

**Career and Technical Education
Adapted CTE Course Blueprint
of
Essential Standards**

**Business, Finance, and Information Technology
Education**

6432 Network Administration II

Public Schools of North Carolina
State Board of Education • Department of Public Instruction
Academic Services and Instructional Support
Division of Career and Technical Education
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Special thanks to the following educators who developed this Adapted CTE Course Blueprint.

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Justin Crompton – The Academy at Central
Weldon Hinshaw – Guilford County Schools

**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 Microsoft Certified Technology Specialist (MCTS) Windows 7 Configuration Exam 70-680, 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 the certifying body (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 industry certification. Also included are the relative weights of the units and essential standards within the course. The industry certification reflected in this document is MCTS Windows 7 Configuration Exam 70-680.

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. Industry curriculum providers collaborated with the North Carolina Department of Public Instruction (NCDPI) to develop a valid and reliable secure postassessment administered by NCDPI. Assessment for this course is written at the level of the **ESSENTIAL STANDARD** and assesses the intended outcome of the sum of its indicators. The following industry curriculum providers participated in the development of the secure postassessment. Curriculum providers include: Microsoft.

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. CTOS 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
6432 Network Administration II**
(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%	
	Microsoft Windows 7 Configuration (MOAC 70-680)		
A	Installing and Deploying Windows 7	27%	
1.00	Apply procedures to install, upgrade, and migrate to Windows 7.	14%	C3
	1.01 Perform a clean installation. 1.02 Upgrade to Windows 7 from previous versions of Windows. 1.03 Migrate user profiles.		
2.00	Apply procedures to deploy Windows 7.	13%	C3
	2.01 Capture a system image. 2.02 Prepare a system image for deployment. 2.03 Deploy a system image. 2.04 Configure a VHD.		
B	Configuring Devices	51%	
3.00	Apply procedures to configure hardware and applications	14%	C3
	3.01 Configure devices. 3.02 Configure application compatibility. 3.03 Configure application restrictions. 3.04 Configure Internet Explorer.		
4.00	Apply procedures to connect to a network.	14%	C3
	4.01 Configure IPv4 network settings. 4.02 Configure IPv6 network settings. 4.03 Configure network settings. 4.04 Configure Windows Firewall. 4.05 Configure remote management.		
5.00	Apply procedures to share resources.	13%	C3
	5.01 Configure shared resources. 5.02 Configure file and folder access. 5.03 Configure user account control (UAC) 5.04 Configure authentication and authorization. 5.05 Configure BranchCache.		
6.00	Apply procedures to configure mobile computing.	10%	C3
	6.01 Configure Bitlocker and BitLocker to Go. 6.02 Configure DirectAccess. 6.03 Configure mobility options. 6.04 Configure remote connections.		
C	Monitoring, Maintaining, and Recovering Systems	22%	
7.00	Apply procedures to monitor and maintain systems that run Windows 7.	11%	C3
	7.01 Configure updates to Windows 7. 7.02 Manage disks. 7.03 Monitor systems. 7.04 Configure performance settings.		
8.00	Apply procedures to configure backup and recovery options	11%	C3
	8.01 Configure backup. 8.02 Configure system recovery options. 8.03 Configure file recovery options.		