

# Digital Literacy Essential Standards (2024)

## Computer Science

### Essential Standards

- 1 Create or modify a program that uses different forms of input and output. [9-12.CS.1.4](#)
- 2 Create a model of how embedded systems sense, process, and interact in a given environment. [9-12.CS.1.6](#)
- 3 Compare and contrast the viewpoints on cybersecurity from the perspective of security experts, privacy advocates, and the government. [9-12.CS.2.6](#)
- 4 Identify and evaluate the beneficial and harmful effects of computing innovations on behavior and culture. [9-12.CS.3.4](#)
- 5 Debate how the issues of equity, data access, and distribution of computing resources create a digital divide in a global society. [9-12.CS.3.5](#)
- 6 Research and explain the social, moral, ethical, and legal impacts of artificial intelligence systems and respective usage. [9-12.CS.3.8](#)
- 7 Design algorithms using sequence, selection, iteration and recursion. \*Recursion will be addressed in an upper computer science course. [9-12.CS.5.2](#)

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### Supporting Standards

- 1 Diagram the flow and execution and output of a given program. [9-12.CS.5.1](#)
- 3 Discuss trade-offs such as privacy, safety, and convenience associated with the collection and large-scale analysis of personal information. [9-12.CS.3.3](#)
- 2 Explain the social and economic implications associated with unethical computing practices. [9-12.CS.3.2](#)
- 4 Understand and define artificial intelligence. [9-12.CS.3.7](#)
- 5 Critically examine algorithms and design an original algorithm (adapt, remix, improve). [9-12.CS.5.23](#)

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## Information Computer Tech

### Essential Standards

- 1 Develop and manage their digital identity and understand the permanence of their digital actions including the effect on current and future reputation. [9-12.ICT.2.1](#)
- 2 Demonstrate an understanding of the rights and obligations of using and sharing intellectual property. [9-12.ICT.2.3](#)

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### Supporting Standards

- 1 Maintain their digital security and understand data collection technology used to track their online activity. [9-12.ICT.2.4](#)
- 2 Demonstrate responsible digital citizenship (legal and ethical behaviors) in the use of technology systems and software. [9-12.CS.3.1](#)
- 3 Engage in positive, safe, legal and ethical behavior when using technology. [9-12.ICT.2.2](#)
- 4 Manage personal data to maintain digital privacy and security and be conscious and aware of data-collection technology used to track and exploit navigation online. [ODC.9-10.5](#)
- 5 Demonstrate the responsible and ethical use of information and communication technologies by distinguishing between kinds of information that should and should not be publicly shared and describing the consequences of a poor decision. [ODC.11-12.5](#)

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## Digital Communications

### Essential Standards

- 1 Integrate multiple sources of information presented in diverse digital media, evaluating the credibility and accuracy of each source. [ODC.9-12.6.](#)

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### Supporting Standards

- 1 Make strategic use of digital media presentations to enhance understanding of findings, reasoning, and evidence and to add interest. [ODC.9-12.8](#)