

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
1.0 Introduction						
1.0.1 Welcome						
1.0.1.1 Introduction to the Personal Computer						
1.1 Personal Computer Safety						
1.1.1 What is in a Computer?						
1.1.1.1 Video Explanation - What's in a Computer?	K0001;					
1.1.2 Electrical and ESD Safety						
1.1.2.1 Electrical Safety	K0030;	HS-PS3-5	ITEA.2; ITEA.5; ITEA.6; ITEA.7;	IT-NET 2.1	3A-CS-02;	4.4 Given a scenario, use common safety procedures.
1.1.2.2 ESD	K0030;	HS-PS3-5	ITEA.2; ITEA.5; ITEA.6; ITEA.7;	IT-NET 2.1	3A-CS-02;	4.4 Given a scenario, use common safety procedures.
1.1.2.3 Check Your Understanding - ESD Characteristics	K0030;	HS-PS3-5	ITEA.2; ITEA.5; ITEA.6; ITEA.7;	IT-NET 2.1	3A-CS-02;	4.4 Given a scenario, use common safety procedures.
1.2 PC Components						
1.2.1 Case and power supplies						
1.2.1.1 Cases	K0109	HS-ETS2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply. 4.4 Given a scenario, use common safety procedures.
1.2.1.2 Power Supplies	K0109	HS-ETS3	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply. 4.4 Given a scenario, use common safety procedures.
1.2.1.3 Connectors	K0109	HS-PS2-4 HS-PS3-1 HS-PS3-5 HS-PS4-5	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
1.2.1.4 Power Supply Voltage	K0109	HS-PS2-4 HS-PS3-1 HS-PS3-5 HS-PS4-5	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply. 4.4 Given a scenario, use common safety procedures.

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1.2.1.5 Check Your Understanding - Cases and Power Supplies	K0109	HS-PS2-4 HS-PS3-1 HS-PS3-5 HS-PS4-5	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
1.2.2 Motherboards						
1.2.2.1 Motherboards	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.2.2 Motherboard Components	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.2.3 Motherboard Chipset	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.2.4 Motherboard Form Factors	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices. 3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.2.5 Check Your Understanding - Motherboards	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices. 3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.3 CPUs and Cooling Systems	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.3.1 What is a CPU?	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.3.2 Cooling Systems	K0109	HS_ET51-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.

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1.2.3.3 Check Your Understanding: Motherboard	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.4 Memory						
1.2.4.1 Types of Memory	K0109; K0114;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.4.2 Types of ROM	K0109; K0114;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.4.3 Types of RAM	K0109; K0114;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.2 Given a scenario, install the appropriate RAM.
1.2.4.4 Memory Modules	K0109; K0114;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.2 Given a scenario, install the appropriate RAM.
1.2.4.5 Check Your Understanding: Memory	K0109; K0114;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.5 Adapter Cards and Expansion Slots						
1.2.5.1 Adapter Cards	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.5.2 Check Your Understanding - Adapter Cards and Expansion Slots	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
1.2.6 Hard Disk Drives and SSDs						
1.2.6.1 Types of Storage Devices	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.6.2 Storage Device Interfaces	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.6.3 Magnetic Media Storage	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.6.4 Semiconductor Storage	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.

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1.2.6.5 Check Your Understanding - Data Storage Devices	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.7 Optical Storage Devices						
1.2.7.1 Types of Optical Storage Devices	K0114	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.7.2 Check Your Understanding - Types of Optical Media	K0114	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.8 Ports, Cables, and Adaptors						
1.2.8.1 Video Ports and Cables	K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes. 3.3 Given a scenario, select and install storage devices.
1.2.8.2 Other Ports and Cables	K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes. 4.4 Given a scenario, use common safety procedures.
1.2.8.3 Adapters and Converters	K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
1.2.8.4 Check Your Understanding - Ports, Cables, and Adaptors	K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.9 Input Devices						
1.2.9.1 The Original Input Devices	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.9.2 New Input Devices	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	

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1.2.9.3 More New Input Devices	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.9.4 Most Recent Input Devices	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.9.5 Check Your Understanding - Input Devices	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.10 Output Devices						
1.2.10.1 What are Output Devices?	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.10.2 Monitors and Projectors	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.10.3 VR and AR Headsets	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.10.4 Printers	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.10.5 Speakers and Headphones	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.2.10.6 Check Your Understanding - Visual and Auditory Output Device Characteristics	K0114; K0491;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.3 Computer Disassembly						
1.3.1 The Technician's Toolkit						
1.3.1.1 Video Explanation - Technician's Toolkit		HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.3.1.2 Check Your Understanding - Technician's Toolkit		HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
1.3.2 Computer Disassembly		HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	

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1.3.2.1 Lab - Safety	S0074;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	4.4 Given a scenario, use common safety procedures.
1.3.2.2 Video Demonstration – Computer Disassembly	S0074;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.9.K;	IT-NET 2.1	3A-CS-02;	
1.3.2.3 Lab - Disassemble a Computer	S0074;	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.9.K;	IT-NET 2.1	3A-CS-02;	
1.4 Summary						
1.4.1 Conclusion						
1.4.1.1 Chapter 1: Introduction to Personal Computer Hardware						
1.4.1.2 Introduction to Personal Computer Hardware Quiz						
2.0 Introduction						
2.0.1 Welcome						
2.0.1.1 PC Assembly						
2.1 Assemble the Computer						
2.1.1 General and Fire Safety						
2.1.1.1 Video Explanation - General and Fire Safety						
2.1.2 Open the Case and Connect the Power Supply						3.5 Given a scenario, install or replace the appropriate power supply.
2.1.2.1 Video Demonstration - Install the Power Supply	K0109	HS-ETS3	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
2.1.2.2 Check Your Understanding – Install the Power Supply	K0109	HS-ETS3	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
2.1.2.3 Select the Case and Fans	K0109	HS-ETS3	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
2.1.2.4 Select a Power Supply	K0109	HS-ETS3	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.

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2.1.2.5 Lab - Install the Power Supply	K0109	HS-ETS3	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
2.1.3 Install the Motherboard Components						
2.1.3.1 Video Demonstration - Install the CPU	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.3.2 Check Your Understanding - Install the CPU	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.3.3 Video Demonstration - Install the RAM	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.2 Given a scenario, install the appropriate RAM.
2.1.3.4 Check Your Understanding - Install the RAM	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.2 Given a scenario, install the appropriate RAM.
2.1.3.5 Video Demonstration - Install the Motherboard	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.3.6 Check Your Understanding - Install the Motherboard	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.3.7 Select the Motherboard	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.3.8 Select the CPU and CPU Cooling	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.3.9 Select the RAM	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.2 Given a scenario, install the appropriate RAM.
2.1.3.10 Lab - Install the Motherboard in a Computer	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.4 Install Internal Drives						
2.1.4.1 Video Demonstration - Install the Drives	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.

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2.1.4.2 Select Hard Drives	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.4.3 Select Optical Drives	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.4.4 Install the Hard Drive	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.4.5 Install the Optical Drive	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.4.6 Check Your Understanding - Installing Drives	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.4.7 Lab - Install the Drives	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.5 Install the Adapter Cards						
2.1.5.1 Video Demonstration - Install the Adapter Cards	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.5.2 Select Adapter Cards	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.5.3 Other Factors for Adapter Card Selection	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.5.4 Install the Adapter Cards	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.5.5 Check Your Understanding - Installing Adapter Cards	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.5.6 Lab - Install Adapter Cards	K0109	HS-PS3-3 HS-ETS1-2	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
2.1.6 Select Additional Storage						
2.1.6.1 Select a Media Reader	K0114	HS_ETTS1-2	ITEA.2; ITEA.4.1;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.

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			ITEA.8; ITEA.11.Q; ITEA.12.O;			
2.1.6.2 Select External Storage	K0114	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.6.3 Check Your Understanding – Media Cards	K0114	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
2.1.7 Install the Cables						
2.1.7.1 Video Demonstration - Connect the Internal Power Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.2 Check Your Understanding – Identify the Power Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.3 Video Demonstration - Connect the Internal Data Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.4 Lab - Install Internal Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.5 Video Demonstration - Install the Front Panel Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
2.1.7.6 Install the Front Panel Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.7 Check Your Understanding – Identify the Front Panel Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.8 Lab - Install the Front Panel Cables	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.9 Video Demonstration - Complete the Computer Assembly	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.10 Check Your Understanding – Identify the External Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.1.7.11 Lab – Complete the Computer Assembly	K0109	HS_ETS1-2	ITEA.2; ITEA.4.I; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
2.2 Summary						
2.2.1 Conclusion						
2.2.1.1 Chapter 2: PC Assembly						
2.2.1.2 PC Assembly Quiz						
3.0 Introduction						
3.0.1 Welcome						
3.0.1.1 Advanced Computer Hardware						
3.1 Boot the Computer						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
3.1.1 POST, BIOS, CMOS and UEFI						
3.1.1.1 Video Demonstration - BIOS - UEFI Menus	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	
3.1.1.2 POST	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	5.4 Given a scenario, troubleshoot video, projector, and display issues.
3.1.1.3 BIOS and CMOS	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes. 5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power.
3.1.1.4 UEFI	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.1.5 Check Your Understanding - BIOS and UEFI Terminology	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.1.6 Lab - Investigate BIOS or UEFI Settings	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.2 BIOS/UEFI Configuration						
3.1.2.1 Video Demonstration - Configure BIOS - UEFI Settings	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.2.2 BIOS and UEFI Security	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.2.3 Update the Firmware	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	5.4 Given a scenario, troubleshoot video, projector, and display issues. 2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.2.4 Check Your Understanding - BIOS and UEFI Configuration Terminology	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.2.5 Lab - Search for BIOS or UEFI Firmware Updates	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
3.1.2.6 Lab - Install Windows	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.1.2.7 Lab - Install Third-Party Software in Windows	T0125	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	2.6 Given a scenario, configure a workstation to meet best practices for security.
3.2 Electrical Power						
3.2.1 Wattage and Voltage						
3.2.1.1 Wattage and Voltage	K0030; K0109;	HS-PS2-4; HS-PS3-1; HS-PS3-5; HS-PS4-5;	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply.
3.2.1.2 Power Supply Voltage Setting	K0030; K0109;	HS-PS2-4; HS-PS3-1; HS-PS3-5; HS-PS4-5;	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply. 5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power.
3.2.1.3 Lab - Ohm's Law	K0030; K0109;	HS-PS2-4; HS-PS3-1; HS-PS3-5; HS-PS4-5;	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.16;	IT-NET 2.1 CCR.ELA-Literacy.W HST.11-12.7.	3A-CS-02;	
3.2.2 Power Fluctuation and Protection						
3.2.2.1 Power Fluctuation Types	K0109	HS-PS2-4; HS-PS3-1; HS-PS3-5; HS-PS4-5;	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	5.3 Given a scenario, troubleshoot and diagnose problems with storage drives and RAID arrays. 4.5 Summarize environmental impacts and local environmental controls.
