary format.
32. The student will convert subnet masks to binary format to calculate the network ID and to determine if the destination computer is local or remote in relation to the source computer.
33. The student will describe IP address allocation by using CIDR.
34. The student will describe the Internet, an intranet, the domain namespace, and a URL.

35. The student will describe the different client technologies available for accessing information on the Internet.
36. The student will describe the methods for securely connecting to the Internet from a Windows 2000 network by using network address translators (NATs), proxy servers, and firewalls.
37. The student will explain how Web server technologies, such as IIS, can be used to host services on the Internet.
38. The student will prepare for a Windows 2000 installation.
39. The student will install Windows 2000 Professional from a compact disc.
40. The student will install Windows 2000 Advanced Server from a compact disc.
41. The student will upgrade to Windows 2000 Professional.
42. The student will upgrade to Windows 2000 Advanced Server.
43. The student will identify setup errors.
44. The student will configure and manage hardware.
45. The student will configure display options.
46. The student will configure system settings.
47. The student will configure the desktop environment.
48. The student will configure Internet options.
49. The student will describe the components of connectivity in a Windows 2000 environment.
50. The student will connect to a Microsoft network.
51. The student will connect to a Novell NetWare network.
52. The student will identify the guidelines for new user accounts.
53. The student will create local user accounts.
54. The student will create and configure domain user accounts.
55. The student will set properties for domain user accounts.
56. The student will customize user settings with user profiles.
57. The student will identify best practices for creating and configuring user accounts.
 - A. The student will understand and follow computer lab rules and regulations relating to the safety of the student and school equipment.
 - B. The student will know the steps involved in certification in the Microsoft Certified Systems Engineer track.
 - C. The student will demonstrate, on a daily basis, soft skills related to getting and keeping employment in the IT field, including, but not limited to:
 - ï Timeliness
 - ï Ability to communicate both written and oral
 - ï Mature behavior in the class/work environment
 - ï Ability to follow complex oral instructions
 - ï Ability to follow complex written instructions
 - ï Ability to work independently from others
 - ï Ability to work as a team member
 - ï Ability to take initiative in completing class assignments
 - D. The student will understand and demonstrate high standards of ethical behavior when dealing with information technology.
 - E. The student will demonstrate a basic knowledge of computer functions in the Windows environment.

Curriculum Guide

Computer Systems Technology II



Computer Systems Technology II

Content Outline

Topic	Competency/ Objective	Suggested Time Frame
I. MANAGING ACCESS TO RESOURCES BY USING GROUPS (2152 Module Five) A. Introduction to Windows 2000 Groups B. Implementing Groups in a Workgroup C. Implementing Groups in a Domain D. Lab A: Creating Global Groups E. Best Practices	58, 59, 60, 61	4 block/ 8 single periods
II. MANAGING DATA BY USING NTFS (2152 Module Six) A. Introduction to NTFS Permissions B. How Windows 2000 Applies NTFS Permissions C. Using NTFS Permissions D. Using Special NTFS Permissions E. Lab A: Using NTFS Permissions F. Compressing Data on an NTFS Partition G. Configuring Disk Quotas on NTFS Partitions H. Lab B: Configuring Disk Compression and Quotas I. Securing Data by Using EFS J. Lab C: Securing Files by Using EFS	62, 63, 64, 65, 66, 67, 68	4 blocks/ 8 single periods
III. PROVIDING NETWORK ACCESS TO FILE RESOURCES (2152 Module Seven) A. Introduction to Shared Folders B. Creating Shared Folders C. Combining NTFS and Shared Folders Permissions D. Using Administrative Shared Folders E. Publishing a Shared Folder in Active Directory F. Lab A: Sharing and Securing Network Resources G. Configuring Shared Folders by Using Dfs H. Lab B: Configuring Domain-Based Dfs	69, 70, 71, 72, 73, 74	4 blocks/ 8 single periods
IV. MONITORING AND OPTIMIZING PERFORMANCE IN WINDOWS 2000 (2152 Module Eight) A. Monitoring Event Logs B. Using Task Manager to Monitor System Resources C. Lab A: Using Task Manager and Event Viewer D. Using System Monitor to Monitor System Performance E. Using Alerts F. Lab B: Monitoring System Performance G. Optimizing Performance	75, 76, 77, 78, 79	4 blocks/ 8 single periods

