



NETWORKING TECHNOLOGIES COURSE SEQUENCE

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
Second Year	NWT451– 30 hours Network Review & Specialized Projects Network Types Network Models Network Topologies Applicable Emerging Technologies Post Secondary and Career Exploration Specialized Networking Projects NWT452 – 30 hours Cabling, Connectors and Ethernet Standards Media Considerations Network Media and Connectors IEEE and Networking Standards 802.3 Ethernet Standards NWT453 –30 hours Networking Components and Devices I How Network Traffic Gets from Hubs, Network Cards MSAU Switches + Advanced Features Bridges, Routers Gateways NWT454 –30 hours Networking Components and Devices II Wireless Access Points Modems Firewalls DHCP Server Repeaters Specialized Network Devices TOTAL 120 Hours	NWT461 – 45 hours TCP/IP Routing and Addressing Identifying the Differences Between IPv4 Public and Private Networks Assigning IP Addresses NAT, PAT and SNAT Managing TCP/IP Routing NWT462– 30 hours WAN Technologies and Internet Access ISDN T-Carrier Lines SONET/OCx Levels Frame Relay Asynchronous Transfer Mode xDSL, Cable, Satellite, Wireless, and POTS Internet Access NWT463 – 45 hours Wireless Networking Wireless Access Points Wireless Radio Channels Factors Affecting Wireless Signals 802.11 Wireless Standards Establishing Connection Configuring the Wireless Connection Infrared Wireless Networking Bluetooth TOTAL 120 Hours	NWT471 – 45 hours Network Performance Optimization Risks Fault Tolerance Disaster Recovery NW Optimization Strategies Command-Line Utilities NWT472 – 45 hours Network Securities Firewalls Access Control Overview Tunneling and Encryption Remote-Access Protocols and Services Authentication, Authorization and Accounting (AAA) Remote Authentication Protocols Physical Security Secured vs Unsecured Threats Managing Common Security Threats NWT473 – 30 hours Specialized Projects Post Secondary and Career Exploration Specialized Networking Projects TOTAL 120 Hours	NW481 – 45 hours Network Management Tools and Documentation Documentation Management Monitoring Network Performance Networking Tools NWT482 – 45 hours Troubleshooting and Supporting the Network Troubleshooting Steps and Procedures Troubleshooting the Network Topology Errors Issue Escalation NWT483 – 30 hours Specialized Projects Senior Project Specialized Networking Projects TOTAL 120 Hours