



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

"My goal is to become a video game designer or programmer. The classes I took in high school taught me how to use the programs that I would be pursuing in my career field and have given me a taste of what programming and design are like."

Jenny Whitecar
 Syracuse High School

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 | SkillsUSA.org | TSAweb.org
Utah-FBLA-PBL.org | UtahSkillsUSA.org | UtahTSA.org