3.2.2.2 Power Protection Devices	K0110	HS-PS2-4; HS-PS3-1; HS-PS3-5; HS-PS4-5;	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	4.5 Summarize environmental impacts and local environmental controls.
3.2.2.3 Check Your Understanding – Power Fluctuation Terms	K0111	HS-PS2-4; HS-PS3-1; HS-PS3-5; HS-PS4-5;	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O; ITEA.16;	IT-NET 2.1	3A-CS-02;	4.5 Summarize environmental impacts and local environmental controls.
3.3 Advanced Computer Functionality						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
3.3.1 CPU Architectures and Operation						
3.3.1.1 CPU Architectures	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.3.1.2 Enhancing CPU Operation	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.3.1.3 Multicore Processors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.2 Given a scenario, install the appropriate RAM. 3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.3.1.4 CPU Cooling Mechanisms	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.3.1.5 Check Your Understanding - CPU Architectures and Operation	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.3.2 RAID						
3.3.2.1 What Do You Already Know? - RAID	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	5.3 Given a scenario, troubleshoot and diagnose problems with storage drives and RAID arrays.
3.3.2.2 RAID Concepts	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	5.3 Given a scenario, troubleshoot and diagnose problems with storage drives and RAID arrays.
3.3.2.3 RAID Levels	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	5.3 Given a scenario, troubleshoot and diagnose problems with storage drives and RAID arrays.
3.3.2.4 Check Your Understanding – RAID Levels	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	5.3 Given a scenario, troubleshoot and diagnose problems with storage drives and RAID arrays.
3.3.3 Ports, Connectors, and Cables						
3.3.3.1 Legacy Ports	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.3.2 Video and Graphic Ports	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
3.3.3.3 USB Cables and Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.3.4 SATA Cables and Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.3.5 Twisted Pair Cables and Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.3.6 Coax Cables and Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.3.7 SCSI and IDE Cables and Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.3.8 Check Your Understanding – Identify the External Connectors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.4 Monitors						
3.3.4.1 Monitor Characteristics	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.3.4.2 Monitor Terms	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
3.3.4.3 Display Standards	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
3.3.4.4 Using Multiple Monitors	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
3.3.4.5 Check Your Understanding - Monitor Terminology	K0109	HS_ETS1-2	ITEA.2; ITEA.8; ITEA.11.Q; ITEA.12.O;	IT-NET 2.1	3A-CS-02;	
3.4 Computer Configuration						
3.4.1 Upgrade Computer Hardware						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
3.4.1.1 Motherboard Upgrade	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes. 3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.4.1.2 Steps to Upgrade a Motherboard	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes. 3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.4.1.3 CPU Upgrade	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.4 Given a scenario, install and configure motherboards, central processing units (CPUs), and add-on cards.
3.4.1.4 Storage Device Upgrade	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.3 Given a scenario, select and install storage devices.
3.4.1.5 Peripheral Upgrades	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.1 Explain basic cable types and their connectors, features, and purposes.
3.4.1.6 Power Supply Upgrade	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	3.5 Given a scenario, install or replace the appropriate power supply. 5.3 Given a scenario, troubleshoot and diagnose problems with storage drives and RAID arrays.
3.4.1.7 Lab - Research a Hardware Upgrade	K0109	HS-PS3-3; HS-ETS1-2;	ITEA.8; ITEA.9; ITEA.11; ITEA.12;	IT-NET 2.1	3A-CS-02;	
3.5 Protecting the Environment						
3.5.1 Safe Disposal of Equipment and Supplies						4.5 Summarize environmental impacts and local environmental controls.
3.5.1.1 Safe Disposal Methods	T0966	HS-LS2-7; HS-ETS1-4;	ITEA.12; ITEA.13; ITEA.7;	IT-NET 2.1	3A-CS-02;	4.5 Summarize environmental impacts and local environmental controls.
3.5.1.2 Safety Data Sheets	T0966	HS-LS2-7; HS-ETS1-4;	ITEA.12; ITEA.13; ITEA.7;	IT-NET 2.1	3A-CS-02;	4.5 Summarize environmental impacts and local environmental controls.
3.5.1.3 Check Your Understanding - Safe Disposal	T0966	HS-LS2-7; HS-ETS1-4;	ITEA.12; ITEA.13; ITEA.7;	IT-NET 2.1	3A-CS-02;	4.5 Summarize environmental impacts and local environmental controls.
3.6 Summary						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
3.6.1 Conclusion						
3.6.1.1 Chapter 3: Advanced Computer Hardware						
3.6.1.2 Advanced Computer Hardware Quiz						
4.0 Introduction						
4.0.1 Welcome						
4.0.1.1 Chapter 4: Preventive Maintenance and Troubleshooting	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	
4.1 Preventive Maintenance						
4.1.1 PC Preventive Maintenance Overview						
4.1.1.1 Benefits of Preventive Maintenance	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.5 Summarize environmental impacts and local environmental controls.
4.1.1.2 Preventive Maintenance - Dust	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.5 Summarize environmental impacts and local environmental controls.
4.1.1.3 Preventive Maintenance – Internal Components	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.5 Summarize environmental impacts and local environmental controls.
4.1.1.4 Preventive Maintenance - Environmental Concerns	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.5 Summarize environmental impacts and local environmental controls.
4.1.1.5 Preventive Maintenance - Software	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.5 Summarize environmental impacts and local environmental controls.
4.1.1.6 Check Your Understanding - Preventive Maintenance	K0103; K0294;	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.5 Summarize environmental impacts and local environmental controls.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
4.2 Troubleshooting Process						
4.2.1 Troubleshooting Process Steps						
4.2.1.1 Introduction to Troubleshooting	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 4.3 Given a scenario, implement workstation backup and recovery methods.
4.2.1.2 Troubleshooting Process Steps						5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.3 Identify the Problem	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.4 Check Your Understanding – Identify the Problem	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9 CCR.ELA-Literacy.RS T.11-12.4.	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.5 Establish a Theory of Probable Cause	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.6 Test the Theory to Determine the Cause	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.7 Establish a Plan of Action to Resolve the Problem and Implement the Solution	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.8 Verify Full Functionality and, If Applicable, Implement Preventive Measures	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.9 Document Findings, Actions, and Outcomes	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.1.10 Check Your Understanding - Number the Steps						5.1 Given a scenario, apply the best practice methodology to resolve problems.
4.2.2 Common Problems and Solutions for PCs						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
4.2.2.1 PC Common Problems and Solutions	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power. 3.1 Given a scenario, troubleshoot common Windows OS problems.
4.2.2.2 Common Problems and Solutions for Storage Devices	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power. 3.1 Given a scenario, troubleshoot common Windows OS problems.
4.2.2.3 Common Problems and Solutions for Motherboards and Internal Components	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power. 3.1 Given a scenario, troubleshoot common Windows OS problems.
4.2.2.4 Common Problems and Solutions for Power Supplies	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power. 3.1 Given a scenario, troubleshoot common Windows OS problems.
4.2.2.5 Common Problems and Solutions for CPUs and Memory	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power. 3.1 Given a scenario, troubleshoot common Windows OS problems.
4.2.2.6 Common Problems and Solutions for Displays	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-CS-03;	5.2 Given a scenario, troubleshoot problems related to motherboards, RAM, CPU, and power. 3.1 Given a scenario, troubleshoot common Windows OS problems.
4.2.3 Apply Troubleshooting Process to Computer Components and Peripherals						
4.2.3.1 Personal Reference Tools	T0528	HS-LS2-7; HS-ETS1-4;	ITEA.1 ITEA.12	IT-NET 2.1	3A-CS-03;	
4.2.3.2 Internet Reference Tools	T0528	HS-LS2-7; HS-ETS1-4;	ITEA.1 ITEA.12	IT-NET 2.1	3A-CS-03;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
4.2.3.3 Check Your Understanding – Reference Tools	T0528	HS-LS2-7; HS-ETS1-4;	ITEA.1 ITEA.12	IT-NET 2.1	3A-CS-03;	
4.2.3.4 Advanced Problems and Solutions for Hardware	T0528	HS-LS2-7; HS-ETS1-4;	ITEA.1 ITEA.12	IT-NET 2.1	3A-CS-03;	
4.2.3.5 Lab – Use a Multimeter and a Power Supply Tester	T0528	HS-LS2-7; HS-ETS1-4;	ITEA.1 ITEA.12	IT-NET 2.1	3A-CS-03;	
4.2.3.6 Lab - Troubleshoot Hardware Problems	T0528	HS-LS2-7; HS-ETS1-4;	ITEA.1 ITEA.12	IT-NET 2.1	3A-CS-03;	
4.3 Summary						
4.3.1 Conclusion						
4.3.1.1 Chapter 4: Preventive Maintenance and Troubleshooting	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.8	3A-CS-03;	
4.3.1.2 Preventive Maintenance and Troubleshooting Quiz	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	CCR.ELA-Literacy.RS T.11-12.4.	3A-CS-03;	
5.0 Introduction						
5.0.1 Welcome						
5.0.1.1 Chapter 5: Networking Concepts						
5.1 Types of Networks						
5.1.1.1 Network Icons	K0179; K0255; K0470;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.1.1.2 Network Topologies and Description	K0179; K0255; K0470;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.1.1.3 Check Your Understanding - Types of Networks	K0179; K0255; K0470;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.1.1.4 VLANs	K0113	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.6 Compare and contrast common network configuration concepts.
5.1.2 Internet Connection Types						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.1.2.1 Brief History of Connection Technologies	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware. 2.3 Compare and contrast protocols for wireless networking.
5.1.2.2 DSL, Cable, and Fiber	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware. 2.7 Compare and contrast Internet connection types, network types, and their features.
5.1.2.3 Line of Sight Wireless Internet Service	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking. 2.7 Compare and contrast Internet connection types, network types, and their features.
5.1.2.4 Satellite	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.1.2.5 Cellular	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.1.2.6 Mobile Hotspot and Tethering	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.1.2.7 Check Your Understanding - Internet Connection Types	K0029; K0274;	HS-ETS1-2.	ITEA.7.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.2 Networking Protocols, Standards, and Services						
5.2.1 Transport Layer Protocols	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.1.1 Video Explanation - Transport Layer Protocols	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.1.2 Activity - Transport Layer Protocols	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.2.1.3 The TCP/IP Model	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.1.4 TCP	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.1.5 UDP	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.1.6 Check Your Understanding - Transport Layer Protocols	K0061	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.2.2 Application Port Numbers	K0471	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.2.2.1 Video Explanation - Application Port Numbers	K0471	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.2.2 Classify Application Port Numbers	K0471	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.2.3 Check Your Understanding - Application Port Numbers	K0471	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.3 Wireless Protocols						
5.2.3.1 WLAN Protocols	K0029; K0274;	HS-ETS1.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3.5	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
5.2.3.2 Bluetooth, NFC, and RFID	K0029; K0274;	HS-ETS1.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3.5	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
5.2.3.3 Zigbee and Z-Wave	K0029; K0274;	HS-ETS1.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3.5	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.2.3.4 Cellular Generations	K0029; K0274;	HS-ETS1.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3.5	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking. 2.7 Compare and contrast Internet connection types, network types, and their features.