Topic	Competency	Suggested Time Frame
V. IMPLEMENTING SECURITY IN WINDOWS 2000 (2152 Module Nine) A. Securing Desktops and Services by Using Security Policies B. Lab A : Configuring Windows 200 Security Settings C. Auditing Access to System Resources D. Lab B: Configuring Auditing	80, 81	4 blocks/ 8 single periods
VI. CONFIGURING PRINTING (2152 Module Ten) A. Introduction to Windows 2000 Printing B. Adding a Printer C. Lab A: Installing Printers on a Print Server D. Configuring a Network Printer E. Configuring Web-based Printing F. Lab B: Installing a Client Printer and Managing Printers	82, 83, 84, 85	4 blocks/ 8 single periods
VII. CONFIGURING WINDOWS 2000 FOR MOBILE COMPUTING (2152 Module Eleven) A. Configuring Hardware for Mobile Computing B. Configuring Power Management Options for Mobile Computing C. Lab A: Configuring Power Management Options D. Making Files Available for Offline Use E. Lab B: Configuring Offline Files F. Connecting to Networks and Computers G. Identifying Solutions to Mobile Computing Problems	86, 87, 88, 89, 90	2 blocks/ 4 single periods
VIII. CONFIGURING AND MANAGING DISKS (2152 Module Twelve) A. Windows 2000 Disk Types B. Creating Partitions on a Basic Disk C. Creating Volumes on a Dynamic Disk D. Lab A: Working with Dynamic Disks E. Performing Common Disk Management Tasks F. Lab B: Creating and Mounting a New Volume G. Best Practices	91, 92, 93, 94, 95	4 blocks/ 8 single periods
IX. IMPLEMENTING DISASTER PROTECTION (2152 Module Thirteen) A. Introduction to Disaster Protection B. Configuring an Uninterruptible Power Supply C. Implementing Fault Tolerance by Using RAID D. Lab A: Implementing Fault-Tolerant Volumes E. Backing Up and Restoring Data F. Lab B: Backing Up and Restoring System State Data G. Using Disaster Recovery Tools	96, 97, 98, 99, 100	4 blocks/ 8 single periods

Topic	Competency	Suggested Time Frame
X. INSTALLING AND CONFIGURING TERMINAL SERVICES (2152 Module Fourteen) A. Introduction to Terminal Services B. Planning the Installation C. Lab A: Installing Terminal Services D. Configuring Terminal Services E. Establishing a Terminal Session F. Configuring Session Settings G. Installing Applications on a Terminal Server H. Lab B: Installing an Application	101, 102, 103, 104, 105, 106, 107	4 blocks/ 8 single periods
XI. IMPLEMENTING WINDOWS 2000 CLIENTS (2152 Module Fifteen) A. Deploying Windows 2000 B. Performing a Manual Network Installation C. Customizing Installations and Upgrades by Using Switches D. Installing Windows 2000 Using the Setup Manager Wizard E. Using Disk Duplication F. Lab A: Creating an Answer File for an Unattended Installation G. Installing Windows 2000 Using RIS H. Troubleshooting Windows 2000 Setup I. Preparation Tool	108, 109, 110, 111, 112, 113, 114, 115	4 blocks/ 8 single periods
XII. IMPLEMENTING WINDOWS 2000-BASED SERVERS (2152 Module Sixteen) A. Common Implementation Features B. Implementing a File Server C. Implementing a Print Server D. Implementing an Application Server E. Implementing a Web Server F. Routine Administration Tasks	116, 117, 118, 119, 120, 121	4 blocks/ 8 single periods
XIII. APPRENTICESHIPS	A, B, C, D, E	44 blocks/ 88 single periods

