Career Cluster: Agriculture, Food & Natural Resources

Career Pathway: Agricultural Mechanics Systems

**JUNIOR HIGH / MIDDLE SCHOOL**
College and Career Awareness

**HIGH SCHOOL**

**EXPLORER COURSES:** Choose one or more of the following courses.
- Agricultural Biotechnology
- Agricultural Science 1
- Agricultural Science and Technology Application
- Agricultural Systems Technology 1+
- Biology-Agricultural Science

**CONCENTRATOR COURSES:** To be a concentrator you must pass the following course AND one explorer course.
- Agricultural Systems Technology 2

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- Agricultural Mechanics, Advanced
- Agricultural Machinery Technology
- CTE Internship

**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

**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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Hydraulic Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Maintenance Service Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Welder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Agricultural Engineer Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Diesel Mechanic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Equipment Dealer Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Agricultural Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; CTE Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Welding Engineer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**

“The CTE classes I took in high school, such as agricultural systems and technology, animal science, and floriculture, have given me the basic skills, knowledge and abilities to allow me to obtain employment in any of those fields.”

Colton Zilles
Mountain Crest High School

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

Agriculture, Food Natural Resources
UtahCTE.org: Fact Sheet
Department of Workforce Services
Utah Occupational Explorer

**FFA**

is the Career and Technical Student (CTSO) Organization for students in the Agricultural Mechanics Systems Career Pathway.

FFA.org | UtahFFA.org
Utah FFA flyer

---

Published January 2022
Revised February 2022
ADA Compliant February 2022
## Career Cluster: Agriculture, Food & Natural Resources

### Career Pathway: Agricultural Production Systems

#### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness

#### HIGH SCHOOL

**EXPLORER COURSES:** Choose one or more of the following courses.

- Agricultural Biotechnology
- Agricultural Science 1 *
- Agricultural Science and Technology Application *
- Biology-Agricultural Science

**HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING**
- **1-2 Year Certificate**
  - > Crop Scout
  - > Pesticide Handler/Applicator
  - > Storage and Hygiene Coord.
- **2-Year Associate Degree**
  - > Agricultural Engineer Tech.
  - > Sales Representative
  - > Slaughter/Processor
- **4-Year Bachelor’s Degree**
  - > Agricultural Inspectors
  - > CTE Teacher
  - > Farm/Ranch Manager

**CONCENTRATOR COURSES:** To be a concentrator you must pass the following course AND one explorer course.

- Agricultural Science 2

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

- CTE Internship
- Apprenticeship

**POSTSECONDARY:** There are many options for education and training beyond high school.

- Utah System of Higher Education: [ushe.edu](https://ushe.edu) (Utah’s public colleges and universities)
- UtahMajors.org: [Majors Guide](https://www.utahmajors.org)

* concurrent enrollment course  + recommended explorer course

---

**Student Testimonial**

“My CTE classes and my leadership experience in 4-H and FFA have laid a strong foundation on which I can build upon. I have learned crucial values, including hard work, dedication, and responsibility. I plan to go to college to complete a teaching degree.”

Kaitlin Hallam
Spanish Fork High School

---

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Agriculture, Food & Natural Resources**

UtahCTE.org: [Fact Sheet](https://www.utahcte.org)

Department of Workforce Services [Utah Occupational Explorer](https://www.occupationalexplorer.org)

---

**FFA**

is the Career and Technical Student Organization (CTSO) for students in the Agricultural Production Systems Career Pathway.

- FFA.org | UtahFFA.org
- Utah FFA flyer

---

**Credentials of Value**

Utah CTE classes are open to all qualified students without regard to race, color, national origin, sex, disability, or age.
## Career Cluster: Agriculture, Food & Natural Resources

### Career Pathway: Animal & Veterinary Science

#### JUNIOR HIGH / MIDDLE SCHOOL
College and Career Awareness

#### HIGH SCHOOL

**EXPLORER COURSES:** Choose one or more of the following courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Biotechnology</td>
<td></td>
</tr>
<tr>
<td>Agricultural Science 1</td>
<td></td>
</tr>
<tr>
<td>Agricultural Science and Technology Application *</td>
<td></td>
</tr>
<tr>
<td>Animal Science 1 +</td>
<td></td>
</tr>
<tr>
<td>Aquaculture +</td>
<td></td>
</tr>
<tr>
<td>Biology-Agricultural Science</td>
<td></td>
</tr>
</tbody>
</table>

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science 2 *</td>
<td></td>
</tr>
<tr>
<td>Equine Science 2</td>
<td></td>
</tr>
</tbody>
</table>

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTE Internship</td>
<td></td>
</tr>
<tr>
<td>Apprenticeship</td>
<td></td>
</tr>
</tbody>
</table>

**POSTSECONDARY:** There are many options for education and training beyond high school.

- Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)
- UtahMajors.org: [Majors Guide](http://utahmajors.org)

* concurrent enrollment course  + recommended explorer course

### 1-2 Year Certificate
- Artificial Inseminator
- Livestock Auctioneer
- Shipping Coordinator

### 2-Year Associate Degree
- Herdsman
- Livestock Buyer
- Veterinary Assistant/Technologist and Technician

### 4-Year Bachelor’s Degree
- Animal Nutrition Specialist
- CTE Teacher
- Farm/Ranch Manager

---

**Student Testimonial**

“I took many CTE classes in high school that were beneficial in preparation for my college education to become a veterinary technician. I have a passion for animals and their well-being and want to pursue a career in agriculture.”

Karlie Ault
American Fork High School

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Agriculture, Food & Natural Resources**
UtahCTE.org: [Fact Sheet](http://UtahCTE.org)
Department of Workforce Services
Utah Occupational Explorer

**FFA**
is the Career and Technical Student Organization (CTSO) for students in the Animal & Veterinary Science Career Pathway.
FFA.org | UtahFFA.org
Utah FFA flyer

---

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

---

Utah Career and Technical Education
Career Pathway Chart
2022-2023 School Year

Published January 2022
Revised February 2022
ADA Compliant February 2022
Career Cluster: Agriculture, Food & Natural Resources

Career Pathway: Food Science, Dietetics & Nutrition

JUNIOR HIGH / MIDDLE SCHOOL
College and Career Awareness
FCS 6th Grade
FCS Exploration

HIGH SCHOOL
EXPLORER COURSES: Choose one or more of the following courses.
Food and Nutrition +
Human Development *
Medical Anatomy and Physiology *

CONCENTRATOR COURSES: To be a concentrator you must pass the following course AND one explorer course.
Dietetics and Nutrition 1

COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
Dietetics and Nutrition 2
Food Science
Foundations of Nutrition *

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
> Food Protections Manager
> Food Inspector Assistant
> Food Sanitation Coordinator

2-Year Associate Degree
> Research and Development Technician

4-Year Bachelor’s Degree
> CTE Teacher
> Dietitian/Nutritionist
> Food Scientist

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
“Participating in a CTE Internship helped me to experience the reality of being a dietitian. I participated in a number of activities, including recipe construction, consultations, and food preparation.”
Melissa DeFriez
Sky View High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES
Agriculture, Food & Natural Resources
UtahCTE.org: Fact Sheet
Utah Occupational Explorer

FCCLA
is the Career and Technical Student Organization (CTSO) for students in the Food Science, Dietetics & Nutrition Career Pathway.
FCCLAIrc.org | UtahFCCLA.org
Utah FCCLA flyer
# Career Pathway: Natural Resource Science

## JUNIOR HIGH / MIDDLE SCHOOL

- College and Career Awareness

## HIGH SCHOOL

### EXPLORER COURSES: Choose one or more of the following courses.

- Agricultural Biotechnology
- Agricultural Science 1
- Agricultural Science and Technology Application *
- Aquaculture +
- Biology-Agricultural Science

### CONCENTRATOR COURSES: To be a concentrator you must pass the following course AND one explorer course.

- Natural Resource Science 2 *

### COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

- CTE Internship
- Apprenticeship

### POSTSECONDARY: There are many options for education and training beyond high school.

- Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)
- Utah Majors.org: [Majors Guide](http://UtahMajors.org)

* 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**
  - Firefighter
  - Heavy Equipment Operator
  - Pesticide Handler/Applicator

- **2-Year Associate Degree**
  - Arborist
  - Fisheries Technician
  - Forestry Technician

- **4-Year Bachelor’s Degree**
  - CTE Teacher
  - Conservation Officer/Scientist
  - Wildlife Biologist

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](http://UtahCTE.org)

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

---

## Student Testimonial

"I enrolled in all of the CTE courses in the Natural Resource Science Pathway. The courses added depth to my understanding. Summer Ag enhanced my practical knowledge in the field. All of this together helped me along my planned path to reach my personal and occupational goals."

Cache Bisel
South Summit High School

## LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Agriculture, Food & Natural Resources**

UtahCTE.org: [Fact Sheet](http://UtahCTE.org)  
Department of Workforce Services  
[Utah Occupational Explorer](http://UtahOccupationalExplorer)

## FFA

is the Career and Technical Student Organization (CTSO) for students in the Natural Resource Science Career Pathway.

[FFA.org](http://FFA.org)  |  [UtahFFA.org](http://UtahFFA.org)

Utah FFA flyer

---

012005-BD  
Published January 2022  
Revised February 2022  
ADA Compliant February 2022
# Career Pathway: Plant Science

## Career Cluster: Agriculture, Food & Natural Resources

### Junior High / Middle School
- College and Career Awareness

### High School

#### Explorer Courses
- Choose one or more of the following courses.
  - Agricultural Biotechnology
  - Agricultural Science 1
  - Agricultural Science and Technology Application *
  - Business Leadership 1 *
  - Biology-Agricultural Science
  - Business Communication 1 *
  - Plant and Soil Science 1 *
  - Agricultural Science 1
  - Business Communication 2
  - Agriculture, Intro
  - Business Communication 1

#### Concentrator Courses
- To be a concentrator you must pass one of the following courses AND one explorer course.
  - Floriculture
  - Landscape Architecture, Intro
  - Sustainable Urban Agriculture
  - Landscape Management
  - Floriculture and Greenhouse Mgmt.
  - Nursery Operation
  - Plant and Soil Science 2
  - Plant and Soil Science 2

#### Completer Courses
- To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
  - Floriculture, Advanced
  - Greenhouse Management
  - Landscape Management *
  - Greenhouse Management

### CTE Internship/Apprenticeship

#### Postsecondary
- There are many options for education and training beyond high school.
  - Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)
  - UtahMajors.org: [Majors Guide](http://UtahMajors.org)

* 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Crop Scout</td>
<td>&gt; Arborist</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; Irrigation Specialist</td>
<td>&gt; Landscape Technician</td>
<td>&gt; Crop Advisor</td>
</tr>
<tr>
<td>&gt; Pesticide Handler/Applicator</td>
<td>&gt; Turf Manager</td>
<td>&gt; Landscape Designer/Architect</td>
</tr>
</tbody>
</table>

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](http://UtahMajors.org)

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

---

### Student Testimonial

“I took my first agriculture class, which everyone assumes is strictly about farm animals, and it introduced me to plant biology. The classes took place mostly in the school greenhouse, where I learned to grow plants and flowers from seeds. This is where I found my passion.”

Madyson Smith
Sky View High School

---

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

#### Agriculture, Food & Natural Resources
- UtahCTE.org: [Fact Sheet](http://UtahCTE.org)
- Department of Workforce Services [Utah Occupational Explorer](http://UtahMajors.org)

### FFA

FFA is the Career and Technical Student Organization (CTSO) for students in the Plant Science Career Pathway.
- [FFA.org](http://FFA.org) | [UtahFFA.org](http://UtahFFA.org)
- [Utah FFA flyer](http://UtahFFA.org)

---

Published January 2022
Revised February 2022
ADA Compliant February 2022
Utah Career and Technical Education
Career Pathway Chart
2022-2023 School Year

Career Cluster: Architecture & Construction

Career Pathway: Architectural Design (CAD)

<table>
<thead>
<tr>
<th>JUNIOR HIGH / MIDDLE SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Awareness</td>
<td></td>
</tr>
<tr>
<td>Exploring Technology</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPPORTING COURSES:</td>
<td>Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)</td>
</tr>
<tr>
<td>Secondary Math 2</td>
<td></td>
</tr>
<tr>
<td>EXPLORE COURSES:</td>
<td>Choose one or more of the following courses.</td>
</tr>
<tr>
<td>CAD Architectural Design 1</td>
<td>Construction Trades Foundation</td>
</tr>
<tr>
<td>Carpentry 1</td>
<td>Electrician 1</td>
</tr>
<tr>
<td>Construction Technology</td>
<td>Plumbing 1</td>
</tr>
<tr>
<td>CONCENTRATOR COURSES:</td>
<td>To be a concentrator you must pass the following course AND one explorer course.</td>
</tr>
<tr>
<td>CAD Architectural Design 2</td>
<td></td>
</tr>
<tr>
<td>COMPLETER COURSES:</td>
<td>To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.</td>
</tr>
<tr>
<td>CAD Architectural Design 3</td>
<td></td>
</tr>
<tr>
<td>CTE Internship</td>
<td>Apprenticeship</td>
</tr>
<tr>
<td>POSTSECONDARY:</td>
<td>There are many options for education and training beyond high school.</td>
</tr>
<tr>
<td>Utah System of Higher Education: ushe.edu (Utah’s public colleges and universities)</td>
<td>UtahMajors.org: Majors Guide</td>
</tr>
</tbody>
</table>