5.2.3.5 Check Your Understanding - Wireless Protocols	K0029; K0274;	HS-ETS1.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3.5	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
5.2.4 Network Services						
5.2.4.1 Video Explanation - Network Services	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.2.4.2 Client - Server Roles	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.3 DHCP Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes. 2.4 Summarize services provided by networked hosts.
5.2.4.4 DNS Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes. 2.4 Summarize services provided by networked hosts. 2.6 Compare and contrast common network configuration concepts.
5.2.4.5 Print Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.6 File Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.1 Compare and contrast Transmission Control Protocol (TCP) and User Datagram Protocol (UDP) ports, protocols, and their purposes.
5.2.4.7 Web Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.2.4.8 Mail Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.9 Proxy Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.10 Authentication Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.11 Syslog Server	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.12 Load Balancer	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.13 SCADA	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.2.4.14 Check Your Understanding - Network Services	K0011; K0077; K0452;	HS-ETS1-2.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.3 Network Devices						
5.3.1 Basic Network Devices						
5.3.1.1 Video Explanation - Basic Network Devices	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.1.2 Network Interface Card	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.1.3 Repeaters, Bridges, and Hubs	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.1.4 Switches	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.1.5 Wireless Access Points	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware. 2.3 Compare and contrast protocols for wireless networking.
5.3.1.6 Routers	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.3.1.7 Check Your Understanding - Basic Network Devices	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.2 Security Devices						
5.3.2.1 Video Explanation - Security Devices	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.3.2.2 Firewalls	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.2.3 IDS and IPS	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.3.2.4 UTMs	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware. 2.4 Summarize services provided by networked hosts.
5.3.2.5 Endpoint Management Server	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.3.2.6 Spam Management	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.3.2.7 Check Your Understanding - Security Devices	K0011	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.3.3 Other Network Devices						
5.3.3.1 Legacy and Embedded Systems	K0556	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
5.3.3.2 Patch Panel	K0556	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	
5.3.3.3 Power over Ethernet and Ethernet over Power	K0556	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.2 Compare and contrast common networking hardware.
5.3.3.4 Cloud-based Network Controller	K0556	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
5.3.3.5 Check Your Understanding - Other Network Devices	K0556	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
5.4 Network Cables						
5.4.1 Network Tools						
5.4.1.1 Video Explanation - Network Cable Tools	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.8 Given a scenario, use networking tools.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.4.1.2 Network Tools and Descriptions	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.8 Given a scenario, use networking tools.
5.4.1.3 Network Taps	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.8 Given a scenario, use networking tools.
5.4.1.4 Check Your Understanding - Network Tools	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.8 Given a scenario, use networking tools.
5.4.2 Copper Cables and Connectors						
5.4.2.1 Cable Types	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.2 Coaxial Cables	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.3 Twisted-Pair Cables	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.4 Twisted-Pair Category Ratings	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.5 Twisted-Pair Wire Schemes	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.6 Activity - Cable Pinouts	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.7 Video Demonstration - Build and Test a Network Cable	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.2.8 Lab - Build and Test a Network Cable	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.3 Fiber Cables and Connectors						
5.4.3.1 Fiber-Optic Cables	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
5.4.3.2 Types of Fiber Media	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking. 2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.3.3 Fiber-Optic Connectors	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.4.3.4 Check Your Understanding - Fiber Cables and Connectors	K0108	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.7 Compare and contrast Internet connection types, network types, and their features.
5.5 Summary						
5.5.1 Conclusion						
5.5.1.1 Chapter 5: Network Concepts						
5.5.1.2 Networking Concepts Quiz						
6.0 Introduction						
6.0.1 Welcome						
6.0.1.1 Chapter 6: Applied Networking						
6.1 Device to Network Connection						
6.1.1 Network Addressing						
6.1.1.1 Video Explanation - MAC Addressing	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3 CCR.ELA-Literacy.RS T.11-12.7.	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.1.2 Video Explanation - IPv4 Addressing	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3 CCR.ELA-Literacy.RS T.11-12.7.	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.1.3 Video Explanation - IPv6 Addressing	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3 CCR.ELA-Literacy.RS T.11-12.7.	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.1.4 Two Network Addresses	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
6.1.1.5 Displaying the Addresses	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.1.6 IPv4 Address Format	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.1.7 IPv6 Address Formats	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.1.8 Static Addressing	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks. 2.6 Compare and contrast common network configuration concepts.
6.1.1.9 Dynamic Addressing	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks. 2.6 Compare and contrast common network configuration concepts.
6.1.1.10 DNS	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts. 2.6 Compare and contrast common network configuration concepts.
6.1.1.11 DHCP Operation	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts. 2.6 Compare and contrast common network configuration concepts.
6.1.1.12 VLAN	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.6 Compare and contrast common network configuration concepts.
6.1.1.13 Link-local IPv4 and IPv6 Addresses	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks. 2.6 Compare and contrast common network configuration concepts.
6.1.1.14 Check Your Understanding - Network Addressing	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.2 Configure a NIC						
6.1.2.1 Packet Tracer - Add Computers to an Existing Network	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
6.1.2.2 Network Design	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
6.1.2.3 Selecting a NIC	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	
6.1.2.4 Installing and Updating a NIC	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	
6.1.2.5 Configure a NIC	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.2.6 ICMP	K0471;	HS-ETS1-2.	ITEA.2.		3A-NI-04; 3B-NI-03;	
6.1.2.7 Lab - Configure a NIC to Use DHCP in Windows	K0471;	HS-ETS1-2.	ITEA.2.	IT-NET 3 CCR.ELA-Literacy.RS T.11-12.3.	3A-NI-04; 3B-NI-03;	
6.1.3 Configure a Wired and Wireless Network						
6.1.3.1 Video Explanation - Configure a Wired and Wireless Network	K0471;	HS-ETS1.	ITEA.2. ITEA.9. ITEA.17.	IT-NET 3.5	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.3.2 Connecting Wired Devices to the Internet	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.3.3 Logging in to the Router	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.3.4 Basic Network Setup	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.3.5 Basic Wireless Settings	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
6.1.3.6 Configure a Wireless Mesh Network	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
6.1.3.7 NAT for IPv4	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.1.3.8 Quality of Service	K0164; K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
6.1.3.9 Packet Tracer - Connect to a Wireless Network	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
6.1.3.10 Lab - Configure a Wireless Network	K0471;	HS-ETS1-2.	ITEA.9.	IT-NET 3 CCR.ELA-Literacy.RS T.11-12.3.	3A-NI-04; 3B-NI-03;	2.3 Compare and contrast protocols for wireless networking.
6.1.4 Firewall Settings						
6.1.4.1 Video Explanation - Firewall Settings	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.2 UPnP	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.3 DMZ	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.4 Port Forwarding	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.5 MAC Address Filtering	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.6 Whitelisting and Blacklisting	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.7 Packet Tracer - Configure Firewall Settings	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.4.8 Lab - Configure Firewall Settings	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
6.1.5 IoT Device Configuration	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	
6.1.5.1 Internet of Things	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.
6.1.5.2 IoT Devices in Packet Tracer	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
6.1.5.3 Packet Tracer - Control IoT Devices	K0049; K0452;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-04; 3B-NI-03;	2.4 Summarize services provided by networked hosts. 2.5 Given a scenario, install and configure basic wired/wireless small office/home office (SOHO) networks.
6.2 The Basic Networking Troubleshooting Process						
6.2.1 Applying the Troubleshooting Process to Networking						
6.2.1.1 The Six Steps of the Troubleshooting Process	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.2 Identify the Problem	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.3 Establish a Theory of Probable Cause	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.4 Test the Theory to Determine the Cause	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.5 Establish a Plan of Action to Resolve the Problem and Implement the Solution	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.6 Verify Full Functionality and, If Applicable, Implement Preventive Measures	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.7 Document Findings, Actions, and Outcomes	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.1.8 Check Your Understanding - Network Troubleshooting Process	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.2 Network Problems and Solutions	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	
6.2.2.1 Common Problems and Solutions for Networking	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
6.2.2.2 Advanced Problems and Solutions for Network Connections	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.2.3 Advanced Problems and Solutions for FTP and Secure Internet Connections	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.2.4 Advanced Problems and Solutions Using Network Tools	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.2.2.5 Lab - Troubleshoot Network Problems	T0237	HS-ETS1	ITEA.10; ITEA.11; ITEA.12;	IT-NET 5.9	3A-NI-04; 3B-NI-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
6.3 Summary						
6.3.1 Conclusion						
6.3.1.1 Chapter 6: Applied Networking						
6.3.1.2 Applied Networking Quiz						
7.0 Introduction						
7.0.1 Welcome						
7.0.1.1 Laptops and Other Mobile Devices						
7.1 Characteristics of Laptops and Other Mobile Devices						
7.1.1 Mobile Device Overview						
7.1.1.1 What Do You Already Know? - Mobile Devices	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	
7.1.1.2 Mobility	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.3 Laptops	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.4 Smartphone Characteristics	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.5 Smartphone Features	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.1.1.6 Tablets and E-Readers	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.7 Wearables: Smartwatches and Fitness Trackers	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.8 Wearables: Augmented and Virtual Realities	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.9 Check Your Understanding - Laptops and Other Mobile Devices	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.1.10 Lab – Mobile Device Information	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.1.2 Laptop Components						
7.1.2.1 Video Explanation – External Features Unique to Laptops	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.2.2 Video Explanation - Common Input Devices and LEDs in Laptops	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.2.3 Motherboards	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.2.4 Internal Components	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.2.5 Special Function Keys	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.2.6 Video Explanation - Docking Station Versus Port Replicator	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.2.7 Lab - Research Docking Stations and Port Replicators	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.2 Compare and contrast the display components of mobile devices.
7.1.3 Laptop Display Components						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.1.3.1 LCD, LED, and OLED Display Technologies	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.1.3.2 Laptop Display Features	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.1.3.3 Backlights and Inverters	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.1.3.4 Check Your Understanding – Laptop Display Components	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.1.3.5 Wi-Fi Antenna Connectors	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.1.3.6 Webcam and Microphone	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.2 Laptop Configuration						
7.2.1 Power Settings Configuration						1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.2.1.1 Power Management	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 2.1	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.2.1.2 Managing ACPI Settings in the BIOS	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 2.1	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.2.1.3 Check Your Understanding – Match ACPI Standards	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 2.1 CCR.ELA-Literacy.RS T.11-12.7.	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.2.1.4 Video Demonstration – Managing Laptop Power Options	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 2.1 CCR.ELA-Literacy.RS T.11-12.7.	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components. 1.2 Compare and contrast the display components of mobile devices. 1.3 Given a scenario, set up and configure accessories and ports of mobile devices.
