Skill Struck’s alignment to

Rhode Island’s K-12 Computer Science Education Standards

Legend

✅ = Standard aligned

🔷 = Not currently aligned

Standard	Status
1A-CT-A-1 Model daily processes by creating and following algorithms to complete tasks.	✅
1B-CT-A-1 Compare and refine multiple algorithms for the same task and determine which is more appropriate to complete the task.	✅
2-CT-A-1 Use diagrams and/or pseudocode to plan, analyze, solve and/or code complex problems as algorithms.	✅
3-CT-A-1 Create computational artifacts that use algorithms to solve computational problems by leveraging prior knowledge and personal interests.	✅

1A-CT-V-1 Model real-world data and how it is stored.	✅
1B-CT-V-1 Create programs that use variables	✅
2-CT-V-1 Create clearly named variables that represent different data. Perform operations on data stored in variables.	✅
3-CT-V-1 Explain the role of a variable within a program, and the scope in which its name and value can be used.	✅
1A-CT-D-1 Model real-world objects and/or processes that can be represented by various types of data.	✅
1B-CT-D-1 Identify real-world examples of data structures and data types.	✅
2-CT-D-1 Organize data into an appropriate data structure in a program.	✅
3-CT-D-1 Create a program that processes a collection of data.	✅
1A-CT-C-1 Develop simple programs with sequences and simple repetitions	✅
1B-CT-C-1 Create programs that combine sequences, loops, conditionals, and/or events.	✅
2-CT-C-1 Design programs that combine control structures, including nested loops and compound conditionals.	✅

3-CT-C-1 Create and justify the selection of specific control structures when tradeoffs involve code organization, readability, and program performance and explain the benefits and drawbacks of choices made.	✅
1A-CT-M-1 Decompose a task into a set of smaller tasks.	✅
1B-CT-M-1 Continually decompose problems into smaller subtasks until each subtask is a manageable set of basic operations.	✅
1B-CT-M-2 Create computational artifacts by incorporating existing modules into one's own work to solve a problem.	✅
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.	✅
3-CT-M-1 Identify existing computational artifacts that can be used for the subtasks of a decomposed problem.	✅
3-CT-M-2 Create computational artifacts by incorporating pre- defined procedures, self-defined procedures and external artifacts.	✅
1A-CT-CD-1 Develop a plan that describes what a computational artifact should look like and how it should perform.	✅

1A-CT-CD-2 Identify a task that includes sequences and simple loops	✅
1B-CT-CD-1 Use an iterative process to plan the development of a computational artifact by including others' perspectives and considering user preferences.	✅
1B-CT-CD-2 Debug errors in an algorithm or program that includes sequences and simple loops.	✅
1B-CT-CD-3 Describe steps taken and choices made during the process of creating a computational artifact.	✅
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.	✅
3-CT-CD-1 Systematically design and implement computational artifacts for targeted audiences by incorporating feedback from users.	✅
3-CT-CD-2 Systematically test and refine programs using a range of test cases.	✅
3-CT-CD-3 Document computational artifacts in order to make them easier to follow, test, and debug.	✅

1A-CSN-H-1 Identify the inputs and outputs of a computer system.	✅
1B-CSN-H-1 Describe how people interact with the various parts of computing systems to accomplish tasks.	✅
2-CSN-H-1 Identify improvements to the design of computing devices, based on an analysis of how users interact with the devices.	✅
3-CSN-H-1 Analyze a computing system and explain how abstractions simplify the underlying implementation details embedded in everyday objects	✅
1A-CSN-HS-1 Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).	✅
1B-CSN-HS-1 Model how computer hardware and software work together as a system to accomplish tasks.	✅
2-CSN-HS-1 Design projects that combine hardware and software components to collect and use data to perform a function.	✅
3-CSN-HS-1 Compare levels of abstraction and interactions between application software, system software, and hardware layers.	✅
1A-CSN-T-1 Describe basic hardware and software problems using appropriate terminology.	✅
1B-CSN-T-1	✅

Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.	
2-CSN-T-1 Identify and fix problems with computing devices and their components using a systematic troubleshooting method or guide.	✅
3-CSN-T-1 Develop and communicate troubleshooting strategies others can use to identify and fix errors.	✅
1A-CSN-N-1 Describe the Internet as a place to share and find information.	✅
1B-CSN-N-1 Model how information is broken down into smaller pieces of data, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.	✅
1A-CY-R-1 Keep login and personal information private, and log off of devices appropriately.	✅
1B-CY-R-1 Describe the risks of sharing personal information, on websites or other public forums.	✅
1B-CY-R-2 Describe ways personal information can be obtained digitally.	✅
1B-CY-R-3 Describe the risks of others using one's personal resources or devices.	✅
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.	✅
3-CY-R-1 Explain the privacy concerns related to the collection and generation of data through automated processes that may not be evident to users.	✅
3-CY-R-2 Analyze an existing or proposed application to identify the potential ways it could be used to obtain sensitive information.	✅
3-CY-R-3 Explain how the digital security of an organization may be affected by the actions of its employees.	🔷
1A-CY-S-1 Recognize basic digital security features.	✅
1B-CY-S-1 Explain individual actions that protect personal electronic information and devices.	✅
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.	✅
3-CY-S-1 Recommend security measures to address various scenarios based on	✅

