Florida CTE

Information Technology (2024-25): Coding Fundamentals (9009200)

Demonstrate proficiency using specialized computer coding software. The student will be able to: 1.0	**1** Use specialized computer coding software to solve problems. 1.01
	2 Demonstrate proficiency using specialized computer software (e.g., Swift, Python). 1.02
Develop an awareness of programming languages. The student will be able to: 2.00	**1** Identify programming language design approaches. 2.01
	2 Explain the components of programming languages. 2.02
	3 Examine connections between elements of mathematics and computer science including binary numbers, logic, sets, and functions. 2.03
Demonstrate proficiency of using common software applications. The student will be able to: 3.00	**1** Compare and contrast the appropriate use of various software applications. 3.01
	2 Demonstrate proficiency in the use of various software applications. 3.02
	3 Explain why different file types exist (e.g., formats for word processing, images, music, and three-dimensional drawings). 3.03
	4 Identify the kinds of content associated with different file types. 3.04
Demonstrate knowledge, skill, and application of information systems to accomplish job objectives and enhance workplace performance. The student will be able to: 4.00	**1** Develop keyboarding skills to enter and manipulate text and data. 4.01
	2 Describe and use current and emerging computer technology and software to perform personal and business related tasks. 4.02
	3 04.03 Perform a variety of operations such as sorting, filtering, and searching in a database to organize and display information in a variety of ways such as number formats (e.g., scientific notation, percentages, and exponents) charts, tables and graphs. 4.03
De co co	**1** Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively. 5.01

Skip to main content

student will be able to: 5.00	**2** Organize ideas and communicate oral and written messages. 5.02
	3 Collaborate with individuals and teams to complete tasks and solve information technology problems. 5.03
	4 Demonstrate an awareness of project management concepts and tools. 5.04
	5 Demonstrate an ability to communicate appropriately through various online tools. 5.05
	6 Recognize that more than one algorithm can solve a given problem. 5.06
	7 Create a program that implements an algorithm to achieve a given goal, individually and collaboratively. 5.07
Demonstrate knowledge of different operating systems. The student will be able to: 6.00	**1** Compare and contrast various operating systems used in a computer and mobile devices (i.e., Windows, OS (Apple), UNIX, Android, iOS). 6.01
	2 Demonstrate proficiency in using gadgets, icons, and task bars and other pre-loaded operating system programs (e.g., calculator, text editor, clock, volume controls, adding icons and shortcuts to task bar and shortcut menus). 6.02
	3 Use iterative development and debugging to explore the problem domain. 6.03
Demonstrate proficiency in basic programming. The student will be able to: 7.00	**1** Describe the structure of a simple program, and explain why sequencing is important. 7.01
	2 Define the term “algorithm,” and explain how it relates to problem-solving. 7.02
	3 Describe iterative programming structures (e.g., while, do/while) and how they are used in programming. 7.03
	4 Describe selection programming structures (e.g., if/then, else) and explain the logic used for if statements. 7.04
	5 Explain the types and use of variables in programming. 7.05
	6 Write a simple program in pseudo-code that used structured programming to solve a problem. 7.06
	7 Troubleshoot and debug errors in code. 7.07
	8 Create, modify, and use a database (e.g., define field formats, adding new records, manipulate data) to analyze data and propose solutions for a task/problem, individually and collaboratively. 7.08