* concurrent enrollment course  + recommended explorer course

<table>
<thead>
<tr>
<th>HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are several options for education and training beyond high school, depending on your career goals.</td>
</tr>
<tr>
<td>1-2 Year Certificate</td>
</tr>
<tr>
<td>&gt; Civil Drafter</td>
</tr>
<tr>
<td>&gt; Civil Drafter</td>
</tr>
<tr>
<td>&gt; Civil Engineer</td>
</tr>
</tbody>
</table>

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**

“As a freshman in high school, I was unsure what career path I should focus on. Because of this, I ended up taking a wide variety of courses and finding a passion in designing house plans using the computer. I have chosen to focus on structural and architectural design technology.”

Jaxon Schiess
Wasatch High School

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Architecture & Construction**
UtahCTE.org: [Fact Sheet](#)
Department of Workforce Services[ Utah Occupational Explorer](#)

**TSA**
is the Career and Technical Student Organization (CTSO) for students in the Architectural Design (CAD) Career Pathway.
[TSAnet.org](#) | [UtahTSA.org](#)
Utah TSA flyer
## Career Pathway: Construction & Structural Systems

### JUNIOR HIGH / MIDDLE SCHOOL

College and Career Awareness

Exploring Technology

### 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>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1010</td>
<td>Entrepreneurship *</td>
</tr>
<tr>
<td>Math 1050</td>
<td></td>
</tr>
</tbody>
</table>

**EXPLORER COURSES:** Choose one or more of the following courses.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD Architectural Design 1 * +</td>
</tr>
<tr>
<td>Construction Management 1 +</td>
</tr>
<tr>
<td>Construction Technology +</td>
</tr>
</tbody>
</table>

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentry 1 *</td>
</tr>
<tr>
<td>Construction Management 2</td>
</tr>
<tr>
<td>Electrician 1 *</td>
</tr>
<tr>
<td>Plumbing 1</td>
</tr>
</tbody>
</table>

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentry 2 *</td>
</tr>
<tr>
<td>Construction Management 3</td>
</tr>
<tr>
<td>Electrician 2</td>
</tr>
<tr>
<td>Plumbing 2</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical and Electronics Engineering Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipeliner (Journey Level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumber (Journey Level)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carpenter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Drafter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTE Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**The CTE classes I have taken** have led me to see that I am interested in a career in construction. With the CTE classes I have learned many skills needed to go farther in my career. I have learned that I like framing, shingling, and now I found out I like doing the finish mud on sheet rock. Once I finish my schooling, I will be able to get a job that I will enjoy and that I can improve throughout my life.”

* Tyler Stettler  
  Murray High School

---

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Architecture & Construction**

UtahCTE.org: [Fact Sheet](#)  
Department of Workforce Services  
[Utah Occupational Explorer](#)  
[UAE Pathways](#)

---

### SkillsUSA

is the Career and Technical Student Organization (CTSO) for students in the Construction & Structural Systems Career Pathway.  
[SkillsUSA.org](https://www.skillsusa.org)  
[UtahSkillsUSA.org](https://www.utahskillsusa.org)  
[SkillsUSA flyer](#)

---

**SkillsUSA**
Utah Career and Technical Education
Career Pathway Chart
2022-2023 School Year

Career Cluster: Architecture & Construction

Career Pathway: Interior Design

JUNIOR HIGH / MIDDLE SCHOOL
College and Career Awareness

FCS 6th Grade
FCS Exploration

HIGH SCHOOL

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

EXPLORER COURSES: Choose one or more of the following courses.
Business Communication 1 *
CAD Architectural Design 1 *
Digital Media 1 *

CONCENTRATOR COURSES: To be a concentrator you must pass the following course AND one explorer course.
Interior Design 2 *

COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
Interior Design 3
Sewing Construction and Textiles 3

CTE Internship

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.

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
</table>
| 24 or more | N/A | > Photo Stylist | > Architect  
> CTE Teacher  
> Interior Designer  
> Sales Manager |

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
"The most influential decision I made during high school was to participate in a CTE internship. The path towards interior design began with my quick start into the field through my internship. Because my decision was made during high school, I didn’t have to waste thousands of dollars in tuition trying to decide on a major.”

Paige Kirschbaum
American Fork High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES
Architecture & Construction
UtahCTE.org: Fact Sheet
Department of Workforce Services Utah Occupational Explorer

FCCLA
is the Career and Technical Student Organization (CTSO) for students in the Interior Design Career Pathway.
FCCLAinc.org | UtahFCCLA.org
Utah FCCLA flyer

Published January 2022
Revised February 2022
ADA Compliant February 2022
Career Cluster: Arts, Audio/Visual Technology & Communications

Career Pathway: Broadcasting & Digital Media

JUNIOR HIGH / MIDDLE SCHOOL
College and Career Awareness

HIGH SCHOOL

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

<table>
<thead>
<tr>
<th>Drama</th>
<th>Film Making</th>
<th>Music Theater</th>
<th>Photography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing 1</td>
<td>Marketing 1</td>
<td></td>
<td>Painting</td>
</tr>
</tbody>
</table>

EXPLORER COURSES: Choose one or more of the following courses.

| 3D Graphics * + | Computer Science Principles * + | Screen Printing Technology * + |
| AR/VR * +       | Digital Media 1 * +             | Web Development 1 * +          |
| Computer Programming 1 * + | Digital Print Design * + |

CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.

| 3D Animation 1 * + | Digital Media 2 * | Video Production 1 * |
| Digital Audio 1   | TV Broadcasting 1 |

COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

| 3D Animation 2 | Digital Media Advanced * | Video Production 2 * |
| Digital Audio 2 | TV Broadcasting 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

> Camera Operator
> Designer
> Graphic Artist
> Videographer Editor
> Audio Technician
> Audio Video Equipment Tech.
> Broadcast Technician
> Production Specialist
> CTE Teacher
> Audio Engineer
> Motion Graphic Artist
> Producer

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
“The CTE courses have helped me focus, get experience, and gain an understanding of the dedication and work required to obtain my goal. These classes have also helped me make the right choice to continue my education.”