Computer Systems Technology II

Competencies/Objectives

58. The student will identify how groups function and their characteristics.
59. The student will implement groups in a workgroup.
60. The student will implement groups in a domain.
61. The student will identify best practices for implementing groups.
62. The student will describe NTFS permissions.
63. The student will explain how Microsoft Windows 2000 applies NTFS permissions.
64. The student will use NTFS permissions
65. The student will grant special NTFS permissions.
66. The student will compress data on an NTFS partition.
67. The student will configure disk quotas on NTFS partitions.
68. The student will secure data by using Encrypting File System (EFS).
69. The student will explain the purpose and use of shared folders.
70. The student will create shared folders.
71. The student will combine NTFS permissions and shared folders permissions.
72. The student will use Administrative shared folders.
73. The student will publish a folder in the Active Directory directory service.
74. The student will configure shared folders by using Distributed file system (Dfs).
75. The student will monitor event logs to monitor information about system operations.
76. The student will use Task Manager to monitor system resources.
77. The student will use System Monitor to monitor system performance.
78. The student will use alerts to notify a user or an administrator when certain system criteria are met or exceeded.
79. The student will optimize performance by identifying the counters to monitor.
80. The student will secure desktops and services by using security policies.
81. The student will audit access to system resources.
82. The student will identify the requirements for setting up a network printer.
83. The student will add a shared printer on a print server and set up client computers to print.
84. The student will configure a network printer on a print server.
85. The student will configure Web-based printing.
86. The student will configure hardware for mobile computing.
87. The student will configure power management options for mobile computing.
88. The student will make files available offline by configuring client computers and the server.
89. The student will connect to computers and networks remotely.
90. The student will identify solutions to mobile computing problems.
91. The student will describe the different disk types in Microsoft Windows 2000.
92. The student will create partitions on a basic disk.
93. The student will create volumes on a dynamic disk.
94. The student will perform common disk management tasks.
95. The student will apply best practices for configuring and managing hard disks.
96. The student will describe the purpose of disaster protection.
97. The student will configure an uninterruptible power supply.
98. The student will provide data redundancy with fault-tolerant volumes.
99. The student will back up and restore data in Windows 2000.
100. The student will recover from a computer disaster.
101. The student will describe the purpose and use of Terminal Services.

102. The student will plan a Terminal Services installation.
103. The student will install Terminal Services.
104. The student will configure Terminal Services.
105. The student will establish a Terminal session.
106. The student will configure session settings.
107. The student will install applications on a Terminal server.
108. The student will describe the primary deployment methods for Windows 2000.
109. The student will perform an manual network installation of Windows 2000.
110. The student will customize installations and upgrades using switches.
111. The student will use the Setup Manager wizard.
112. The student will use the System Preparation Tool (Sysprep.exe) to prepare a computer for disk duplication.
113. The student will describe the process of disk duplication.
114. The student will perform remote installations of Windows 2000.
115. The student will troubleshoot Windows 2000 setup.
116. The student will describe common implementation features of a Windows 2000-based server.
117. The student will implement a file server.
118. The student will implement a print server.
119. The student will implement an application server.
120. The student will implement a Web server.
121. The student will describe routine server administration tasks.
 - A. The student will understand and follow computer lab rules and regulations relating to the safety of the student and equipment in the work environment.
 - B. The student will know the steps involved in certification in the Microsoft Certified Systems Engineer track.
 - C. The student will demonstrate, on a daily basis, soft skills related to getting and keeping employment in the IT field, including, but not limited to:
 - ï Timeliness
 - ï Ability to communicate both written and oral
 - ï Mature behavior in the class/work environment
 - ï Ability to follow complex oral instructions
 - ï Ability to follow complex written instructions
 - ï Ability to work independently from others
 - ï Ability to work as a team member
 - ï Ability to take initiative in completing class assignments
 - D. The student will understand and demonstrate high standards of ethical behavior when dealing with information technology.
 - E. The student will demonstrate a basic knowledge of computer functions in the Windows environment.