7.2.2 Wireless Configuration						
7.2.2.1 Bluetooth	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.2.2.2 Bluetooth Laptop Connections	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.2.2.3 Video Demonstration – Bluetooth Configuration	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.2.2.4 Cellular WAN	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.2.2.5 Wi-Fi	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.2.2.6 Video Demonstration – Wi-Fi Configuration	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.2.2.7 Check Your Understanding- Wireless Configuration	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.3 Laptop Hardware and Component Installation and Configuration						220-1101-1.1; 220-1101-1.3; 220-1101-1.4;
7.3.1 Expansion Slots						
7.3.1.1 Expansion Cards	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.1.2 Flash Memory	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.1.3 Smart Card Reader	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.1.4 SODIMM Memory	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.3.1.5 Video Demonstration - Install SODIMM	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.1.6 Check Your Understanding – Expansion Modules	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2 Replacing Laptop Components						
7.3.2.1 Overview of Hardware Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.2 Video Demonstration - Keyboard Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.3 Video Demonstration - Screen Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.4 Lab - Research Laptop Screens	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4 CCR.ELA-Literacy.W HST.11-12.7.	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.5 Power	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 2.1	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.6 Video Demonstration - DC Jack Replacement	K0108; K0109; K0114;		ITEA.2.; ITEA.9.; ITEA.17.;		3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.7 Lab - Research Laptop Batteries	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4 CCR.ELA-Literacy.W HST.11-12.7.	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.8 Internal Storage and Optical Drive	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.9 Video Demonstration - Internal Storage and Optical Drive Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.3.2.10 Lab - Research Laptop Drives	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4 CCR.ELA-Literacy.W HST.11-12.7.	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.11 Video Demonstration - Wireless Card Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.12 Video Demonstration - Speakers Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.13 Video Demonstration - CPU Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.14 Video Demonstration - Motherboard Replacement	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.15 Video Demonstration - Plastic Frames	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.3.2.16 Check Your Understanding - Replacing Laptop Components	K0108; K0109; K0114;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-02;	1.1 Given a scenario, install and configure laptop hardware and components.
7.4 Other Mobile Device Hardware Overview						
7.4.1 Other Mobile Device Hardware						
7.4.1.1 Cell Phone Parts	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.4.1.2 Wired connectivity	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.4.1.3 Wireless Connections and Shared Internet Connections	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.4.2 Specialty Mobile Devices						1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.4.2.1 Wearable Devices	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.4.2.2 Specialty Devices	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5 Network Connectivity and Email						1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1 Wireless and Cellular Data Networks						1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1.1 Wireless Data Networks	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1.2 Lab - Mobile Wi-Fi	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1.3 Cellular Communication Standards	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1.4 Airplane Mode	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1.5 Hotspot	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.1.6 Check Your Understanding - Wireless Technology	K0108; K0109;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0114; K0274;					
7.5.2 Bluetooth						
7.5.2.1 Bluetooth for Mobile Devices	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.3 Given a scenario, set up and configure accessories and ports of mobile devices. 1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.2.2 Bluetooth Pairing	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.3 Given a scenario, set up and configure accessories and ports of mobile devices. 1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.3 Configuring Email						
7.5.3.1 Introduction to Email	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.3.2 Activity - Matching Email Protocols	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.3.3 Android Email Configuration	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.3.4 iOS Email Configuration	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.3.5 Internet Email	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.5	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.5.4 Mobile Device Synchronization						
7.5.4.1 Types of Data to Synchronize	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.1	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.5.4.2 Enabling Synchronization	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.1	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support. 4.3 Given a scenario, implement workstation backup and recovery methods.
7.5.4.3 Synchronization Connection Types	K0108; K0109; K0114; K0274;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.1	3A-CS-01;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
7.6 Preventive Maintenance for Laptops and Other Mobile Devices						
7.6.1 Scheduled Maintenance for Laptops and other Mobile Devices						5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.6.1.1 What Do You Already Know? - Preventive Maintenance	K0103; K0294;	HS-ETS1.	ITEA.12.		3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.6.1.2 The Reason for Maintenance	K0103; K0294;	HS-ETS1.	ITEA.12.		3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.6.1.3 Laptop Preventive Maintenance Program	K0103; K0294;	HS-ETS1.	ITEA.12.		3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.6.1.4 Mobile Device Preventive Maintenance Program	K0103; K0294;	HS-ETS1.	ITEA.12.		3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7 Basic Troubleshooting Process for Laptops and other Mobile Devices						5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.1 Applying the Troubleshooting Process to Laptops and other Mobile Devices						
7.7.1.1 The Six Steps of the Troubleshooting Process	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.1.2 Identify the problem	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.1.3 Establish a theory of probable cause	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.1.4 Test the Theory to Determine Cause	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.7.1.5 Establish a Plan of Action to Resolve the Problem and Implement the Solution	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.1.6 Verify Full System Functionality and if Applicable, Implement Preventative Measures	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.1.7 Document Findings, Actions, and Outcomes	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
7.7.2 Common Problems and Solutions for Laptops and Other Mobile Devices						
7.7.2.1 Identify Common Problems and Solutions	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.2 Given a scenario, troubleshoot common personal computer (PC) security issues.
7.7.2.2 Common Problems and Solutions for Laptops	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.2 Given a scenario, troubleshoot common personal computer (PC) security issues.
7.7.2.3 Common Problems and Solutions for Other Mobile Devices	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.5 Given a scenario, troubleshoot common mobile OS and application security issues.
7.7.2.4 Lab - Research Laptop Specifications	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.2 Given a scenario, troubleshoot common personal computer (PC) security issues.
7.7.2.5 Lab - Gather Information from the Customer	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.2 Given a scenario, troubleshoot common personal computer (PC) security issues.
7.7.2.6 Lab - Investigate Support Websites	K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.2 Given a scenario, troubleshoot common personal computer (PC) security issues.
7.8 Summary						
7.8.1 Conclusion						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
7.8.1.1 Chapter 7: Laptops and Other Mobile Devices						
7.8.1.2 Laptops and Other Mobile Devices Quiz						
8.0 Introduction						
8.0.1 Welcome						
8.0.1.1 Printers						
8.1 Common Printer Features						
8.1.1 Characteristics and Capabilities						
8.1.1.1 Characteristics of Printers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.1.1.2 Printer Speed, Quality, and Color	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.1.1.3 Reliability and Total Cost of Ownership	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.1.1.4 Automatic Document Feeder and Network Scanning	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.1.1.5 Check Your Understanding - Printer Capabilities and Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.1.2 Printer Connections						
8.1.2.1 Printer Connection Types	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.1.2.2 Check Your Understanding - Printer Connections	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.2 Printer Type Comparison						
8.2.1 Inkjet Printers Printer Type Comparison						
8.2.1.1 Inkjet Printer Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.1.2 Inkjet Printer Parts	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.1.3 Check Your Understanding - Inkjet Printers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
8.2.2 Laser Printers						
8.2.2.1 Laser Printer Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.2.2 Laser Printer Parts	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.2.3 Check Your Understanding - Laser Printers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.3 Laser Printing Process						
8.2.3.1 How Laser Printing Works	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4 CCR.ELA-Literacy.RS T.11-12.7.	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.2.3.2 Check Your Understanding - The Laser Printing Process	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.2.4 Thermal Printers and Impact Printers						3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.2.4.1 Thermal Printer Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.2.4.2 Impact Printer Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.2.4.3 Check Your Understanding - Thermal Printers and Impact Printers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings. 3.7 Given a scenario, install and replace printer consumables.
8.2.5 Virtual Printers						
8.2.5.1 Virtual Printer Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
8.2.5.2 Cloud Printing	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.2.5.3 Check Your Understanding - Virtual Printers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.2.6 3D Printers						
8.2.6.1 3D Printer Characteristics	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.6.2 3D Printer Parts	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.2.6.3 Check Your Understanding - 3D Printers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.7 Given a scenario, install and replace printer consumables.
8.3 Installing and Configuring Printers						
8.3.1 Installing and Updating a Printer						3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.1.1 Installing a Printer	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.1.2 Test Printer Functions	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 1.4	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.1.3 Lab - Install a Printer in Windows	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.2 Configuring Options and Default Settings						
8.3.2.1 Common Configuration Settings	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.2.2 Check Your Understanding - Configuration Options	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.3 Optimizing Printer Performance						
8.3.3.1 Software Optimization	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.3.2 Hardware Optimization	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.3.3.3 Check Your Understanding - Printer Optimization	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
8.4 Sharing Printers						
8.4.1 Operating System Settings for Sharing Printers						3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.1.1 Configuring Printer Sharing	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.1.2 Wireless Printer Connections	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.1.3 Lab - Share a Printer in Windows	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.2 Print Servers						
8.4.2.1 Purposes of Print Servers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	2.3 Compare and contrast protocols for wireless networking. 3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.2.2 Software Print Servers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	2.3 Compare and contrast protocols for wireless networking. 3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.2.3 Hardware Print Servers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	2.3 Compare and contrast protocols for wireless networking. 3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.2.4 Dedicated Printer Servers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1	3A-CS-02;	2.3 Compare and contrast protocols for wireless networking. 3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.4.2.5 Check Your Understanding - Print Servers	K0114;	HS-ETS1.	ITEA.2.; ITEA.8.;	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-02;	2.3 Compare and contrast protocols for wireless networking. 3.6 Given a scenario, deploy and configure multifunction devices/printers and settings.
8.5 Maintaining and Troubleshooting Printers						
8.5.1 Printer Preventive Maintenance						3.7 Given a scenario, install and replace printer consumables.
8.5.1.1 Vendor Guidelines	K0114;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
8.5.1.2 What Do You Already Know? Printer Operating Environment	K0114;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.2 Inkjet Printer Preventive Maintenance						
8.5.2.1 Video Demonstration - Inkjet Printer Preventive Maintenance	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.2.2 Lab - Perform Preventive Maintenance on an Inkjet Printer	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.3 Laser Printer Preventive Maintenance						
8.5.3.1 Video Demonstration - Laser Printer Preventive Maintenance	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.3.2 Lab - Perform Preventive Maintenance on a Laser Printer	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.4 Thermal Printer Preventive Maintenance						
8.5.4.1 Preventive Maintenance on a Thermal Printer	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.4.2 Check Your Understanding - Thermal Printer Preventive Maintenance	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.5 Impact Printer Preventive Maintenance						
8.5.5.1 Preventive Maintenance of an Impact Printer	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.5.2 Check Your Understanding - Impact Printer Preventive Maintenance	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.6 3D Printer Preventive Maintenance						
8.5.6.1 Video Demonstration - 3D Printer Preventive Maintenance	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
8.5.6.2 Video Demonstration - 3D Printer Printing a Component	K0114; K0103; K0294;	HS-ETS1.	ITEA.12.	IT-NET 5.4	3A-CS-03;	3.7 Given a scenario, install and replace printer consumables.
