Career Cluster: Computer Science & Information Technology

Career Pathway: Programming & Software Development

**JUNIOR HIGH / MIDDLE SCHOOL**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>College and Career Awareness</td>
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<tr>
<td>Digital Literacy</td>
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**HIGH SCHOOL**

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

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Math 1050</td>
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<tr>
<td>Physics</td>
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**EXPLORER COURSES:** Choose one or more of the following courses:

- AP Computer Science Principles
- Computer Programming 1*
- Computer Science Principles

**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.

- Game Development Fundamentals 2
- CTE Internship

**POSTSECONDARY:**

- Utah System of Higher Education: [ushe.edu](http://ushe.edu) | [Utah Majors.org: Utah Majors Guide](http://Utah Majors.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>
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<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>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Computer Programmer</td>
</tr>
<tr>
<td></td>
<td></td>
<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://UtahCTE.org)
UtahFutures.org: [Occupation/Wage Search](http://UtahFutures.org)

**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](http://Utah-FBLA-PBL.org) | [UtahSkillsUSA.org](http://UtahSkillsUSA.org) | [UtahTSA.org](http://UtahTSA.org)
[Utah FBLA flyer](http://Utah FBLA flyer) | [SkillsUSA flyer](http://SkillsUSA flyer) | [Utah TSA flyer](http://Utah TSA flyer)

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