Curriculum Guide

Computer Systems Technology III



Computer Systems Technology 3

Content Outline

- | | |
|--|---------|
| I. MANAGING ACCESS TO OBJECTS IN ORGANIZATIONAL UNITS | 4 Weeks |
| A. Modifying Permissions for Active Directory Objects | |
| B. Delegating Control of Organizational Units | |
| II. IMPLEMENTING GROUP POLICY | 3 Weeks |
| A. Implementing Group Policy Objects | |
| B. Implementing GPOs in a Domain | |
| C. Managing the Deployment of Group Policy | |
| III. MANAGING THE USER ENVIRONMENT ENVIRONMENT BY USING GROUP POLICY | 2 Weeks |
| A. Configuring Group Policy Settings | |
| B. Assigning Scripts with Group Policy | |
| C. Restricting Group Membership and access to Software | |
| D. Configuring Folder Redirection | |
| E. Determining Applied GPOs | |
| IV. IMPLEMENTING ADMINISTRATIVE TEMPLATES AND AUDIT POLICY | 2 Weeks |
| A. Managing User Rights in Windows Server 2003 | |
| B. Using Security Templates to Secure Servers | |
| C. Testing Computer Security Policy | |
| D. Configuring Auditing | |
| E. Managing Security Logs | |
| V. PREPARING TO ADMINISTER A SERVER | 4 Weeks |
| A. Introduction to Administering a Server | |
| B. Configuring Remote Desktop to Administer a Server | |
| C. Managing Remote Desktop Connections | |
| VI. PREPARING TO MONITOR SERVER PERFORMANCE | 4 Weeks |
| A. Introduction to Monitoring Server Performance | |
| B. Performing Real-time and Logged Monitoring | |
| C. Configuring and Managing Counter Logs | |
| D. Configuring Alerts | |

- VII. MANAGING DATA STORAGE 5 Weeks
 - A. Managing File Compression
 - B. Configuring File Encryption
 - C. Configuring EFS Recovery Agents
 - D. Implementing Disk Quotas

- VIII. MANAGING DISASTER RECOVERY 4 Weeks
 - A. Preparing for Disaster Recovery
 - B. Backing Up Data
 - C. Scheduling Backup Jobs
 - D. Restoring Data
 - E. Configuring Shadow Copies
 - F. Recovering from Server Failure

- IX. MAINTAINING SOFTWARE BY USING WINDOWS SERVER UPDATE SERVICES 4 Weeks
 - A. Introduction to Windows Server Update Services
 - B. Installing and Configuring Windows Server Update Services
 - C. Managing Windows Server Update Services

- X. SECURING WINDOWS SERVER 2003 4 Weeks
 - A. Introduction to Securing Services
 - B. Implementing Core Server Security
 - C. Hardening Servers
 - D. Microsoft Baseline Security Analyzer

Curriculum Guide

TV Production I



Course Title Content Outline

Unit: 1		Implementing Virginia's CTE Course Requirements	Suggested Timeframe 4 blocks / 8 periods
Competency	Topic		
022-029	Apply Virginia's All Aspects of Industry elements in course activities		
001-021	Demonstrate Virginia's Workplace Readiness Skills in course activities		
033	Identify Internet safety issues and procedures for complying with acceptable use standards		
Unit: 2		Participating in the Student Organization	Suggested Timeframe 2 blocks / 4 periods
030	Identify the purposes and goals of the student organization		
031	Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult		
032	Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects		
Unit: 3		Practicing Safety on the Set	Suggested Timeframe 2 blocks / 4 periods
034	Wear appropriate safety apparel and use gear properly		
035	Maintain clean and orderly work area and professional conduct		
Unit: 4		Writing for Electronic Media	Suggested Timeframe 3 blocks / 6 periods
036	Write/edit a news story		
037	Write/edit a lead-in (open)		
038	Write open and close for studio production		
Unit: 5		Managing Pre-Production Activities	Suggested Timeframe

