



The following resources are related to the [Advance CTE Digital Tech Career Cluster](#). This Cluster concentrates on development of digital systems for communication, data storage with technologies such as AI, data analytics, and cybersecurity.

A Possible Futures Career Exploration [Information Technology](#)

(Grades 6-10) Free lessons on the fundamentals of computer programming. Additional courses on digital citizenship, digital threats, ciphers, digital security, and networking protocols

Amazon Future Computer Science amazonfutureengineer.com/middle-school

(Grades 6-8) Free computer science curriculum and teacher training.

Arizona Department of Education Standards

(Grades K-12) [Computer Science](#) and [EdTech](#).

Ascend Education ascendeducation.com/k-12

(Grades K-12) Curriculum for purchase IT, MS Office, networking, and cybersecurity basics.

Code.org studio.code.org/courses

(Grades K-8) Free lessons in computer science, fundamentals and discoveries.

Computer Science (CS) for All csforall.org/curriculum-directory

(Grades 3-8) Free curriculum designed for students to learn computer science/computational skills.



CompTIA [Tech Career Exploration](#)

(Grades 6-12) Explore tech careers or industry sectors to learn about earning potential, hiring markets, top certifications, skill requirements, and more.

Digital Citizenship Curriculum commonsense.org/

(Grades K-8) Lesson plans prepare students to take ownership of their digital lives.

Digital Technology Career Cluster Information [Advance CTE](#)

(Grades 7-12) Key workplace skills and national job outlook, salary, emerging occupations, and required education and certifications.

GenTech Kids Tech in Schools gentechsupport.com/kidstech-in-schools/

(Grades K-8) Curriculum includes Coding, Robotics/Automation, Microcomputers/Electronics, 3D Modeling/CAD, Computer Hardware/Software, and Cyber Security.

Girls Who Code girlswhocode.com/programs

(Grades 3-12) Free coding curriculum with emphasis on social-emotional development.

Google Education [Applied Digital Skills](#) and CSfirst.withgoogle.com

(Grades 4-12) Free project-based learning curriculum for students to develop digital skills to solve real-world problems.

ICT and CIW Certification Partners certified.com

(Grades 6-12) The ICT certifications help build foundational technology and digital literacy skills that prepare students for the more advanced CIW certifications at the high school level.

Microsoft Microbit makecode.microbit.org/

(Grades 4-8) Learn Python, Block, and Java Script by interacting with fun online tutorials.

Project Lead the Way Computer Science for Innovators pltw.org/curriculum

(Grades 6-8) Computer science concepts and skills by creating personally relevant, tangible, and shareable projects.

SAM Labs samlabs.com

(Grades K–8) Purchase the hands-on STEAM and coding platform that introduces students to computer science, engineering design, and problem-solving through interactive lessons and project-based learning.

Scratch scratch.mit.edu/educators

(Grades K-9) Free coding concept lessons using a simple interface with an emphasis on computational thinking and problem-solving skills.



Tinker CAD tinkercad.com/lessonplans

(Grades 5-12) Free lessons to introduce 3D design, electronics, and coding block concepts in a simple visual interface.



TryEngineering (IEEE) tryengineering.org/explore-resources

(Grades 5-12) Free resources in computer science, binary basics, AI, and machine learning.

Typing.com typing.com

(Grades K-8) Free auto-graded lessons in keyboarding, digital citizenship, and coding lessons. Teachers can set up a virtual classroom to monitor student progress.



W3 Schools Coding w3schools.com

(Grades 7-9) Free tutorials on popular coding languages, html, and web design.

ZSpace Computer Science, Web and Game Design zspace.com/solutions/stem

(Grades K-8) Block-based programming, computational thinking, and digital citizenship.

