

Rhode Island Standards Alignment with Python with Robots Curriculum

	Unit 1	Unit 2	Unit 3	Unit 4
Computational Thinking and Programming				
2-CT-A-1 Use diagrams and/or pseudocode to plan, analyze, solve and/or code complex problems as algorithms.				
2-CT-V-1 Create clearly named variables that represent different data. Perform operations on data stored in variables.				
2-CT-D-1 Organize data into an appropriate data structure in a program.				
2-CT-C-1 Design programs that combine control structures, including nested loops and compound conditionals.				
2-CT-M-1 Decompose computational problems to facilitate the design and implementation of programs				
2-CT-M-2 Create procedures with parameters to organize code and make it easier to reuse.				
2-CT-CD-1 Seek and incorporate feedback from team members and users to refine a solution that meets user needs.				
2-CT-CD-2 Test and debug a program to ensure it runs as intended.				
2-CT-CD-3 Describe choices made during development of computational artifacts.				
Computing Systems and Networks				
2-CSN-H-1 Identify improvements to the design of computing devices, based on an analysis of how users interact with the devices.				
2-CSN-HS-1 Design projects that combine hardware and software components to collect and use data to perform a function.				
2-CSN-T-1 Identify and fix problems with computing devices and their components using a systematic troubleshooting method or guide.				
2-CSN-N-1 Model the role of protocols in transmitting data across networks and the Internet.				
Cybersecurity				
2-CY-R-1 Describe tradeoffs between allowing information to be public and keeping information private and secure.				
2-CY-R-2 Describe social engineering attacks and the potential risks associated with them.				
2-CY-R-3 Describe risks of using free and open services.				
2-CY-S-1 Explain physical and digital security measures that protect electronic information.				
2-CY-S-2 Demonstrate how multiple methods of encryption provide secure transmission of information.				
2-CY-RP-1 Describe which actions to take and not to take when an application or device reports a problem or behaves unexpectedly.				
Data and Analysis				

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2-DA-CVT-1 Collect data using computational tools or online sources and transform the data to make it more useful and reliable.				
2-DA-IM-1 Create and refine computational models based on generated or gathered data.				
2-DA-IM-2 Discuss potential visible biases that could exist in a dataset and how these biases could affect analysis conclusions.				
2-DA-ST-1 Store, retrieve, and share data to collaborate, using a cloud-based system.				
2-DA-ST-2 Describe various low-level data transformations and identify which result in a loss of information.				
Digital Literacy				
2-DL-CU-1 Use software tools to create artifacts that engage users over time.				
2-DL-SDI-1 Conduct searches over multiple types of digital information.				
2-DL-US-1 Describe the different formats of software components that support common tasks in software tools.				
Responsible Computing and Society				
2-RC-CU-1 Compare and contrast tradeoffs associated with computing technologies that affect people's everyday activities and career options.				
2-RC-CU-2 Discuss issues of bias and accessibility in the design of existing technologies.				
2-RC-SLE-1 Discuss how laws control use and access to intellectual property, and mandate broad access to information technologies.				
2-RC-SI-1 Collaborate and strategize with many online contributors when creating a computational or digital artifact.				