Marian Vega
Box Elder High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES
Arts, Audio/Visual Technology & Communications
UtahCTE.org: Fact Sheet
Department of Workforce Services
Utah Occupational Explorer

SkillsUSA
is the Career and Technical Student Organization (CTSO) for students in the Broadcasting & Digital Media Career Pathway.
SkillsUSA.org | UtahSkillsUSA.org
SkillsUSA flyer
Career Cluster: Arts, Audio/Visual Technology & Communications

Career Pathway: Fashion Apparel & Textiles

| JUNIOR HIGH / MIDDLE SCHOOL |  |
|------------------------------|  |
| College and Career Awareness |  |
| FCS 6th Grade |  |
| FCS Exploration |  |

| HIGH SCHOOL |  |
|-------------|  |
| SUPPORTING COURSES: Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway) |  |
| Entrepreneurship |  |
| EXPLORER COURSES: Choose one or more of the following courses. |  |
| Digital Media 1 * | Screen Printing Technology * |
| Sports and Outdoor Design 1 * + | Sewing Construction and Textiles 1 + |
| Fashion Design Studio * + |  |
| CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course. |  |
| Sports and Outdoor Design 2 * | Sewing Construction and Textiles 2 |
| Fashion Design Merchandising |  |
| COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway. |  |
| Textile Technology | Sewing Construction and Textiles 3 |
| Fashion Merchandising, Advanced |  |
| 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. |  |
| COLLEGE 24-or more |  |
| 1-2 Year Certificate |  |
| > Graphic Designer |  |
| 2-Year Associate Degree |  |
| > Fashion Design and Merchandising |  |
| 4-Year Bachelor’s Degree |  |
| > CTE Teacher |  |
| > Fashion Designer |  |
| > Fashion Illustrator |  |
| > Textile Scientist |  |

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

“The information I learned from the CTE classes provided me with a knowledge base about the theories and application of fashion design. I found it exciting and motivating to be able to take classes in high school that fulfilled my passions.”

Tyllar Hubbard
Herriman High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Arts, Audio/Visual Technology & Communications
UtahCTE.org: Fact Sheet
Department of Workforce Services
Utah Occupational Explorer

FCCLA is the Career and Technical Student Organization (CTSO) for students in the Fashion Apparel & Textiles Career Pathway.
FCCLAINC.org | UtahFCCLA.org
Utah FCCLA flyer
Utah Career and Technical Education
Career Pathway Chart
2022-2023 School Year

Career Cluster: Arts, Audio/Visual Technology & Communications

Career Pathway: Graphic Design & Communication

<table>
<thead>
<tr>
<th>JUNIOR HIGH / MIDDLE SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Awareness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPPORTING COURSES:</td>
</tr>
<tr>
<td>Drawing 1</td>
</tr>
<tr>
<td>Entrepreneurship *</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPLORER COURSES:</th>
<th>Choose one or more of the following courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Art 1 * +</td>
<td>Digital Print Design *</td>
</tr>
<tr>
<td>Digital Media 1 * +</td>
<td>Screen Printing Technology *</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONCENTRATOR COURSES:</th>
<th>To be a concentrator you must pass one of the following courses AND one explorer course.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Art 2 *</td>
<td>Commercial Photography 1 *</td>
</tr>
<tr>
<td>Production Graphics 1 *</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPLETER COURSES:</th>
<th>To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Art 3</td>
<td>Commercial Photography 2</td>
</tr>
<tr>
<td>Production Graphics 2</td>
<td></td>
</tr>
</tbody>
</table>

| CTE Internship | Apprenticeship |

<table>
<thead>
<tr>
<th>POSTSECONDARY:</th>
<th>There are many options for education and training beyond high school.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utah System of Higher Education:</td>
<td>ushe.edu (Utah’s public colleges and universities)</td>
</tr>
<tr>
<td>UtahMajors.org:</td>
<td>Majors Guide</td>
</tr>
</tbody>
</table>

* 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Camera Operator</td>
<td>&gt; Graphic Artist</td>
<td>&gt; Art Director</td>
</tr>
<tr>
<td>&gt; Commercial Photographer</td>
<td>&gt; UX/UI Designer</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td></td>
<td>&gt; Web Designer</td>
<td>&gt; Commercial Designer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Product Developer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Web/App Developer</td>
</tr>
</tbody>
</table>

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**

“To reach my goal of becoming a graphic designer and animator, I will need to gain both an education and extensive experience. The CTE classes have given me the preparation and foundation for college that I will need to stay one step ahead in order to succeed.”

Lauren Yancey
Hunter High School

---

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Arts, Audio/Visual Technology & Communications**

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 Graphic Design & Communication Career Pathway.

FBLA-PBL.org | Utah-FBLA-PBL.org | Utah FBLA flyer
SkillsUSA.org | UtahSkillsUSA.org | SkillsUSA flyer
TSAweb.org | UtahTSA.org | Utah TSA flyer
## Career Cluster: Business, Finance & Marketing

### Career Pathway: Accounting & Finance

#### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness

#### HIGH SCHOOL

<table>
<thead>
<tr>
<th>EXPLORER COURSES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 1 * +</td>
<td>Business Math and Personal Finance *</td>
<td>Marketing 1 *</td>
</tr>
<tr>
<td>Business Communication 1 *</td>
<td>Customer Service *</td>
<td>Real Estate</td>
</tr>
<tr>
<td>Business Communication 2</td>
<td>Economics * +</td>
<td>Sports and Entertainment Marketing</td>
</tr>
<tr>
<td>Business Law</td>
<td>Entrepreneurship *</td>
<td>Web Development 1 *</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONCENTRATOR COURSES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 2 *</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPLETER COURSES</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business and Marketing Capstone</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CTE Internship</th>
<th>Apprenticeship</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSTSECONDARY:</td>
<td></td>
</tr>
<tr>
<td>There are many options for education and training beyond high school.</td>
<td></td>
</tr>
</tbody>
</table>

| 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.