		5 blocks / 10 periods
039	Check equipment readiness (i.e., camera, audio, lights)	
040	Identify procedures for obtaining licenses, permits, and releases	
041	Research production topic	
042	Identify video/audio sources	
043	Create a storyboard	
044	Brainstorm program ideas	
Unit: 6	Practicing the Talent Role	Suggested Timeframe 7 blocks / 14 periods
045	Perform in front of a camera (e.g., deliver a news story, perform a stand-up, intro/outro, live shot, act in a television drama, and choose the appropriate clothing for each)	
046	Read teleprompter/cue cards	
047	Participate as talent in a studio program	
048	Perform audio narration/voice-over	
Unit: 7	Operating Studio Equipment	Suggested Timeframe 8 blocks / 16 periods
049	Set up studio camera for operation	
050	Shoot basic shots with a studio camera (e.g., establishing, wide, medium, close, extreme close)	
051	Move and reposition camera using a tripod, dolly, and pan tilt-head	
052	Connect and communicate through intercom system	
053	Deliver scripts to talent using teleprompter or cue cards	
Unit: 8	Operating Control Room Equipment	Suggested Timeframe 9 blocks / 18 periods
054	Record master program using video recording device	
055	Prepare titles for shows using character generator (CG)	
056	Feed audio to the control room and studio using audio monitors	
057	Operate video playback device	
058	Check video sources and program output using monitors	

059	Mix video sources using production switcher	
Unit: 9	Practicing the Director Role	Suggested Timeframe 4 blocks / 8 periods
060	Function as a floor manager on a studio show demonstrating hand signals (e.g., commercial, wrap-up, speed-up, time remaining, speak-up)	
Unit: 10	Practice Lighting	Suggested Timeframe 4 blocks / 8 periods
061	Control light levels with a lighting board	
062	Use various lighting instruments to light subjects and sets	
Unit 11	Practicing Media Criticism	Suggested Timeframe 4 blocks / 8 periods
063	Articulate a personal response to the effects of a specific medium	
064	Analyze audio/video techniques and effects as they pertain to the message	
Unit: 12	Managing Audio	Suggested Timeframe 7 blocks / 14 periods
065	Prepare music (original or preproduced) to be edited into a segment	
066	Record narration	
067	Record live audio, using appropriate microphones	
068	Control audio mix using various mixing techniques	
069	Obtain music and sound effects from audio libraries and the Internet	
Unit: 13	Managing Equipment	Suggested Timeframe 3 blocks / 6 periods
<u>070</u>	Maintain audio and video cables	
071	Checkout and return video equipment	
072	Charge and handle video batteries	
073	Report problems and broken equipment	

074	Label and handle a video tape	
Unit: 14	Using Signals, Data & Routing	Suggested Timeframe 7 blocks / 14 periods
075	Burn a data or audio CD/DVD	
076	Transfer data from removable media to a hard drive	
077	Label and save computer files	
078	Send data over a computer network	
079	Translate audio/video data for distribution	
Unit: 15	Designing Graphics & Animation	Suggested Timeframe 5 blocks / 10 periods
080	Obtain images from various sources	
081	Use software to prepare images for television	
082	Compose digital still images	
083	Prepare video titles for television	
Unit: 16	Shooting Field/Location Video	Suggested Timeframe 7 blocks / 14 periods
084	Position and level a camera on a tripod	
085	Shoot location video using portable camera	
086	Shoot for editing with pre-roll	
087	Compose and shoot static shots	
088	Compose and shoot motion shots	
089	Shoot B-roll footage	
090	Control picture quality using camera settings	
Unit: 17	Mastering Post-Production/Editing	Suggested Timeframe 9 blocks / 18 periods
091	Interpret SMPTE time code	
092	Combine various elements into a program using editing system	

<u>093</u>	Edit montage of still images	
<u>094</u>	Edit a simple motion sequence	
<u>095</u>	Key a graphic or a title-over video	
<u>096</u>	Digitize video onto computer hard drive	