

Computer Education and Technology Nevada is a one-semester course that is 100 percent aligned to the Nevada Academic Content Standards for Computer Science and Integrated Technology. The course is designed to prepare students to compete in a global digital age by developing proficiency in problem-solving, computational thinking, and the production of computational artifacts. Students will examine core computer science concepts, including digital citizenship, digital communication, and innovative design, with a particular focus on computer hardware, operating systems, networking, the internet, web publishing, and database software. They will also explore how computer science relates to their lives and potential future careers. In unit activities, students will code their own programs and create a variety of digital artifacts using word processing, presentation, and collaboration software. Students will also develop proficiency with spreadsheet software and demonstrate digital literacy across a range of foundational computing skills. They will apply computational thinking and problem-solving skills through hands-on activities that prepare them to become computationally literate members of society.

There are no required materials for this course.

Length: One Semester

Unit 1: Introduction to Computer Education and Technology

- Exploring Computer Science and Technology
- Collaboration and Project Management
- Computer Science and Technology Careers
- Computing Systems Wrap-Up

Unit 2: Algorithms and Programming

- Algorithms
- Programming
- Designing a Program
- Algorithms and Programming Wrap-Up

Unit 3: Computing Systems

- Computer System Basics
- Peripherals and Software
- Computing Systems Wrap-Up

Unit 4: Data and Analysis

- Data
- Collection and Analysis of Data
- Data and Analysis Wrap-Up

Unit 5: Networking and the Internet

- Networking

- Using the Internet
- Intellectual Property and Cybersecurity
- Data and Analysis Wrap-Up

Unit 6: The Digital Impact

- Social Interactions
- Programming for Bias and Equity
- The Digital Impact Wrap-Up

Unit 7: Semester Wrap-Up

- Semester Review and Exam