<table>
<thead>
<tr>
<th>Certificates</th>
<th>Associate Degrees</th>
<th>Bachelor’s Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>&gt; Accountant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Auditor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Financial Manager</td>
</tr>
</tbody>
</table>

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

**"Because of my CTE Internship, I am going to be more prepared when I go into the field of accounting. I will be able to understand and apply it to real hands-on learning experiences."**

[Brayden Austin](#)  
Sky View High School

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Business, Finance & Marketing**

UtahCTE.org: [Fact Sheet](#)  
Department of Workforce Services  
[Utah Occupational Explorer](#)

### FBLA

is the Career and Technical Student Organization (CTSO) for students in the Accounting & Finance Career Pathway.  
[FBLA-PBL.org](#) | [Utah-FBLA-PBL.org](#)  
[Utah FBLA flyer](#)
## Career Cluster: Business, Finance & Marketing

### Career Pathway: Business Administration

#### JUNIOR HIGH / MIDDLE SCHOOL

- College and Career Awareness
- Digital Literacy
- Exploring Business and Marketing
- Word Processing

#### HIGH SCHOOL

**EXPLORER COURSES:** Choose one or more of the following courses.

- Accounting 1 *
- Business Communication 1 *
- Business Communication 2
- Business Law *

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

- Business Management *
- Business Leadership 1 *
- Business Leadership 2

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

- Business and Marketing Capstone
- CTE Internship
- Apprenticeship

**POSTSECONDARY:** There are many options for education and training beyond high school.

- Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)
- UtahMajors.org: [Majors Guide](http://utahmajors.org)

* concurrent enrollment course  + recommended explorer course

### HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>&gt; Account Representative</td>
<td>&gt; Budget Analyst</td>
</tr>
<tr>
<td></td>
<td>&gt; Consumer Advocate</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td></td>
<td>&gt; Dispute Resolution Analyst</td>
<td>&gt; Credit Counselor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Financial Manager</td>
</tr>
</tbody>
</table>

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](http://credentialsofvalue.org)

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

---

### Student Testimonial

**“Taking Business Management sparked my interest to pursue a business degree. Taking advantage of the CTE program ultimately helped to pinpoint my career trajectory.”**

Andrew Nadauld
Murray High School

---

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Business, Finance & Marketing**

UtahCTE.org: [Fact Sheet](http://utahcte.org)

Department of Workforce Services
Utah Occupational Explorer

---

### DECA | FBLA

are the Career and Technical Student Organizations (CTSO) for students in the Business Administration Career Pathway.

[DECAdirect.org](http://deca.org) | [UtahDECA.org](http://utahdeca.org) | [Utah DECA flyer](http://utahdeca.org/flyer)

[FBLA-PBL.org](http://fbla-pbl.org) | [Utah-FBLA-PBL.org](http://utahfbla-pbl.org) | [Utah FBLA flyer](http://utahfbla.org/flyer)

---

042003-RR

Published January 2022
Revised February 2022
ADA Compliant February 2022
Utah Career and Technical Education
Career Pathway Chart
2022-2023 School Year

Career Cluster: Business, Finance & Marketing

Career Pathway: Business Information Management

<table>
<thead>
<tr>
<th>JUNIOR HIGH / MIDDLE SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Awareness</td>
<td></td>
</tr>
<tr>
<td>Creative Coding</td>
<td>Exploring Business and Marketing</td>
</tr>
<tr>
<td>Digital Literacy</td>
<td>Word Processing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPLORER COURSES: Choose one or more of the following courses.</td>
<td></td>
</tr>
<tr>
<td>Accounting 1 *</td>
<td>Business Law</td>
</tr>
<tr>
<td>Business Communication 1 * +</td>
<td>Business Math and Personal Finance *</td>
</tr>
<tr>
<td>Business Communication 2</td>
<td>Customer Service * +</td>
</tr>
</tbody>
</table>

| CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course. |  |
| Business Office Specialist * |  |
| Digital Business Applications * |  |

| COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway. |  |
| Business and Marketing Capstone |  |

| 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

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>Desktop Publisher</td>
<td>CTE Teacher</td>
</tr>
<tr>
<td></td>
<td>Legal Assistant/Paralegal</td>
<td>General and Operations Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Web Developer</td>
<td>Marketing Manager</td>
<td></td>
</tr>
</tbody>
</table>

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](http://credentialsofvalue.org)

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

Student Testimonial

"The [Microsoft Office Specialist] certifications helped me land my current job at Lowe’s Home Improvement. I am the manager there and perform all of the administrative functions."

Andrew McLay
Murray High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Business, Finance & Marketing
UtahCTE.org: [Fact Sheet](http://factsheet.org)
Department of Workforce Services
Utah Occupational Explorer

FBLA

is the Career and Technical Student Organization (CTSO) for students in the Business Information Management Career Pathway.

[FBLA-PBL.org](http://FBLA-PBL.org) | [Utah-FBLA-PBL.org](http://Utah-FBLA-PBL.org)

Utah FBLA flyer

FBLA

Published January 2022
Revised February 2022
ADA Compliant February 2022
### Career Cluster: Business, Finance & Marketing

### Career Pathway: Marketing

**JUNIOR HIGH / MIDDLE SCHOOL**

<table>
<thead>
<tr>
<th>College and Career Awareness</th>
<th>Exploring Business and Marketing</th>
<th>Word Processing</th>
</tr>
</thead>
</table>

**HIGH SCHOOL**

<table>
<thead>
<tr>
<th>EXPLORER COURSES: Choose one or more of the following courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 1 *</td>
</tr>
<tr>
<td>Business Communication 1 *</td>
</tr>
<tr>
<td>Business Communication 2 +</td>
</tr>
<tr>
<td>Business Law</td>
</tr>
<tr>
<td>Business Math and Personal Finance *</td>
</tr>
</tbody>
</table>

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

| Digital Marketing * |
| Retailing * |

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

| Business and Marketing Capstone |

**CTE Internship** | Apprenticeship

**POSTSECONDARY:** There are many options for education and training beyond high school.

| Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities) | UtahMajors.org: [Majors Guide](http://UtahMajors.org) |

* 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>&gt; Art Director</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Editor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Graphic Designer</td>
</tr>
</tbody>
</table>

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](http://UtahCTE.org)

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

---

**Student Testimonial**

“The business and marketing courses I have taken in high school have really influenced me in the direction I would like to go for my future education and career.”

Rory James Pollard
Fremont High School

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Business, Finance & Marketing**

UtahCTE.org: [Fact Sheet](http://UtahCTE.org)

Department of Workforce Services
Utah Occupational Explorer

**DECA**

is the Career and Technical Student Organization (CTSO) for students in the Marketing Pathway.

