Career and Technical Education
Adapted CTE Course Blueprint
of
Essential Standards

Business and Information Technology Education

6343 Network Administration III

This Adapted CTE Course Blueprint has been reviewed by business and industry representatives for technical content and appropriateness for the industry.

Adapted CTE Course Blueprint of Essential Standards

Essential standards are big, powerful ideas that are necessary and essential for students to know to be successful in a course. Essential standards identify the appropriate verb and cognitive process intended for the student to accomplish. Essential standards provide value throughout a student's career, in other courses, and translate to the next level of education or world of work.

This document lays out the essential standards for a specific course leading to industry certification. The certifying organization provides Windows 7 Enterprise Desktop Support Technician Certification, which is used to write the essential standards. The essential standards use Revised Bloom's Taxonomy (RBT) category verbs (remember, understand, apply, analyze, evaluate, create) that reflect the overall intended cognitive outcome of the indicators written by Microsoft. Each essential standard and indicator reflects the intended level of learning through two dimensions; The Knowledge Dimension is represented with letters A-C, and the Cognitive Process Dimension by numbers 1-6.

The Adapted CTE Course Blueprint includes units of instruction, essential standard(s) for each unit, and the specific indicators aligned with Windows 7 Enterprise Desktop Support Technician Certification. Also included are the relative weights of the units and essential standards within the course. The industry certification reflected in this document is Windows 7 Enterprise Desktop Support Technician Certification

This document will help teachers plan for curriculum delivery for the course, prepare daily lesson plans, and construct valid formative, benchmark, and summative assessments. Curriculum for this course is not provided by NCDPI.

For additional information about this blueprint, contact the Division of Career and Technical Education, North Carolina Department of Public Instruction, 6361 Mail Service Center, Raleigh, North Carolina 27699-6361.

Reference: Anderson, Lorin W. (Ed.), Krathwohl, David R. (Ed.), et al., *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives,* Addison Wesley Longman, Inc., New York, 2001.

Interpretation of Columns on the NCDPI Adapted CTE Course Blueprint

No.	1	2	3	4
Heading	Essential Std #	Unit Titles, Essential Standards, and Indicators	Course Weight	RBT Designation
Column information	Unique course identifier and essential standard number.	Statements of unit titles, essential standards per unit, and specific indicators per essential standard. If applicable, includes % for each indicator.	Shows the relative importance of each unit and essential standard. Course weight is used to help determine the percentage of total class time to be spent on each essential standard.	Classification of outcome behavior in essential standards and indicators in Dimensions according to the Revised Bloom's Taxonomy. **Cognitive Process Dimension:** 1 Remember 2 Understand 3 Apply 4 Analyze 5 Evaluate 6 Create **Knowledge Dimension:** A Factual Knowledge B Conceptual Knowledge C Procedural Knowledge

Career and Technical Education conducts all activities and procedures without regard to race, color, creed, national origin, gender, or disability. The responsibility to adhere to safety standards and best professional practices is the duty of the practitioners, teachers, students, and/or others who apply the contents of this document.
Career and Technical Student Organizations (CTSO) are an integral part of this curriculum. CTSOs are strategies used to teach course content, develop leadership, citizenship, responsibility, and proficiencies related to workplace needs.

Adapted CTE Course Blueprint of Essential Standards for
6348 Network Administration III
(Recommended hours of instruction: 135 - 180)

Essential Std #	Units, Essential Standards, and Indicators (The Learner will be able to:)	Course Weight	RBT Designation
1	2	3	4
	Total Course Weight	**100%**	
	(MOAC 70-685 Windows 7 Enterprise Desktop Support Technician)		
A	**DESKTOP APPLICATION ISSUES**	**20%**	
X1.00	**Apply procedures to resolve new software installation issues.**	**6%**	**C3**
	1.01 Configure installation permissions. 1.02 Configure administrator requirements. 1.03 Understand license requirements and digital signing.		
X2.00	**Apply procedures to resolve software configuration issues.**	**7%**	**C3**
	2.01 Configure features and advanced settings. 2.02 Configure network resources. 2.03 Configure images.		
X3.00	**Apply procedures to resolve software failure issues.**	**7%**	**C3**
	3.01 Examine logs. 3.02 Examine application and compatibility settings. 3.03 Repair the installation.		
B	**NETWORKING ISSUES**	**23%**	
X4.00	**Apply procedures to resolve logon issues.**	**6%**	**C3**
	4.01 Analyze hardware and network issues. 4.02 Analyze logon context and trust relationships.		
X5.00	**Apply procedures to resolve network connectivity issues.**	**6%**	**C3**
	5.01 Identify type of issue—hardware or network. 5.02 Configure TCP/IP 5.03 Analyze hardware and cabling.		
X6.00	**Apply procedures to resolve names resolution issues.**	**6%**	**C3**
	6.01 Configure DNS. 6.02 Configure DHCP.		
X7.00	**Apply procedures to resolve network printer issues.**	**5%**	**C3**
	7.01 Analyze hardware failure. 7.02 Analyze software failure. 7.03 Analyze network failure.		
C	**MANAGING AND MAINTAINING SYSTEMS THAT RUN WINDOWS 7 CLIENT**	**21%**	
X8.00	**Apply procedures to resolve performance issues.**	**11%**	**C3**
	8.01 Analyze the event viewer. 8.02 Analyze started services. 8.03 Configure power management. 8.04 Optimize hard disk space and virtual memory.		
X9.00	**Apply procedures to resolve hardware failure issues.**	**10%**	**C3**
	9.01 Diagnose hardware issues. 9.02 Configure the BIOS.		
D	**SUPPORTING MOBILE USERS**	**18%**	
X10.00	**Apply procedures to resolve wireless connectivity issues.**	**9%**	**C3**
	10.01 Configure wireless devices. 10.02 Implement encryption.		

Essential Std #	Units, Essential Standards, and Indicators (The Learner will be able to:)	Course Weight	RBT Designation
1	2	3	4
X11.00	**Apply procedures to resolve remote access issues.**	**9%**	**C3**
	11.01 Configure VPN.		
	11.02 Understand IP v.6		
	11.03 Configure authentication and network access.		
E	**IDENTIFYING CAUSE OF AND RESOLVING SECURITY ISSUES**	**18%**	
X12.00	**Apply procedures to resolve Windows Internet Explorer security issues.**	**5%**	**C3**
	12.01 Implement security settings.		
	12.02 Implement group policy for IE.		
	12.03 Understand security certificates.		
X13.00	**Apply procedures to resolve issues due to malicious software.**	**5%**	**C3**
	13.01 Analyze services, programs, processes, and browser helper add-ons.		
	13.02 Configure user account control.		
X14.00	**Apply procedures to resolve encryption issues.**	**5%**	**C3**
	14.01 Understand requirements for installing.		
	14.02 Configure key management.		
X15.00	**Apply procedures to resolve software update issues.**	**3%**	**C3**
	15.01 Configure Windows updates.		
	15.02 Configure Windows update group policy settings.		