8.5.7 Applying the Troubleshooting Process to Printers						
8.5.7.1 The Six Steps of the Troubleshooting Process	K0114; K0103; K0294;	HS-ETS1.		IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.7.2 Identify the Problem	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.7.3 Establish a Theory of Probable Cause	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.7.4 Test the Theory to Determine Cause	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.7.5 Establish a Plan of Action to Resolve the Problem and Implement the Solution	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.7.6 Verify Full System Functionality and, if Applicable, Implement Preventive Measures	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.7.7 Document Findings, Actions, and Outcomes	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4; IT-NET 5.9;	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.8 Problems and Solutions						
8.5.8.1 Identify Printer Problems and Solutions	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.8.2 Common Problems and Solutions for Printers	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.5.8.3 Advanced Problems and Solutions for Printers	K0114; K0103; K0294;	HS-ETS1.	ITEA.10.	IT-NET 5.4	3A-CS-03;	5.6 Given a scenario, troubleshoot and resolve printer issues.
8.6 Summary						
8.6.1 Conclusion						
8.6.1.1 Chapter 8: Printers						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
8.6.2 Printers Quiz						
9.0 Introduction						
9.0.1 Welcome						
9.0.1.1 Virtualization and Cloud Computing						4.1 Summarize cloud-computing concepts.
9.1 Virtualization						
9.1.1 Virtualization						
9.1.1.1 Video Explanation - What is the Cloud?	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.1.1.2 Cloud Computing and Virtualization	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts. 5.7 Given a scenario, troubleshoot problems with wired and wireless networks.
9.1.1.3 Traditional Server Deployment	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.1.1.4 Server Virtualization	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.1.1.5 Advantages of Server Virtualization	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts. 4.2 Summarize aspects of client-side virtualization.
9.1.1.6 Check Your Understanding - Match the Advantages of Virtualization	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	
9.1.2 Client-Side Virtualization						
9.1.2.1 Client-Side Virtualization	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts. 4.2 Summarize aspects of client-side virtualization. 5.7 Given a scenario, troubleshoot problems with wired and wireless networks.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
9.1.2.2 Type 1 and Type 2 Hypervisors	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.2 Summarize aspects of client-side virtualization. 5.7 Given a scenario, troubleshoot problems with wired and wireless networks.
9.1.2.3 Virtual Machine Requirements	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.2 Summarize aspects of client-side virtualization.
9.1.2.4 Check Your Understanding - Virtualization Terminology	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.2 Summarize aspects of client-side virtualization.
9.1.2.5 Lab - Install Linux in a Virtual Machine and Explore the GUI	K0104; K0130; K0609;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts. 4.2 Summarize aspects of client-side virtualization.
9.2 Cloud Computing						
9.2.1 Cloud Computing Applications						
9.2.1.1 How We Use the Cloud	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts. 4.2 Summarize aspects of client-side virtualization.
9.2.2 Cloud Services						
9.2.2.1 Cloud Services	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts. 4.2 Summarize aspects of client-side virtualization.
9.2.2.2 What Do You Already Know? - Cloud Models	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.2.2.3 Check Your Understanding - Cloud Service and Cloud Model Terminology	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.2.2.4 Cloud Computing Characteristics	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
9.2.2.5 Software Defined Networking	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.2.2.6 Check Your Understanding - Match the Cloud Characteristics	K0194; K0230;	HS-ETS1.	ITEA.2; ITEA.8; ITEA.9; ITEA.11; ITEA.17.;	IT-NET 3.7	3A-CS-02; 3A-DA-10;	4.1 Summarize cloud-computing concepts.
9.3 Summary						
9.3.1 Conclusion						
9.3.1.1 Chapter 9: Virtualization and Cloud Computing						
9.3.1.2 Virtualization and Cloud Computing Quiz						
10.0 Introduction						
10.0.1 Welcome						
10.0.1.1 Windows Installation	K0224; K0452;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	
10.1 Modern Operating Systems						
10.1.1 Operating System Features						1.1 Identify basic features of Microsoft Windows editions.
10.1.1.1 Terms	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.1.2 Basic Functions of an Operating System	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.1.3 Windows Operating Systems	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.1.4 Check Your Understanding - Windows Terminology	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.2 Customer Requirements for an Operating System						
10.1.2.1 Compatible System Software and Hardware Requirements	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.2.2 Minimum Hardware Requirements and Compatibility with OS	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
10.1.2.3 32-bit vs. 64-bit Processor Architecture	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.2.4 What Do You Already Know? Choosing a Windows Edition	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.2.5 Check Your Understanding – Choosing an Operating System	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.3 Operating System Upgrades						
10.1.3.1 Checking OS Compatibility	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.3.2 Windows OS Upgrades	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.3.3 Data Migration	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.1.3.4 Check Your Understanding - OS Upgrades	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
10.2 Disk Management						
10.2.1 Disk Management						
10.2.1.1 Storage Device Types	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.2.1.2 Hard Drive Partitioning	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.2.1.3 Partitions and Logical Drives	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.2.1.4 Check Your Understanding - Disk Terminology	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.2.1.5 File Systems	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.2.1.6 Video Demonstration - Disk Management Utility and Disk Partitioning	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
10.2.1.7 Video Demonstration - Multiboot Procedures	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.2.1.8 Lab - Create a Partition in Windows	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
10.3 Install Windows						
10.3.1 Basic Windows Installation						
10.3.1.1 Lab - Windows Installation	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.1.2 Account Creation	K0035; K0060; K0122; K0158;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.1.3 Finalize the Installation	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.1.4 Lab - Finalize the Windows Installation	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2 Custom Installation Options						
10.3.2.1 Disk Cloning	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.2 Other Installation Methods	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.3 Remote Network Installation	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.4 Unattended Network Installation	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.5 Video Demonstration - Windows Restore and Recovery	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
10.3.2.6 Recovery Partition	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.7 Upgrade Methods	K0035; K0060; K0122; S0154;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.8 Check Your Understanding	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.2.9 Lab - Operating System Upgrades	K0035; K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.3 Windows Boot Sequence						
10.3.3.1 Windows Boot Sequence	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.3.2 Windows 7 Startup Modes	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.3.3 Windows 8 and 10 Startup Modes	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.3.4 Lab - Boot Methods	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.3.3.5 Check your Understanding	K0060; K0122;	HS-ETS1.	ITEA.12	IT-NET 4.1	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment.
10.4 Summary						
10.4.1 Conclusion						
10.4.1.1 Chapter 10: Windows Installation						
10.4.1.2 Windows Installation Quiz						
11.0 Introduction						
11.0.1 Welcome						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.0.1.1 Windows Configuration	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	
11.1 Windows Desktop and File Explorer						
11.1.1 Comparing Windows Versions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	
11.1.1.1 Windows Versions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
11.1.1.2 Windows 10	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.5 Given a scenario, use the appropriate Windows settings.
11.1.2 The Windows Desktop						1.5 Given a scenario, use the appropriate Windows settings.
11.1.2.1 Personalizing the Windows Desktop	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.5 Given a scenario, use the appropriate Windows settings.
11.1.2.2 Video Demonstration - The Windows 10 Desktop	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.5 Given a scenario, use the appropriate Windows settings.
11.1.2.3 The Windows 10 Start Menu	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.5 Given a scenario, use the appropriate Windows settings.
11.1.2.4 The Taskbar	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.5 Given a scenario, use the appropriate Windows settings.
11.1.2.5 Lab - Explore the Windows Desktop	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.5 Given a scenario, use the appropriate Windows settings.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.1.3 Windows Task Manager						
11.1.3.1 Video Demonstration - Working With Task Manager	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.1.3.2 Windows 10 Task Manager Functions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.1.3.3 Task Manager in Windows 7	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.1.3.4 Lab - Work with Task Manager	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.1.3.5 Check Your Understanding - Compare Task Manager in Windows 7 and 10	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.1.4 Windows File Explorer						
11.1.4.1 File Explorer	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.2 Video Demonstration - Working with File Explorer	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.3 This PC	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.4 Run as Administrator	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.1.4.5 Windows Libraries	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.6 Directory Structures	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.7 User and System File Locations	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.8 File Extensions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.9 File Attributes	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.10 Video Demonstration - File and Folder Properties	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.11 Lab - Working with File Explorer	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.1.4.12 Check Your Understanding - File Explorer	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2 Configure Windows with Control Panels						
11.2.1 Control Panel Utilities						1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.1.1 Windows 10: Settings and Control Panels	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.2.1.2 Introduction to Control Panel	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.1.3 Control Panel Views	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.1.4 Define Control Panel Categories	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.1.5 Lab - Explore Control Panel Categories	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.1.6 Check Your Understanding - Control Panel Categories	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2 User and Account Control Panel Items						1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2.1 User Accounts	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2.2 User Account Control Settings	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2.3 Lab - User Accounts	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2.4 Lab - Permission	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.2.2.5 Credential Manager	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2.6 Sync Center	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.2.7 Check Your Understanding - User and Account Control Panels	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3 Network and Internet Control Panels						1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3.1 Network Settings	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3.2 Internet Options	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3.3 Network and Sharing Center	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3.4 HomeGroup	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3.5 Lab - Configure Browser Settings	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.3.6 Check Your Understanding - Network and Internet Control Panel	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.2.4 Display Settings and Control Panel	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.4.1 Display Settings and Configuration	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.4.2 Display Features	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.4.3 Check Your Understanding - Display Features	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5 Power and System Control Panels						1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.1 Power Options	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.2 Power Options Settings	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.3 Power Options Actions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.4 Check Your Understanding - Power Options	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.5 System Control Panel Item	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.2.5.6 System Properties	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.7 Increasing Performance	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.8 Lab - Manage Virtual Memory	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.5.9 Check Your Understanding - Power Options and System Properties	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.6 Hardware and Sound Control Panels						
11.2.6.1 Device Manager	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS). 1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.6.2 Lab - Use Device Manager	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS). 1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.6.3 Devices and Printers	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS). 1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.6.4 Sound	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS). 1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.7 Clock, Region, and Language						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.2.7.1 Clock	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility. 1.5 Given a scenario, use the appropriate Windows settings.
11.2.7.2 Region	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility. 1.5 Given a scenario, use the appropriate Windows settings.
11.2.7.3 Language	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility. 1.5 Given a scenario, use the appropriate Windows settings.
11.2.7.4 Lab - Region and Language Options	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility. 1.5 Given a scenario, use the appropriate Windows settings.
11.2.7.5 Check Your Understanding - Clock, Region, and Language	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility. 1.5 Given a scenario, use the appropriate Windows settings.
11.2.8 Programs and Features Control Panels						
11.2.8.1 Programs	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.8.2 Windows Features and Updates	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.8.3 Default Programs	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.8.4 Check Your Understanding - Programs and Features	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.2.9 Other Control Panels	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.9.1 Troubleshooting	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.9.2 BitLocker Drive Encryption	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.9.3 File Explorer and Folder Options	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.2.9.4 Lab - Privacy and Gaming	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility. 1.5 Given a scenario, use the appropriate Windows settings.
11.2.9.5 Check Your Understanding - Other Control Panels	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.4 Given a scenario, use the appropriate Microsoft Windows 10 Control Panel utility.