[DECAdirect.org](http://DECAdirect.org) | [UtahDECA.org](http://UtahDECA.org) | Utah DECA flyer
Career Cluster: Computer Science & Information Technology

Career Pathway: Cybersecurity

JUNIOR HIGH / MIDDLE SCHOOL

- College and Career Awareness
- Computer Science Investigations: Python 1, Intro
- Creative Coding: Python 2, Intro

HIGH SCHOOL

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

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Senior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Issues</td>
<td>Math 1050</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>Secondary Math 3</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>Secondary Math 2</td>
</tr>
</tbody>
</table>

EXPLORER COURSES: Choose one or more of the following courses.

- Computer Programming 1 *
- Computer Science Principles *
- Database Development *
- Exploring Computer Science
- Information Technology, Intro *
- Linux Fundamentals *

CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.

- Principles of Cyber Defense and Ethics *

COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

- Cybersecurity Forensics *
- 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

- Computer Technician
- Cybersecurity Operations
- Security Specialist

2-Year Associate Degree

- Computer Network Support
- Cybersecurity Technical Writer
- Security Architect
- Vulnerability Analysis

4-Year Bachelor’s Degree

- CTE Teacher
- Computer and Information Systems Manager
- Security App. Programmer
- Security Engineer

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](http://cte.utah.gov/certifications)

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

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 Cybersecurity 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

Student Testimonial

“Getting a degree will help me to pursue my goal of working as a computer programmer at a large company. CTE classes prepared me by showing me what I would actually be doing in the different job fields and how I would apply the information that I learned in class.”

Aaron Montoya
Jordan High School

Published January 2022
Revised February 2022
ADA Compliant February 2022
# Career Cluster: Computer Science & Information Technology

## Career Pathway: Information Technology Systems

<table>
<thead>
<tr>
<th>JUNIOR HIGH / MIDDLE SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Awareness</td>
<td></td>
</tr>
<tr>
<td>Computer Science Investigations</td>
<td>Python 1, Intro</td>
</tr>
<tr>
<td>Creative Coding</td>
<td>Python 2, Intro</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUPPORTING COURSES:</strong> Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)</td>
<td></td>
</tr>
<tr>
<td>Math 1050</td>
<td>Secondary Math 2</td>
</tr>
<tr>
<td><strong>EXPLORER COURSES:</strong> Choose one or more of the following courses.</td>
<td></td>
</tr>
<tr>
<td>Exploring Computer Science</td>
<td>Network Fundamentals *</td>
</tr>
<tr>
<td>Computer Programming 1 *</td>
<td>Information Technology, Intro *</td>
</tr>
<tr>
<td>Computer Science Principles 1 *</td>
<td>Web Development 1 *</td>
</tr>
<tr>
<td>Database Development *</td>
<td>Robotics 1</td>
</tr>
<tr>
<td><strong>CONCENTRATOR COURSES:</strong> To be a concentrator you must pass the following course AND one explorer course.</td>
<td></td>
</tr>
<tr>
<td>Computer Systems 1</td>
<td>Cloud Computing 1</td>
</tr>
<tr>
<td><strong>COMPLETER COURSES:</strong> To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.</td>
<td></td>
</tr>
<tr>
<td>Computer Systems 2</td>
<td>Cloud Computing 2</td>
</tr>
</tbody>
</table>

**CTE Internship** | **Apprenticeship**

**POSTSECONDARY:** There are many options for education and training beyond high school.

Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)  
Utah Majors.org: [Majors Guide](http://UtahMajors.org)

* concurrent enrollment course  + recommended explorer course

**HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING**

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Computer Service Technician</td>
<td>&gt; Computer Network Technician</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; Data Center Technician</td>
<td>&gt; Computer Systems Manager</td>
<td>&gt; Computer and Information Systems Manager</td>
</tr>
<tr>
<td>&gt; Service Desk Analyst</td>
<td>&gt; Database Administrator</td>
<td>&gt; Computer Network Architect</td>
</tr>
<tr>
<td></td>
<td>&gt; IT Coordinator</td>
<td>&gt; Network Engineer</td>
</tr>
</tbody>
</table>

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](http://Credentials%20of%20Value)

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

---

**Student Testimonial**

“This program helped me earn many industry-level certifications including CompTIA, IT Strata Fundamentals, IC3, Microsoft Technical Associate (MTA), OS Fundamentals, and Security and Academy of Information Technology certifications.”

Parker Kingsford  
West Jordan High School

---

LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Computer Science & Information Technology**

UtahCTE.org: [Fact Sheet](http://Fact%20Sheet)

Department of Workforce Services  
[Utah Occupational Explorer](http://UtahOccupational%20Explorer)

---

FBLA | SkillsUSA | TSA

are the Career and Technical Student Organizations (CTSO) for students in Information Technology Systems 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

---

Published January 2022  
Revised February 2022  
ADA Compliant February 2022

---

112002-KY
Career Cluster: Computer Science & Information Technology

Career Pathway: Programming & Software Development

JUNIOR HIGH / MIDDLE SCHOOL
College and Career Awareness
Computer Science Investigations
Creative Coding
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 *
Math 1050

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 *
Math 1050

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
Algorithms and Data Structures *

CTE Internship

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
> Entry Level Programmer

2-Year Associate Degree
> Computer Systems Analyst
> Game Play Programmer
> Software Developer

4-Year Bachelor’s Degree
> CTE Teacher
> Software Engineer
> Sys Software Programmer

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

Published January 2022
Revised February 2022
ADA Compliant February 2022
Career Cluster: Computer Science & Information Technology

Career Pathway: Web Development

JUNIOR HIGH / MIDDLE SCHOOL

<table>
<thead>
<tr>
<th>College and Career Awareness</th>
<th>Python 1, Intro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Investigations</td>
<td>Python 2, Intro</td>
</tr>
<tr>
<td>Creative Coding</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Business Leadership 1 *</th>
<th>Secondary Math 2</th>
<th>World Civilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 1050</td>
<td>Secondary Math 3</td>
<td>World Geography</td>
</tr>
</tbody>
</table>

EXPLORER COURSES: Choose one or more of the following courses.

<table>
<thead>
<tr>
<th>Computer Science Principles *</th>
<th>Digital Media 1 *</th>
<th>Exploring Computer Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Database Development *</td>
<td>Entrepreneurship *</td>
<td>Information Technology, Intro *</td>
</tr>
</tbody>
</table>

CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.

| HTML 5 Application Development Fundamentals * |
| Web Development 2 |

COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

| UX/UI and Quality Assurances |
| Web Development Capstone |

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

| > Graphic Artist |
| > Web Analyst |
| > Web Technician |

2-Year Associate Degree

| > Web Developer |

4-Year Bachelor’s Degree

| > CTE Teacher |
| > Full Stack Developer |
| > UI/UX Designer |

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 go to Utah Valley University and obtain an associate degree in computer technology with the focus on Web design. CTE courses have provided experience in several areas that would not be available without CTE.”

