Washington Computer Science

Level 2: 6-8

Computing Systems	1	Recommend improvements to the design of computing devices, based on an analysis of how users interact with the devices. 2-CS-01
	2	Design projects that combine hardware and software components to collect and exchange data. 2-CS-02
	3	Systematically identify and fix problems with computing devices and their components. 2-CS-03
Networks and the Internet	4	Model the role of protocols in transmitting data across networks and the Internet. 2-NI-04
	5	Explain how physical and digital security measures protect electronic information. 2-NI-05
	6	Apply multiple methods of encryption to model the secure transmission of information. 2-NI-06
Data and Analysis	7	Represent data using multiple encoding schemes. 2-DA-07
	8	Collect data using computational tools and transform the data to make it more useful and reliable. 2-DA-08
	9	Refine computational models based on the data they have generated. 2-DA-09
Algorithms and and Programming	10	Use flowcharts and/or pseudocode to address complex problems as algorithms. 2-AP-10
	11	Create clearly named variables that represent different data types and perform operations on their values. 2-AP-11
	12	Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals 2-AP-12
	13	Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs. 2-AP-13
	14	Create procedures with parameters to organize code and make it easier to reuse. 2-AP-14

Skip to main content

	15 Seek and incorporate feedback from team members and users to refine a solution that meets user needs. 2-AP-15
	16 Incorporate existing code, media, and libraries into original programs, and give attribution. 2-AP-16
	17 Systematically test and refine programs using a range of test cases. 2-AP-17
	18 Distribute tasks and maintain a project timeline when collaboratively developing computational artifacts. 2-AP-18
	19 Document programs in order to make them easier to follow, test, and debug. 2-AP-19
Impacts of Computing	**20** Compare tradeoffs associated with computing technologies that affect people's everyday activities and career options. 2-IC-20
	21 Discuss issues of bias and accessibility in the design of existing technologies. 2-IC-21
	22 Collaborate with many contributors through strategies such as crowdsourcing or surveys when creating a computational artifact. 2-IC-22
	23 Describe tradeoffs between allowing information to be public and keeping information private and secure. 2-IC-23