## Career Cluster: Computer Science & Information Technology

### Career Pathway: Programming & Software Development

#### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness
- Creative Coding
- Digital Literacy

#### HIGH SCHOOL

**SUPPORTING COURSES:** Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)
- Math 1050
- Physics

**EXPLORER COURSES:** Choose one or more of the following courses.
- Computer Programming 1*
- Robotics 1

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.
- Computer Programming 2*
- Game Development Fundamentals 1

**COMPLETER COURSES:** To be a completer you must pass enough courses to earn 3.0 credits in this Pathway.
- CTE Internship

#### POSTSECONDARY:
- Utah System of Higher Education: [ushe.edu](http://ushe.edu) | [UtahMajors.org](http://UtahMajors.org): [Utah Majors Guide](http://UtahMajors.org)
- Utah System of Technical Colleges: [utech.edu](http://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.

<table>
<thead>
<tr>
<th>1-Year Certificate</th>
<th>2-Year Assoc. or Tech. Degree</th>
<th>4-Year Bachelor’s Degree</th>
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<tbody>
<tr>
<td>N/A</td>
<td>&gt; Web Developer</td>
<td>&gt; CTE Teacher</td>
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<tr>
<td></td>
<td></td>
<td>&gt; Computer Programmer</td>
</tr>
<tr>
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<td>&gt; Computer Systems Analyst</td>
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</tbody>
</table>

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](http://Fact Sheet)
- UtahFutures.org: [Occupation/Wage Search](http://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](http://FBLA-PBL.org) | [SkillsUSA.org](http://SkillsUSA.org) | [TSAweb.org](http://TSAweb.org)
Utah-FBLA-PBL.org | UtahSkillsUSA.org | UtahTSA.org
Utah FBLA flyer | SkillsUSA flyer | Utah TSA flyer

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