Zachary Crocker
Springville 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 Web 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

112004-KY

Published January 2022
Revised February 2022
ADA Compliant February 2022
## Career Cluster: Education & Training

### Career Pathway: Pre-K: Early Childhood Education

#### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness
- FCS 6th Grade
- FCS Exploration

#### HIGH SCHOOL

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

**EXPLORER COURSES:** Choose one or more of the following courses.
- Child Development
- Early Childhood Education 1 *
- Food and Nutrition

**CONCENTRATOR COURSES:** To be a concentrator you must pass the following course AND one explorer course.
- Early Childhood Education 2 *

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- Early Childhood Education 3

**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

---

**Student Testimonial**

"The CTE classes I have taken throughout high school have introduced me to my dream career path. After taking child development my sophomore year, I decided I wanted a career working with children. CTE classes helped me figure out what career I want in the future."

Kayla Clopten
Keams High School

---

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Education & Training**

UtahCTE.org: Fact Sheet

Department of Workforce Services
Utah Occupational Explorer

---

**EdRising | FCCLA**

are the Career and Technical Student Organizations (CTSOs) for students in the Pre-K: Early Childhood Education Career Pathway.

FCCLAINc.org | UtahFCCLA.org
Utah FCCLA flyer
EducatorsRising.org
Utah Educators Rising flyer

---

Utah CTE classes are open to all qualified students without regard to race, color, national origin, sex, disability, or age.
Career Cluster: Education & Training

Career Pathway: K-12: Teaching as a Profession

JUNIOR HIGH / MIDDLE SCHOOL

College and Career Awareness

Digital Literacy

HIGH SCHOOL

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

- Business Communication 2
- Psychology
- Business Office Specialist *
- Web Development 1 *

**EXPLORER COURSES:** Choose one or more of the following courses.

- Business Communication 1 *
- English 1010
- Human Development *
- Math 1050
- Teaching as a Profession 1 +

**CONCENTRATOR COURSES:** To be a concentrator you must pass the following course AND one explorer course.

- Teaching as a Profession 2

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

- Teaching as a Profession 3 *
- 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.

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Teacher Assistant/Para Professional</td>
<td>&gt; Preschool Teacher</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; Elementary School Teacher</td>
<td>&gt; Kindergarten Teacher</td>
<td>&gt; Elementary School Teacher</td>
</tr>
<tr>
<td>&gt; Middle School Teacher</td>
<td>&gt; Secondary School Teacher</td>
<td>&gt; Special Education Teacher</td>
</tr>
</tbody>
</table>

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 career goal is to become a high school welding teacher. My plan is to attend Utah Valley University and get a bachelor’s degree in education. CTE classes have changed my life. All of these classes have taught me skills that I can apply in life, some of which I have already applied in the workforce."

Miguel Lopez
Provo High School

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Education & Training**

UtahCTE.org: [Fact Sheet](#)
Department of Workforce Services [Utah Occupational Explorer](#)

**Educators Rising**

is the Career and Technical Student Organization (CTSO) for students in the K-12: Teaching as a Profession Career Pathway.

[EducatorsRising.org](#)
[Utah Educators Rising flyer](#)
# Career Pathway: Engineering

## JUNIOR HIGH / MIDDLE SCHOOL
- Exploring Technology

## HIGH SCHOOL

### SUPPORTING COURSES:
Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)
- Chemistry
- Physics
- Secondary Math 2

### EXPLORER COURSES:
Choose one or more of the following courses.
- CAD Architectural Design 1 *
- CAD Mechanical Design 1 *
- CAM Automated Manufacturing
- Composites 1
- Electronics 1 *
- Electronics 2 *
- Aerospace Engineering
- Engineering Principles 2 *
- Manufacturing Principles 2 *
- Electronics Equipment Assembler
- Welding Technician, Entry Level *

### CONCENTRATOR COURSES:
To be a concentrator you must pass one of the following courses AND one explorer course.
- Engineering Principles 2 *
- Manufacturing Principles 2 *
- Robotics 1 +
- Robotics Technology
- Woods 1

### COMPLETER COURSES:
To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- Electronics 3 *
- Engineering Capstone
- Automation Engineer
- CTE Teacher
- Electrical Engineer
- Electronics Drafter

## 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.

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Machine Operator</td>
<td>&gt; Electro-Mechanical Technicians</td>
<td></td>
</tr>
<tr>
<td>&gt; Production Technician</td>
<td>&gt; Electronics Equipment Assembler</td>
<td></td>
</tr>
<tr>
<td>&gt; Automation Engineer</td>
<td>&gt; CTE Teacher</td>
<td></td>
</tr>
<tr>
<td>&gt; Electrical Engineer</td>
<td>&gt; Electronics Drafter</td>
<td></td>
</tr>
</tbody>
</table>

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**

“I have always liked doing hands-on projects and thinking of different ways to make something better. With the CTE classes I was able to see whole processes, from the design stage on paper to transferring that design and idea into a computer application, then all the way to building a prototype.”

Hunter Okerlund
Fremont High School

---

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Engineering & Technology**

Utah CTE.org: [Fact Sheet](#)
Department of Workforce Services
[Utah Occupational Explorer](#)

**TSA**

is the Career and Technical Student Organization (CTSO) for students in the Engineering Career Pathway.

[TSAweb.org](#) | [UtahTSA.org](#)

[Utah TSA flyer](#)
Career Cluster: Engineering & Technology

Career Pathway: Mechanical Design (CAD)

<table>
<thead>
<tr>
<th>JUNIOR HIGH / MIDDLE SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Awareness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH SCHOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPPORTING COURSES: Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)</td>
</tr>
<tr>
<td>Secondary Math 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPLORER COURSES: Choose one or more of the following courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD Mechanical Design 1 * +</td>
</tr>
<tr>
<td>CAM Automated Manufacturing</td>
</tr>
<tr>
<td>Composites 1</td>
</tr>
<tr>
<td>Engineering Technology</td>
</tr>
<tr>
<td>Machining 1 *</td>
</tr>
<tr>
<td>Metalworking 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONCENTRATOR COURSES: To be a concentrator you must pass the following course AND one explorer course.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD Mechanical Design 2 *</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD Mechanical Design 3 *</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CTE Internship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprenticeship</td>
</tr>
</tbody>
</table>

POSTSECONDARY: There are many options for education and training beyond high school.

