

BE 3216 : Creative Coding and Computer Solutions II

Virginia Beach City Public Schools ensures equal access to all CTE courses. Accessibility accommodations will be provided as needed.

This nine-week course expands upon the Foundations of Creative Coding and Computer Solutions course. Students will continue their exploration of coding by building on what they learned in the foundations course. They will delve into more complex concepts such as controlling game flow with loops, events and conditional statements, and add animation using sprites. Admission to this course is based upon the successful completion of the Foundations of Creative Coding and Computer Solutions course.

Subject Area

Business and Information Technology

Level

Middle School

Grades

6

7

8



Prerequisites

Foundations of Creative Coding and Computer Solutions

Parent Docs

[Creative Coding and Computer Solutions II Parent Doc 2021-2022](#)

Storyboard

	Surveying the Landscape	Spinning the Globe	Shifting into Gear	Gaining Ground
Unit				
Focus	At the beginning of this course journey, we review software application skills that were learned in the foundations course by demonstrating our ability to modify text-based documents, manipulate data in a spreadsheet, define fields and formats within a database, and deliver an effective presentation.	We continue developing our coding skills by comparing and refining multiple algorithms for the same task, creating complex programs that include sequences, events, and loops, and debug errors that occur within the algorithm.	Next, we learn how to code using a variety of syntaxes to create complex programs that complete tasks and solve real-world problems.	Lastly, we learn how to modify, remix, and incorporate portions of an existing program into our own work to develop something new or to add more advanced features.
Transfer Goals	<ul style="list-style-type: none"> Bridge the academic, employability, and technical skills to prepare us for emerging occupations. Empower us to be successful citizens, workers, and leaders in a global economy. 	<ul style="list-style-type: none"> Bridge the academic, employability, and technical skills to prepare us for emerging occupations. Empower us to be successful citizens, workers, and leaders in a global economy. 	<ul style="list-style-type: none"> Bridge the academic, employability, and technical skills to prepare us for emerging occupations. Empower us to be successful citizens, workers, and leaders in a global economy. 	<ul style="list-style-type: none"> Bridge the academic, employability, and technical skills to prepare us for emerging occupations. Empower us to be successful citizens, workers, and leaders in a global economy.

**Unit
Learning
Targets**

- Format existing word processing documents.
- Create graphs that visually represent data in a spreadsheet.
- Define fields and design formats within a database.
- Deliver an effective presentation for a specific audience.

- Create complex programs using sequences, events, loops, and conditionals.
- Debug a program using critical thinking skills and problem-solving techniques.

- Create programs using JavaScript and Python programming languages.
- Create a program to complete a task and to solve a problem.
- Debug a program using critical thinking skills and problem-solving techniques.

- Incorporate portions of an existing program into a new program to complete a task.
- Modify the sequence, event, loops, or conditionals in an existing program to solve a problem.