11.3 System Administration						
11.3.1 Administrative Tools	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.1 Administrative Tools Control Panel Item	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.2 Computer Management	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.3 Event Viewer	K0224; K0452;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0537; K0608;					
11.3.1.4 Local Users and Groups	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.5 Performance Monitor	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.6 Component Services and Data Sources	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.7 Services	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.8 Data Sources	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.9 Print Management	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
11.3.1.10 Windows Memory Diagnostics	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.11 Lab - Monitor and Manage System Resources	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.1.12 Check Your Understanding - Administrative Tools	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2 System Utilities						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.3.2.1 System Information	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.2 System Configuration	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.3 The Registry	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.4 Regedit	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.5 Microsoft Management Console	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.6 DxDiag	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.7 Lab - System Utilities	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.8 Lab - Manage System Files	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.2.9 Check Your Understanding - System Utilities	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3 Disk Management						
11.3.3.1 What Do You Already Know? - Disk Operations	K0224; K0452;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0537; K0608;					
11.3.3.2 Disk Management Utility	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.3 Drive Status	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.4 Mounting a Drive	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.5 Adding Arrays	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.6 Disk Optimization	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.7 Disk Error - Checking	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.8 Lab - Hard Drive Maintenance	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.3.9 Check Your Understanding - Disk Management	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.3.4 Application Installation and Configuration						
11.3.4.1 System Requirements	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.3.4.2 Graphics Considerations	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.3 Installation Methods	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.4 ISO Mountable	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.5 External Hardware Tokens	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.6 Installing an Application	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.7 Compatibility Mode	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.8 Uninstalling or Changing a Program	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.9 Lab - Install Third-Party Software	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.10 Security Considerations	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.3.4.11 Other Considerations	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.3.4.12 Check Your Understanding - Application Installation and Configuration	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.7 Given a scenario, apply application installation and configuration concepts.
11.4 Command-Line Tools						
11.4.1 Using Windows CLI	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.1.1 PowerShell	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.1.2 The Command Shell	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.1.3 Basic Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.1.4 Video Demonstration - Managing CLI Sessions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.1.5 Lab - Work in the Windows Command Shell	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.1.6 Check Your Understanding - Basic Command Line Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2 File System CLI Commands						
11.4.2.1 Command Syntax Conventions	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.4.2.2 File System Navigation	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2.3 File System Navigation - Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2.4 Video Demonstration - Working with Files and Folders	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2.5 Manipulating Folders - Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2.6 Manipulating Files - Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2.7 Lab - File System Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.2.8 Check Your Understanding - File System CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.3 Disk CLI Commands						
11.4.3.1 Disk Operations - Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.3.2 Lab - Disk CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.3.3 Check Your Understanding - Disk Operations Commands	K0224; K0452;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0537; K0608;					
11.4.4 Task and System CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	
11.4.4.1 System CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.4.2 Lab - Task and System CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.4.3 Check Your Understanding - Task and System Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.5 Other Useful CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	
11.4.5.1 Other Useful Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool. 1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.4.5.2 Running System Utilities	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.5.3 Lab - Other Useful Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.4.5.4 Check Your Understanding - Other Useful CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool.
11.5 Windows Networking						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.5.1 Network Sharing and Mapping Drives						
11.5.1.1 Domain and Workgroup	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.1.2 Homegroup	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.1.3 Video Demonstration - Connecting to a Workgroup or Domain	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.1.4 Network Shares and Mapping Drives	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.1.5 Administrative Shares	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.2 Sharing Local Resources with Others	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	
11.5.2.1 Sharing Local Resources	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.2.2 Printer Sharing vs. Network Printer Mapping	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
						Windows networking features on a client/desktop.
11.5.2.3 Video Demonstration - Sharing Files and Folders on a Local Network	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.2.4 Lab - Share Resources	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.3 Configure a Wired Network Connection						
11.5.3.1 Configuring Wired Network Interfaces in Windows 10	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.3.2 Configuring a Wired NIC	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.3.3 Setting a Network Profile	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.3.4 Verify Connectivity with the Windows GUI	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.3.5 ipconfig Command	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.5.3.6 Network CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.3.7 Video Demonstration - Network Testing and Verification with CLI Commands	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.2 Given a scenario, use the appropriate Microsoft command-line tool. 1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.4 Configure a Wireless Network Interfaces in Windows						
11.5.4.1 Wireless Settings	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.4.2 Lab - Connect and Test the Wireless Connection	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.5 Remote Access Protocols	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	
11.5.5.1 VPN Access in Windows	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
11.5.5.2 Telnet and SSH	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	2.6 Compare and contrast common network configuration concepts.
11.5.5.3 Packet Tracer - Use Telnet and SSH	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.2.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	2.6 Compare and contrast common network configuration concepts.
11.5.6 Remote Desktop and Assistance						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.5.6.1 Video Demonstration - Remote Desktop and Remote Assistance	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
11.5.6.2 Lab - Windows Remote Desktop and Assistance	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
11.5.6.3 Check Your Understanding – Remote Desktop and Assistance	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.2.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.1 Identify basic features of Microsoft Windows editions.
11.6 Common Preventive Maintenance Techniques for Operating Systems						
11.6.1 OS Preventive Maintenance Plan						
11.6.1.1 Preventive Maintenance Plan Contents	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.10.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.6.1.2 Lab - Manage the Startup Folder	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.10.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.6.1.3 Windows Updates	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.10.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	
11.6.1.4 Video Demonstration - Scheduling Tasks	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.10.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	
11.6.1.5 Lab - Schedule a Task using the GUI and the Command Line	K0224; K0452; K0537; K0608;	HS-ETS1.1; HS-PS4-2.;	ITEA.10.1; ITEA.12.1;	IT-NET 5.8	3A-CS-02;	1.3 Given a scenario, use features and tools of the Microsoft Windows 10 operating system (OS).
11.6.2 Backup and Restore						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.6.2.1 Restore Points	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 4.3 Given a scenario, implement workstation backup and recovery methods.
11.6.2.2 Hard Drive Backup	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 4.3 Given a scenario, implement workstation backup and recovery methods.
11.6.2.3 Video Demonstration - Back up and Restore	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 4.3 Given a scenario, implement workstation backup and recovery methods.
11.6.2.4 Lab - System Restore and Hard Drive Backup	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-02;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 4.3 Given a scenario, implement workstation backup and recovery methods.
11.7 Basic Troubleshooting Process for Windows Operating Systems						
11.7.1 Applying Troubleshooting Process to Windows Operating Systems						
11.7.1.1 The Six Steps of the Troubleshooting Process	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.1.2 Identify the Problem	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.1.3 Establish a Theory of Probable Cause	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.7.1.4 Test the Theory to Determine the Cause	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.1.5 Establish a Plan of Action to Resolve the Problem and Implement the Solution	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.1.6 Verify Full System Functionality and if Applicable Implement Preventive Measures	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.1.7 Document Findings, Actions, and Outcomes	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.2 Common Problems and Solutions for Windows Operating Systems						
11.7.2.1 Common Problems and Solutions for Windows Operating Systems	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems. 3.1 Given a scenario, troubleshoot common Windows OS problems.
11.7.3 Advanced Troubleshooting for Windows Operating Systems	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.3.1 Advanced Problems and Solutions for Windows Operating Systems	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.7.3.2 Lab - Troubleshoot Operating System Problems	K0224; K0452; K0537; K0608;	HS-ETS1.; HS-PS4-2.;	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.1 Given a scenario, apply the best practice methodology to resolve problems.
11.8 Summary						
11.8.1 Conclusion						
11.8.1.1 Chapter 11: Windows Configuration						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
11.8.1.2 Windows Configuration Quiz						
12.0 Introduction						
12.0.1 Welcome						
12.0.1.1 Chapter 12: Mobile, Linux, and OSX Operating Systems	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	
12.1 Mobile Operating Systems						
12.1.1 Android vs. iOS						1.8 Explain common OS types and their purposes.
12.1.1.1 Open Source vs. Closed Source	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.8 Explain common OS types and their purposes.
12.1.1.2 Applications and Content Sources	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.8 Explain common OS types and their purposes. 1.10 Identify common features and tools of the macOS/desktop OS.
12.1.1.3 Check Your Understanding - Compare Android and iOS	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.8 Explain common OS types and their purposes.
12.1.2 Mobile Touch Interface						
12.1.2.1 Android Home Screen Items	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS.
12.1.2.2 Lab - Working with Android	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
12.1.2.3 iOS Home Screen Items	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS.
12.1.2.4 Lab - Working with iOS	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.8 Explain common OS types and their purposes.
12.1.3 Common Mobile Device Features						
12.1.3.1 Screen Orientation	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	
12.1.3.2 Screen Calibration	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	
12.1.3.3 GPS	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.4 Given a scenario, configure basic mobile-device network connectivity and application support.
12.1.3.4 Lab - Mobile Device Features	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS.
12.1.3.5 Wi-Fi Calling	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1 CCR.ELA-Literacy.RS T.11-12.7.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
12.1.3.6 NFC Payment	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	3.4 Given a scenario, troubleshoot common mobile OS and application issues.
12.1.3.7 Virtual Private Network	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	1.6 Given a scenario, configure Microsoft Windows networking features on a client/desktop.
12.1.3.8 Virtual Assistants	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	
12.2 Methods for Securing Mobile Devices						
12.2.1 Passcode Locks	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.1.1 What Do You Already Know - Screen	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.1.2 Lab - Passcode Locks	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1 CCR.ELA- Literacy.RS T.11-12.3.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.1.3 Restrictions on Failed Login Attempts	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A- DA-10; 3A- AP-16;	1.10 Identify common features and tools of the macOS/desktop OS. 2.7 Explain common methods for securing mobile and embedded devices.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
12.2.1.4 Check your Understanding - Screen Locks and Biometric Authentication	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.2 Cloud-Enabled Services for Mobile Devices						
12.2.2.1 Remote Backup	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS.
12.2.2.2 Locator Applications	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.2.3 Remote Lock and Remote Wipe	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.2.4 Check Your Understanding – Cloud-Enabled Services for Mobile Devices	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 4.1	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	2.7 Explain common methods for securing mobile and embedded devices.
12.2.3 Software Security						
12.2.3.1 Antivirus	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.8	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS. 1.11 Identify common features and tools of the Linux client/desktop OS.
12.2.3.2 Rooting and Jailbreaking	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.8	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
12.2.3.3 Patching and Updating Operating Systems	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.8	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 1.10 Identify common features and tools of the macOS/desktop OS. 1.11 Identify common features and tools of the Linux client/desktop OS.
12.2.3.4 Check Your Understanding – Mobile Security Features	K0269; K0438;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 3.8	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	
12.3 Linux and macOS Operating Systems						
12.3.1 Linux and macOS tools and features						
12.3.1.1 Introduction to Linux and macOS Operating Systems	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes.
12.3.1.2 Overview of the Linux GUI	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes. 1.10 Identify common features and tools of the macOS/desktop OS.
12.3.1.3 Overview macOS GUI	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes. 1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 1.10 Identify common features and tools of the macOS/desktop OS.
