

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

## Business, Finance and Information Technology Education

### *BI10 Foundations of Information Technology*

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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**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.

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. 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. Also included are the relative weights of the units and essential standards within the course.

This document will help teachers plan for curriculum delivery for the course, prepare daily lesson plans, and construct valid formative, benchmark, and summative assessments. Assessment for this course is written at the level of the **ESSENTIAL STANDARD** and assesses the intended outcome of the sum of its indicators.

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
<b>Column information</b>	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.  <b>Cognitive Process Dimension:</b> 1 Remember 2 Understand 3 Apply 4 Analyze 5 Evaluate 6 Create  <b>Knowledge Dimension:</b> 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  
BI10 FOUNDATIONS OF INFORMATION TECHNOLOGY**  
(Recommended hours of instruction: 135-180)

Essential Std #	Unit, Essential Standards, and Indicators (The Learner will be able to:)	Course Weight	RBT Level
1	2	3	4
	<b>Total Course Weight</b>	<b>100%</b>	
<b>1.00</b>	<b>Understand Information Technology career pathways and foundation skills.</b>	<b>9%</b>	<b>B2</b>
	1.01 Understand information technologies and related career pathways. (3%) 1.02 Understand career and workplace expectations. (6%)		
<b>2.00</b>	<b>Understand the Information Support and Services pathway.</b>	<b>19%</b>	<b>B2</b>
	2.01 Understand how computing devices work. (11%) 2.02 Understand basic troubleshooting of hardware and software. (8%) 2.03 Explore advanced concepts in Information Support and Services. (supplemental)		
<b>3.00</b>	<b>Understand the Network Systems pathway.</b>	<b>20%</b>	<b>B2</b>
	3.01 Understand the physical components of a network. (10%) 3.02 Understand network management. (10%) 3.03 Explore advanced concepts in network systems. (supplemental)		
<b>4.00</b>	<b>Understand the Web and Digital Communications pathway.</b>	<b>20%</b>	<b>B2</b>
	4.01 Understand how multimedia is used on the Web. (10%) 4.02 Understand how webpages are created and used. (10%) 4.03 Explore advanced concepts in web development. (supplemental)		
<b>5.00</b>	<b>Understand the Programming and Software Development pathway.</b>	<b>20%</b>	<b>B2</b>
	5.01 Understand software types and uses. (5%) 5.02 Understand beginning programming concepts. (15%) 5.03 Explore advanced concepts in Programming and Software Development. (supplemental)		
<b>6.00</b>	<b>Understand the evolution of information technology and career options in Information Technology.</b>	<b>12%</b>	<b>B2</b>
	6.01 Understand the evolution of information technology (6%) 6.02 Understand careers in information technology. (6%)		