

Utah Career and Technical Education Career Pathway Chart 2020-2021 School Year




Programming & Software Development
CAREER PATHWAY
Computer Science & Information Technology
CAREER CLUSTER

Career Cluster: Computer Science & Information Technology

Career Pathway: Programming & Software Development

JUNIOR HIGH / MIDDLE SCHOOL			
College and Career Awareness			
Creative Coding			
Python 1, Intro			
Python 2, Intro			
HIGH SCHOOL			
SUPPORTING COURSES: Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)			
Engineering Principles 1 *	Math 1050	Robotics 1	Secondary Math 3
Leadership Principles 1 *	Physics	Secondary Math 2	
EXPLORER COURSES: Choose one or more of the following courses.			
Computer Programming 1 *	Database Development *	Game Development Fundamentals 1	
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 *	Game Development Fundamentals 2	Mobile Development Fundamentals	
COMPLETER COURSES: To be a completer you must pass enough courses to earn 3.0 credits in this Pathway.			
AP Computer Science			
Algorithm and Data Structures *			
Computer Programming, Advanced *			
CTE Internship			
POSTSECONDARY:			
Utah System of Higher Education: ushe.edu UtahMajors.org: Utah Majors Guide			
Utah System of Technical Colleges: utech.edu			

* 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-Year Certificate	2-Year Assoc. or Tech. Degree	4-Year Bachelor's Degree
	N/A	> Web Developer	> CTE Teacher > Computer Programmer > Computer Systems Analyst

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](#)

UtahFutures.org: [Occupation/Wage Search](#)

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](#)
[Utah FBLA flyer](#) | [SkillsUSA flyer](#) | [Utah TSA flyer](#)