12.3.1.4 Overview of Linux and macOS CLI	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-	1.8 Explain common OS types and their purposes. 1.10 Identify common features and tools of the macOS/desktop OS.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
					AP-16; 3B-AP-19;	
12.3.1.5 Linux Backup and Recovery	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes. 1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 1.10 Identify common features and tools of the macOS/desktop OS.
12.3.1.6 macOS Backup and Recovery	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes. 1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 1.10 Identify common features and tools of the macOS/desktop OS.
12.3.1.7 Overview of Disk Utilities	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes. 1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 1.10 Identify common features and tools of the macOS/desktop OS.
12.3.1.8 Check your understanding – Linux and macOS Operating Systems	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4 CCR.ELA-Literacy.RS T.11-12.7.	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.8 Explain common OS types and their purposes. 1.9 Given a scenario, perform OS installations and upgrades in a diverse OS environment. 1.10 Identify common features and tools of the macOS/desktop OS.
12.3.2 Linux and macOS Best Practices						
12.3.2.1 Scheduled Tasks	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS. 1.11 Identify common features and tools of the Linux client/desktop OS.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
12.3.2.2 Operating System Updates	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS. 1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.2.3 Security	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS. 1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.2.4 Check Your Understanding – Linux and macOS Best Practices	K0224; K0397; K0537; K0608;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.10 Identify common features and tools of the macOS/desktop OS. 1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3 Basic CLI Commands						
12.3.3.1 Syntax Checker - File and Directory Commands	K0129; K0318;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.2 Check Your Understanding - File and Directory commands	K0129; K0318;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.3 The ls -l command output	K0129; K0318;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.4 Basic Unix File and Directory Permissions	K0129; K0318;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.5 Syntax Checker: File and Directory Permissions	K0129; K0318;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-	1.11 Identify common features and tools of the Linux client/desktop OS.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
					DA-10; 3A-AP-16;	
12.3.3.6 Check Your Understanding - File and Directory Permission	K0129; K0318;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.7 Linux Administrative Commands	K0129; K0224; K0318; K0537;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.8 Linux Administrative Commands Requiring Root Access	K0129; K0224; K0318; K0537;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16; 3B-AP-19;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.9 Check Your Understanding: -Administrative Commands	K0129; K0224; K0318; K0537;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.3.3.10 Syntax Checker - File Ownership and Permission	K0129; K0224; K0318; K0537;	HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;	IT-NET 1.4	3A-CS-01; 3A-CS-02; 3A-NI-06; 3A-DA-10; 3A-AP-16;	1.11 Identify common features and tools of the Linux client/desktop OS.
12.4 Basic Troubleshooting Process for Other Operating Systems		HS-ETS1.	ITEA.2.; ITEA.9.; ITEA.17.;			
12.4.1 Applying the Troubleshooting Process to Mobile, Linux, and macOS Operating Systems						5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.1.1 The Six Steps of the Troubleshooting Process	K0292; K0317;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0330; S0142;					
12.4.1.2 Identify the Problem	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.1.3 Establish a theory of Probable Cause	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.1.4 Test the Theory to Determine the Cause	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.1.5 Establish a Plan of Action to Resolve the Problem and Implement the Solution	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.1.6 Verify Full System Functionality and if Applicable, Implement Preventive Measures	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.1.7 Document Findings, Actions, and Outcomes	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices.
12.4.2 Common Problems and Solutions for Other Operating Systems						
12.4.2.1 Common Problems and Solutions for Mobile Operating Systems	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.4 Given a scenario, troubleshoot common mobile OS and application issues.
12.4.2.2 Common Problems and Solutions for Mobile OS Security	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.4 Given a scenario, troubleshoot common mobile OS and application issues.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
12.4.2.3 Common Problems and Solutions for Linux and macOS Operating Systems	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.4 Given a scenario, troubleshoot common mobile OS and application issues.
12.4.2.4 Lab - Troubleshoot Mobile Devices	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.8 CCR.ELA-Literacy.RS T.11-12.3.	3A-CS-03;	5.5 Given a scenario, troubleshoot common issues with mobile devices. 3.4 Given a scenario, troubleshoot common mobile OS and application issues.
12.5 Summary						
12.5.1 Conclusion						
12.5.1.1 Chapter 12: Mobile, Linux, and macOS						
12.5.1.2 Mobile, Linux and macOS Operating Systems-Quiz						
13.0 Introduction						
13.0.1 Welcome						
13.0.1.1 Security	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.1 Security Threats						
13.1.1 Malware	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.1.1.1 Malware	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.1.2 What Do You Already Know? - Malware						2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods.
13.1.1.3 Viruses and Trojan Horses						2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.1.1.4 Types of Malware						2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods.
13.1.1.5 Check Your Understanding - Malware						2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods.
13.1.2 Preventing Malware						
13.1.2.1 Anti-Malware Programs	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.6 Given a scenario, configure a workstation to meet best practices for security. 3.3 Given a scenario, use best practice procedures for malware removal.
13.1.2.2 Signature File Updates	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.1.2.3 Video Explanation – Protecting Against Malware	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.1.2.4 Remediating Infected Systems	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 3.3 Given a scenario, use best practice procedures for malware removal.
13.1.2.5 Video Explanation - Remediating an Infected System	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 3.3 Given a scenario, use best practice procedures for malware removal.
13.1.2.6 Lab - Operating System Security	K0001; K0070; K0074;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.5 Given a scenario, manage and configure

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0147; K0259;					basic security settings in the Microsoft Windows OS.
13.1.2.7 Check Your Understanding	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.1.3 Network Attacks						
13.1.3.1 Networks Are Targets	K0106; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.1.3.2 Types of TCP/IP Attacks	K0106; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8 CCR.ELA-Literacy.RS T.11-12.4.	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.3.3 Check Your Understanding – Identify the TCP/IP Attack	K0106; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.3.4 Zero-Day	K0106; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.3.5 Protecting Against Network Attacks	K0106; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.4 Social Engineering Attacks						
13.1.4.1 Social Engineering	K0106; K0144; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.1.4.2 What Do You Already Know? - Social Engineering Techniques	K0106; K0144; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.4.3 Social Engineering Techniques	K0106; K0144; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.1.4.4 Protecting Against Social Engineering	K0106; K0144; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities. 2.10 Given a scenario, install and configure browsers and relevant security settings. 3.3 Given a scenario, use best practice procedures for malware removal.
13.1.4.5 Check Your Understanding - Personal and Corporate Social Engineering Techniques	K0106; K0144; K0160; K0161; K0162;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.2 Security Procedures						
13.2.1 Security Policy						
13.2.1.1 What is a Security Policy	K0003; K0087; K0157; K0158; K0202; K0242;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.6 Given a scenario, configure a workstation to meet best practices for security.
13.2.1.2 Security Policy Category	K0003; K0087; K0157; K0158; K0202; K0242;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.6 Given a scenario, configure a workstation to meet best practices for security.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.2.1.3 Securing Devices and Data	K0003; K0087; K0157; K0158; K0202; K0242;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.2.2 Protecting Physical Equipment						
13.2.2.1 Physical Security	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes.
13.2.2.2 Types of Secure Locks	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.7 Explain common methods for securing mobile and embedded devices.
13.2.2.3 Mantraps	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.2.2.4 Securing Computers and Network Hardware	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.2.2.5 Check Your Understanding - Locking Mechanisms	K0001; K0070; K0074; K0147; K0259;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes.
13.2.3 Protecting Data						
13.2.3.1 Data - Your Greatest Asset	K0021;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.2.3.2 Data Backups	K0021;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.2.3.3 File and Folder Permissions	K0117; K0132;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.2.3.4 File and Folder Encryption	K0117; K0132;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.2.3.5 Windows BitLocker and BitLocker To Go	K0001;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.2.3.6 Video Demonstration - Bitlocker and Bitlocker To Go	K0001;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.2.3.7 Lab - Bitlocker and Bitlocker To Go	K0001;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.2.4 Data Destruction						
13.2.4.1 Data Wiping Magnetic Media	K0038;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.8 Given a scenario, use common data destruction and disposal methods.
13.2.4.2 Data Wiping Other Media	K0038;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.8 Given a scenario, use common data destruction and disposal methods.
13.2.4.3 Hard Drive Recycling and Destruction	K0038;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.8 Given a scenario, use common data destruction and disposal methods.
13.2.4.4 Check Your Understanding - Data Protection	K0038;	HS-ETS1.	ITEA.2.	IT-NET 3.8 CCR.ELA-Literacy.RS T.11-12.4.	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.8 Given a scenario, use common data destruction and disposal methods.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.3 Securing Windows Workstations						
13.3.1.1 Securing a Computer	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.3.1.2 Securing BIOS	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.6 Given a scenario, configure a workstation to meet best practices for security. 2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.1.3 Securing Windows Login	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.1.4 Local Password Management	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.6 Given a scenario, configure a workstation to meet best practices for security. 2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.1.5 Usernames and Passwords	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.6 Given a scenario, configure a workstation to meet best practices for security.
13.3.1.6 Lab - Operating System Login	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.3.1.7 Check Your Understanding	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.6 Given a scenario, configure a workstation to meet best practices for security. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.2 Windows Local Security Policy						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.3.2.1 The Windows Local Security Policy	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.2.2 Account Policies Security Settings	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.6 Given a scenario, configure a workstation to meet best practices for security. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.2.3 Local Policies Security Settings	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.
13.3.2.4 Exporting the Local Security Policy	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.
13.3.2.5 Lab - Configure Windows Local Security Policy	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8 CCR.ELA-Literacy.RS T.11-12.3.	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.
13.3.2.6 Check Your Understanding- Local Security Policy	K0001; K0158;	HS-ETS1.	ITEA.6.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.3 Managing Users and Groups						

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.3.3.1 Maintaining Accounts	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.7 Explain common methods for securing mobile and embedded devices. 2.9 Given a scenario, configure appropriate security settings on small office/home office (SOHO) wireless and wired networks.
13.3.3.2 Managing Users Account Tools and User Account Tasks	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.6 Given a scenario, configure a workstation to meet best practices for security.
13.3.3.3 Local Users and Groups Manager						2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.6 Given a scenario, configure a workstation to meet best practices for security.
13.3.3.4 Managing Groups	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.9 Given a scenario, configure appropriate security settings on small office/home office (SOHO) wireless and wired networks.
13.3.3.5 Active Directory Users and Computers	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.3.3.6 Lab - Configure Users and Groups in Windows	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.3.3.7 Check your Understanding - User Account Tools and User Account Tasks	K0001; K0158;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes.
13.3.4 Windows Firewall						
13.3.4.1 Firewalls	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.4.2 Software Firewalls	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.4.3 Windows Firewall	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.4.4 Configuring Exceptions in Windows Firewall	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8 CCR.ELA-Literacy.RS T.11-12.3.	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.
13.3.4.5 Windows Firewall with Advanced Security	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.
13.3.4.6 Lab - Configure Windows Firewall	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.3.4.7 Check your Understanding - Windows Firewall	K0049; K0202; K0487;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.7 Explain common methods for securing mobile and embedded devices.