factors such as efficiency, feasibility, and ethical impacts.	
3-CY-S-2 Explain tradeoffs when selecting and implementing cybersecurity recommendations.	✅
1A-CY-RP-1 Identify situations with physical and digital artifacts applications and devices that should be reported to a responsible adult.	✅
1B-CY-RP-1 Identify and describe unusual data or behaviors of applications and devices that should be reported to a responsible adult.	✅
2-CY-RP-1 Describe which actions to take and not to take when an application or device reports a problem or behaves unexpectedly.	✅
3-CY-RP-1 Describe the appropriate actions to take in response to detected security breaches.	🔷
1A-DA-CVT-1 Collect and present the same data in multiple formats.	✅
1B-DA-CVT-1 Organize and present collected data to highlight relationships and support a claim.	✅
2-DA-CVT-1 Collect data using computational tools or online sources and transform the data to make it more useful and reliable.	✅
3-DA-CVT-1 Select appropriate data-collection tools and presentation techniques for different types of data.	✅

1A-DA-IM-1 Identify and describe patterns in data presentations, such as charts or graphs, to make predictions.	✅
1B-DA-IM-1 Use data to highlight or propose cause-and-effect relationships, predict outcomes, or communicate an idea.	✅
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.	✅
3-DA-IM-1 Create computational models that represent the relationships among different elements of data collected from a phenomenon or process.	✅
3-DA-IM-2 Discuss potential hidden biases that could be introduced while collecting a dataset and how these biases could affect analysis conclusions.	✅
3-DA-IM-3 Evaluate the ability of models and simulations to test and support the refinement of hypotheses.	✅
1A-DA-ST-1 Identify data as information that is stored by software.	✅
1B-DA-ST-1 Store, copy, search, retrieve, modify, and delete data using a computing device.	✅
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	✅
3-DA-ST-1 Explain tradeoffs between storing data locally or in central, cloud-based systems.	✅
3-DA-ST-2 Translate data for various real-world phenomena, such as characters, numbers, and images, into bits.	✅
1A-DL-CU-1 Use software tools to create simple digital artifacts	✅
1B-DL-CU-1 Use software tools to create and share multimedia artifacts	✅
2-DL-CU-1 Use software tools to create artifacts that engage users over time	✅
3-DL-CU-1 Select appropriate software tools or resources to create a complex artifact or solve a problem.	✅
1A-DL-SDI-1 Conduct basic digital searches.	✅
1B-DL-SDI-1 Conduct and refine multi-criteria searches over digital information.	✅
2-DL-SDI-1 Conduct searches over multiple types of digital information.	✅
3-DL-SDI-1	🔷

Decompose a complex problem into multiple questions, identify which can be explored through digital sources, and synthesize query results using a variety of software tools.	
1A-DL-US-1 Describe basic differences between humans and computers for performing computational tasks.	✅
1B-DL-US-1 Describe the different high-level tasks that are common to software tools that students use.	✅
2-DL-US-1 Describe the different formats of software components that support common tasks in software tools.	✅
3-DL-US-1 Describe different kinds of computations that software tools perform to tailor a system to individual users.	✅
1A-RC-CU-1 Compare and contrast how individuals live and work before and after the implementation or adoption of new computing technology.	✅
1B-RC-CU-1 Compare and contrast computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.	✅
1B-RC-CU-2 Identify ways to improve the accessibility and usability of technology products for the diverse needs and wants of users.	✅
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.	✅
3-RC-CU-1 Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.	✅
3-RC-CU-2 Design and analyze computational artifacts to reduce bias and equity deficits.	✅
3-RC-CU-3 Evaluate the impact of equity, access, and influence on the distribution of computing resources in a global society.	✅
1A-RC-SLE-1 Discuss ownership and attribution of digital artifacts.	✅
1B-RC-SLE-1 Incorporate public domain or creative commons media into a digital artifact, and refrain from copying or using material created by others without permission.	✅
2-RC-SLE-1 Discuss how laws control use and access to intellectual property, and mandate broad access to information technologies.	✅
3-RC-SLE-1 Evaluate the impact of intellectual property laws on the use of digital information	✅
3-RC-SLE-2 Evaluate the social and economic implications of privacy and free speech in the context of safety, law, or ethics.	✅

1A-RC-SI-1 Work respectfully and responsibly with others online.	✅
1B-RC-SI-1 Seek diverse perspectives for the purpose of improving computational artifacts.	✅
2-RC-SI-1 Collaborate and strategize with many online contributors when creating a computational or digital artifact.	🔷
3-RC-SI-1 Use tools and methods for collaboration on a project to increase connectivity between people in different cultures and career fields.	✅