



Career Cluster: Computer Science & Information Technology


Career Pathway: Programming & Software Development

JUNIOR HIGH / MIDDLE SCHOOL		
College and Career Awareness		
Computer Science Investigations	Python 1, Intro	
Creative Coding	Python 2, Intro	
Digital Literacy		
HIGH SCHOOL		
SUPPORTING COURSES: Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)		
Business Leadership 1 *	Physics	Secondary Math 3
Math 1050	Secondary Math 2	
EXPLORER COURSES: Choose one or more of the following courses.		
AP Computer Science Principles	Robotics 1	Robotics Technology
Computer Programming 1 *	Mobile Development Fundamentals	
Computer Science Principles *	Exploring Computer Science	Information Technology, Intro
CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.		
Computer Programming 2 *	Database Development *	Game Development Fundamentals 1
COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.		
AP Computer Science	Computer Programming, Advanced *	
Algorithms and Data Structures *	Game Development Fundamentals 2	
CTE Internship	Apprenticeship	
POSTSECONDARY: There are many options for education and training beyond high school.		
Utah System of Higher Education: ushe.edu (Utah's public colleges and universities)		UtahMajors.org: Majors Guide

* concurrent enrollment course + recommended explorer course

HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

There are several options for education and training beyond high school, depending on your career goals.

	1-2 Year Certificate	2-Year Associate Degree	4-Year Bachelor's Degree
		> Entry Level Programmer	> Computer Systems Analyst > Game Play Programmer > Software Developer

Career and Technical Education provides all students access to high-quality, rigorous career-focused programs that result in attainment of credentials with labor market value. [Credentials of Value](#)

Utah CTE classes are open to all qualified students without regard to race, color, national origin, sex, disability, or age.

Student Testimonial

"CTE courses have set the course of my life. I was planning on doing something computer related and taking CTE courses have led me to understand what I am confident about, what I enjoy doing, and what possible careers I could go into."

James Cox
 Future IT Developer

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Computer Science & Information Technology

UtahCTE.org: [Fact Sheet](#)

Department of Workforce Services
[Utah Occupational Explorer](#)

FBLA | SkillsUSA | TSA

are the Career and Technical Student Organizations (CTSO) for students in the Programming & Software Development Career Pathway.

[FBLA-PBL.org](https://fbla-pbl.org) | [SkillsUSA.org](https://skillsusa.org) | [TSAweb.org](https://tsaweb.org)
[Utah-FBLA-PBL.org](https://utah-fbla-pbl.org) | [UtahSkillsUSA.org](https://utahskillsusa.org) | [UtahTSA.org](https://utahtsa.org)