13.3.5 Web Security						
13.3.5.1 Web Security	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes.
13.3.5.2 Browser Extensions and Plugins	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.5.3 Secure Connections and Valid Certificates	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.5.4 Browser Privacy Settings	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.8 Given a scenario, use common data destruction and disposal methods. 2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.5.5 InPrivate Browsing	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.5.6 Pop-up Blocker	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.10 Given a scenario, install and configure browsers and relevant security settings.
13.3.5.7 SmartScreen Filter	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.3.5.8 ActiveX Filtering	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.3.5.9 Check Your Understanding - Web Security	K0105; K0624;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.3.6 Security Maintenance						
13.3.6.1 Restrictive Settings	K0074; K0177;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.6 Given a scenario, configure a workstation to meet best practices for security.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.3.6.2 Disable Auto-Play	K0074; K0177;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.6 Given a scenario, configure a workstation to meet best practices for security.
13.3.6.3 Operating System Service Packs and Security Patches	K0074; K0177;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.6 Given a scenario, configure a workstation to meet best practices for security. 2.7 Explain common methods for securing mobile and embedded devices.
13.3.6.4 Check your Understanding - Security Maintenance	K0074; K0177;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.6 Given a scenario, configure a workstation to meet best practices for security.
13.4 Wireless Security						
13.4.1 Configure Wireless Security						
13.4.1.1 What Do You Already Know? - Wireless Security	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	
13.4.1.2 Common Communication Encryption Types	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.1 Summarize various security measures and their purposes. 2.10 Given a scenario, install and configure browsers and relevant security settings.
13.4.1.3 Wi-Fi Configuration Best Practices	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities. 2.6 Given a scenario, configure a workstation to meet best practices for security. 2.9 Given a scenario, configure appropriate security settings on small office/home office (SOHO) wireless and wired networks.
13.4.1.4 Authentication Methods	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.2 Compare and contrast wireless security protocols and authentication methods.
13.4.1.5 Wireless Security Modes	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.2 Compare and contrast wireless security protocols and authentication methods. 2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.4.1.6 Firmware Updates	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.4.1.7 Firewalls	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.3 Given a scenario, detect, remove, and prevent malware using the appropriate tools and methods. 2.5 Given a scenario, manage and configure basic security settings in the Microsoft Windows OS.
13.4.1.8 Port Forwarding and Port Triggering	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.9 Given a scenario, configure appropriate security settings on small office/home office (SOHO) wireless and wired networks.
13.4.1.9 Universal Plug and Play	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.9 Given a scenario, configure appropriate security settings on small office/home office (SOHO) wireless and wired networks.
13.4.1.10 Packet Tracer - Configure Wireless Security	K0428; K0446; K0614;	HS-ETS1.	ITEA.2.	IT-NET 3.8	3A-NI-05; 3A-NI-06; 3A-NI-07; 3A-NI-08;	2.2 Compare and contrast wireless security protocols and authentication methods.
13.5 Basic Troubleshooting Process for Security						
13.5.1.1 The Six Steps of the Troubleshooting Process	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.8	3A-CS-03;	
13.5.1.2 Identify the Problem	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.9	3A-CS-03;	2.4 Explain common social-engineering attacks, threats, and vulnerabilities.
13.5.1.3 Establish a Theory of Probable Cause	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.10	3A-CS-03;	
13.5.1.4 Test the Theory to Determine Cause	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.11	3A-CS-03;	
13.5.1.5 Establish a Plan of Action to Resolve the Problem and Implement the Solution	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.12	3A-CS-03;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
13.5.1.6 Verify Full System Functionality and, If Applicable Implement Preventive Measures	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.13	3A-CS-03;	
13.5.1.7 Document Findings, Actions, and Outcomes	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.14	3A-CS-03;	
13.5.2 Common Problems and Solutions for Security						
13.5.2.1 Common Problems and Solutions for Security	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.16	3A-CS-03;	3.3 Given a scenario, use best practice procedures for malware removal.
13.5.2.2 Lab - Document Customer Information in a Work Order	K0292; K0317; K0330; S0142;	HS-ETS1.	ITEA.10.; ITEA.12.;	IT-NET 5.17	3A-CS-03;	3.3 Given a scenario, use best practice procedures for malware removal.
13.6 Summary						
13.6.1 Conclusion						
13.6.1.1 Chapter 13: Security						
13.6.1.2 Security-Quiz						
14.0 Introduction						
14.0.1 Welcome						
14.0.1.1 The IT Professional	K0008; K0010; K0233; K0247; K0628;			IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	
14.1 Communication Skills and the IT Professional						
14.1.1 Communication Skills, Troubleshooting, and Professional Behavior	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
14.1.1 Communication Skills, Troubleshooting, and Professional Behavior	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.10.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management. 4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.1.2 Relationship Between Communication Skills and Professional Behavior	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.3.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.1.3 Worksheet - Technician Resources	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.3.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.2 Working with a Customer						
14.1.2.1 Know, Relate, and Understand	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.2.2 Active Listening	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.2.3 Check Your Understanding - Closed-Ended and Open-Ended Questions	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.2.4 Video Demonstration - Active Listening and Summarizing	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.3 Professional Behavior						4.7 Given a scenario, use proper communication techniques and professionalism.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
14.1.3.1 Using Professional Behavior with the Customer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.3.2 Tips for Hold and Transfer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.3.3 Video Demonstration - Hold and Transfer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.3.4 What Do You Already Know? - Netiquette	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;	3A-IC-27;	4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.4 The Customer Call						
14.1.4.1 Keeping the Customer Call Focused	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;		4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.4.2 Video Demonstration - The Talkative Customer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;		4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.4.3 Video Demonstration – The Rude Customer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;		4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.4.4 Video Demonstration – The Knowledgeable Customer	K0008; K0010; K0233;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;		4.7 Given a scenario, use proper communication techniques and professionalism.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0247; K0628;					
14.1.4.5 Video Demonstration – The Angry Customer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;		4.7 Given a scenario, use proper communication techniques and professionalism.
14.1.4.6 Video Demonstration – The Inexperienced Customer	K0008; K0010; K0233; K0247; K0628;	HS-ETS1-3.	ITEA.4.	IT-NET 1.4; IT-NET 5.5; IT 01;		4.7 Given a scenario, use proper communication techniques and professionalism.
14.2 Operational Procedures						
14.2.1 Documentation	K0317; K0246; K0354; K0462;	HS-ETS1-1.				
14.2.1.1 Documentation Overview	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.2 IT Department Documentation	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.3 Report and Procedures	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.4 User Checklists	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.5 Knowledge Base and Articles	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
14.2.1.6 Regulatory Compliance Requirements	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.7 Asset Databases	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.8 Asset Procurement	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.1.9 Check Your Understanding - Documentation	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-NI-08; 3A-AP-23;	4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.2.2 Change Management						
14.2.2.1 Change Control Process	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-AP-15;	4.2 Explain basic change-management best practices.
14.2.3 Disaster Prevention and Recovery	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-AP-15;	4.2 Explain basic change-management best practices. 4.3 Given a scenario, implement workstation backup and recovery methods.
14.2.3.1 Disaster Recovery Overview	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-AP-15;	4.2 Explain basic change-management best practices. 4.3 Given a scenario, implement workstation backup and recovery methods.
14.2.3.2 Preventing Downtime and Data Loss	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-AP-15;	4.2 Explain basic change-management best practices. 4.3 Given a scenario, implement workstation backup and recovery methods.
14.2.3.3 Elements of a Disaster Recovery Plan	K0317; K0246; K0354; K0462;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-AP-15;	4.2 Explain basic change-management best practices. 4.3 Given a scenario, implement workstation backup and recovery methods.
14.2.3.4 Check Your Understanding – Disaster Recovery	K0317; K0246;	HS-ETS1-1.	ITEA.2.; ITEA.12.L;	IT-NET 5; IT 09;	3A-AP-15;	4.2 Explain basic change-management best practices.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
	K0354; K0462;					
14.3 Ethical and Legal Considerations						
14.3.1 Ethical and Legal Considerations in the IT Profession	K0003;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.1 Ethical and Legal Considerations in IT	K0003;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.2 Personal Identifiable Information (PII)	K0260;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.3 Payment Card Industry (PCI)	K0261;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.4 Protected Health Information (PHI)	K0262;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.5 Lab - Investigate Breaches of PII, PHI, PCI	K0260; K0261; K0262;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.6 Legal Considerations in IT	K0222; K0312; K0513;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.7 Licensing	K0222; K0312; K0513;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.1.8 Check Your Understanding - Licensing	K0222; K0312; K0513;	HS-ETS1-3.	ITEA.4.J; ITEA.5.	IT 04;	3A-IC-29; 3A-IC-30; 3A-NI-06;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.2 Legal Procedures Overview						
14.3.2.1 Computer Forensics	K0017; K0133; K0304;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28;	

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
14.3.2.2 Data Collected in Computer Forensics	K0017; K0133; K0304;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.2.3 Cyber Law	K0003; K0155; K0267;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.2.4 First Response	K0003; K0155; K0267;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.2.5 Documentation	K0003; K0155; K0267;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28; 3A-AP-23;	
14.3.2.6 Chain of Custody	K0003; K0125; K0155; K0169; K0267;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.3.2.7 Check Your Understanding - Legal Procedures Overview	K0003; K0155; K0267;	HS-ETS1-3.	ITEA.5.; ITEA.13.;	IT-NET 1.4	3A-IC-30; 3B-IC-28;	4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.4 Call Center Technicians						
14.4.1 Call Centers, Level One and Level Two Technicians						4.6 Explain the importance of prohibited content/activity and privacy, licensing, and policy concepts.
14.4.1.1 Call Centers		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		
14.4.1.2 Level One Technician Responsibilities		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.4.1.3 Level Two Technician Responsibilities		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.4.1.4 Lab - Remote Technician - Fix a Hardware Problem		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.4.1.5 Lab - Remote Technician - Fix an Operating System Problem		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		4.1 Given a scenario, implement best practices associated with documentation and support systems information management.

Module	NICE	NGSS	ITEA	DODEA	CSTA	Exam Objective
14.4.1.6 Lab - Remote Technician - Fix a Network Problem		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.4.1.7 Lab - Remote Technician - Fix a Security Problem		HS-ETS1-3.	ITEA.6.; ITEA.12.;	IT-NET 1.4; IT 01;		4.1 Given a scenario, implement best practices associated with documentation and support systems information management.
14.4.2 Basic Scripting and the IT Professional						
14.4.2.1 Script Examples	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.4.2.2 Scripting Languages	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.4.2.3 Basic Script Commands	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.4.2.4 Variables / Environmental Variables	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.4.2.5 Conditional Statements	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.4.2.6 Loops	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.4.2.7 Lab - Write Basic Scripts in Windows and Linux	K0529;	HS-ETS1-2.		IT 06;	3B-AP-17; 3B-AP-19;	4.8 Identify the basics of scripting.
14.5 Summary						
14.5.1 Conclusion						
14.5.1.1 The IT Professional						
14.5.1.2 The IT Professional Quiz						