A BYTE OF CS FOR SECONDARY ADMINISTRATORS & EDUCATORS
Power Up Your CS Knowledge and Skills with an introduction to Summer of CS 2025 in 30 minutes!

Tuesday March 18th or Wednesday March 26th | 4:00 PM - 4:30 PM | Online

A Byte of CS

Zoom link   Slides Link

What is computer science?

Computer science (CS) is the study of computers and algorithmic processes, including their principles, their hardware and software designs, their applications, and their impact on society.

A computer science teacher introduces students to binary code and explains how data is represented using 1s and 0s. (Data & Analysis)
A teacher leads students in comparing different password lengths to understand which are more secure. (Networks & the Internet)
Students explore how targeted social media ads are generated based on their online behavior. (Impacts of Computing)
A science teacher introduces students to sensors and data collection tools to track environmental changes. (Data & Analysis and Computing Systems)

CA K12 CS Standards: Computer Science Standards for California Public Schools
Foundational Content - Reimagining CS

Core Concepts
1. Computing Systems (CS)
2. Networks and the Internet (NI)
3. Data and Analysis (DA)
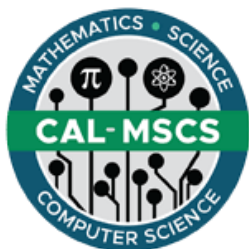4. Algorithms and Programming (AP)
5. Impacts of Computing (IC)

Core Practices
Fostering an Inclusive Computing Culture
Collaborating Around Computing
Recognizing and Defining Computational Problems
Developing and Using Abstractions
Creating Computational Artifacts
Testing and Refining Computational Artifacts
Communicating About Computing

Teaching CS Resources

CS4NorCal   CalMSCS - CS   CS Statewide Group   Seasons of CS

Curriculum, programs, materials

📕 K-5 Computer Science.pdf   📕 6-12 Computer Science.pdf

📕 K-5 Artificial Intelligence.pdf   📕 6-12 Artificial Intelligence.pdf

Summer of CS 2025

CSPDWEEK June 23-27, 2025 | Anaheim, CA
State-wide offering for Grade 6-12 public school educators and paraprofessionals
Choose from 10, 5 day onboarding workshops
1. Advanced Placement CS A
2. CS Principles
3. Exploring CS
4. CS Discoveries
5. Bootstrap Data Science
6. Bootstrap Algebra
7. Computer Science Integration
8. Equity Minded Instruction in CS
9. Everyday AI
10. CS & Art Integration

Registration

E4C at MCOE

Multi-day experience that combines a one day in-person training with asynchronous activities to prepare you to teach CS in your elementary classroom next year

Registration

One Pager

Who Can Teach CS?: A brief summary of avenues to teach CS. You may also find this presentation on CS Credentials in CA from my colleague Mark Lantsberger who is a CS Coordinator in San Diego helpful. Essentially, academic and CTE credentials both qualify to teach CS. With local control and consideration College Board requirements, UC a-g requirements, CTE requirements, and CalPADS usage there is flexibility.

Computer Science Supplementary Authorization Incentive Grant Program awards of up to $2,500 per participant. Round Seven just closed but the Commission will continue offering grant competitions twice a year through the 2025-26 fiscal year or until the full $15 million has been allocated. Eligible applicants are Local Education Agencies (LEAs)— school districts, county offices of education, state-operated education program, state agency education programs, or regional occupational center operated by a joint powers authority or county office of education interested in securing grant increase in the number credentialed teachers authorized to provide computer science instruction. Any non-Career Technical Education (CTE)/Information, Communication, Technology (ICT) teacher with a single or multiple subjects teaching credential can add on the Computer Science Supplementary Authorization by taking additional college level coursework. There are various CS authorization programs in CA. Find one that works for you.

Closing	Discussion: Question and answer
	Contact: Rebecca Bailey rbailey@mcoe.us