<table>
<thead>
<tr>
<th>Utah System of Higher Education: ushe.edu (Utah’s public colleges and universities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UtahMajors.org: Majors Guide</td>
</tr>
</tbody>
</table>

* 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>&gt; Engineering Technician</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Mechanical Drafter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Mechanical Engineering Technician</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Aerospace Engineer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; CTE Teacher</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Civil Engineer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Industrial Designer</td>
<td></td>
</tr>
</tbody>
</table>

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 training, in CTE courses in high school, prepared me for life after high school by helping me discover my love of drafting. I discovered the need for drafters in the world of engineering. I focused my CTE Pathway toward this career goal and have taken some advanced drafting classes to improve both my knowledge of the field and my employability in the field.”

Calvin Hill
Intech Collegiate High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Engineering & Technology
UtahCTE.org: [Fact Sheet](#)
Department of Workforce Services
Utah Occupational Explorer

TSA is the Career and Technical Student Organization (CTSO) for students in the Mechanical Design (CAD) Career Pathway.

[TSAweb.org](#) | [UtahTSA.org](#) | Utah TSA flyer

Published January 2022
Revised February 2022
ADA Compliant February 2022
## Career Cluster: Health Science

### Career Pathway: Health Science

#### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness

#### HIGH SCHOOL

**EXPLORER COURSES**: Choose one or more of the following courses.
- Health Science, Intro
- Human Development *
- Medical Anatomy and Physiology *

**CONCENTRATOR COURSES**: To be a concentrator you must pass one of the following courses AND one explorer course.
- Biotechnology *
- Dental Assistant
- Emergency Medical Response *
- Emergency Medical Technician *
- Exercise Science/Sports Medicine *

**COMPLETER COURSES**: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- PBMT: Health Science Capstone *
- IB Sports Exercise & Health Science SL 1
- IB Sports Exercise & Health Science SL 2
- Medical Anatomy and Physiology, Advanced
- Medical Assistant

#### POSTSECONDARY:
- There are many options for education and training beyond high school.
  - [Utah System of Higher Education](https://ushe.edu)
  - [UtahMajors.org](https://www.utahmajors.org)

* 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Clinical Lab Technician</td>
<td>&gt; Clinical Lab Technologist</td>
<td>&gt; Athletic Trainer</td>
</tr>
<tr>
<td>&gt; Certified Nurse Assistant</td>
<td>&gt; Dental Hygienist</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; Emergency Medical Technician</td>
<td>&gt; Occupational Therapy Assistant</td>
<td>&gt; Forensic Science Technician</td>
</tr>
<tr>
<td>&gt; Medical Assistant</td>
<td>&gt; Registered Nurse (RN)</td>
<td>&gt; Microbiologist</td>
</tr>
</tbody>
</table>

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](https://www.careerpathways.utah.gov/career-education/credentials)

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

---

### Student Testimonial

**“By taking the CNA and EMT courses in high school I’m better prepared to enter the workforce. These courses allowed me to gain hands-on learning and on-the-job training through CTE internships and receive instruction from actual teachers who work in the field.”**

Taylar Brown
Riverton High School

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Health Science**
UtahCTE.org: [Fact Sheet](https://www.utahcte.org)
Department of Workforce Services [Utah Occupational Explorer](https://www.occupationalexplorer.org)

### HOSA

is the Career and Technical Student Organization (CTSO) for students in the Health Science Career Pathway.

[HOSA.org](https://www.hosa.org) | [UTHOSA.wordpress.com](https://uthosa.wordpress.com)

Utah HOSA flyer
## Career Cluster: Hospitality & Tourism

### Career Pathway: Culinary Arts

#### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness
- FCS 6th Grade
- FCS Exploration

#### HIGH SCHOOL
**SUPPORTING COURSES:** Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)
- Entrepreneurship *
- Event Planning and Management
- Hospitality and Tourism *

**EXPLORER COURSES:** Choose one or more of the following courses.
- Customer Service *
- Food and Nutrition
- Culinary 1 *

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.
- Culinary 2
- ProStart® 1 *

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- Culinary 3
- ProStart® 2
- Baking and Pastry

**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

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>&gt; Baker/Pastry Chef</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td></td>
<td>&gt; Sous Chef</td>
<td>&gt; Culinary Arts Instructor</td>
</tr>
<tr>
<td></td>
<td>&gt; Restaurant Manager</td>
<td>&gt; Executive Chef</td>
</tr>
</tbody>
</table>

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**

“I’m going to further my education after high school and study how to become a pastry chef. One day I plan to open my own bakery. By taking culinary classes in high school, I will take the skills and knowledge of food that have learned to the next level and become the best pastry chef I can be.”

Marissa Muhlestein
Granger High School

---

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Hospitality & Tourism**

UtahCTE.org: [Fact Sheet](#)
Department of Workforce Services
[Utah Occupational Explorer](#)

---

**FCCLA**

is the Career and Technical Student Organization (CTSO) for students in the Culinary Arts Career Pathway.

[FCCLAn.org](#) | [UtahFCCLA.org](#)
Utah FCCLA flyer
# Career Pathway: Hospitality & Tourism

<table>
<thead>
<tr>
<th>JUNIOR HIGH / MIDDLE SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Awareness</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIGH SCHOOL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Literacy</td>
<td>Exploring Business and Marketing</td>
</tr>
</tbody>
</table>

**EXPLORER COURSES:** Choose one or more of the following courses.

- Accounting 1 *
- Business Communication 1 *
- Business Law
- Business Math and Personal Finance *

**CULINARY COURSES:**

- Culinary 1 * +
- Customer Service *

**EXPERTISE COURSES:**

- Hospitality and Tourism *
- Lodging and Recreation

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

- Event Planning and Management
- Business Communication 1 *
- Customer Service *

**COMPLETE COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

- Business and Marketing Capstone
- 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

<table>
<thead>
<tr>
<th>COLLEGE</th>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2+ or more</td>
<td>N/A</td>
<td>N/A</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; Marketing Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&gt; Meeting, Convention, and Event Planner</td>
</tr>
</tbody>
</table>

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**

“The CTE courses I took prepared me for my chosen career path. I received knowledge and training in business management and restaurant fundamentals. I would like to open my own restaurant.”

Alexis Kingery
Herriman High School

---

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Hospitality & Tourism**

UtahCTE.org: [Fact Sheet](#)

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

---

**FBLA**

is the Career and Technical Student Organization (CTSO) for students in the Hospitality & Tourism Career Pathway.

[Utah-FBLA-PBL.org](#) Utah FBLA flyer
Career Cluster: Human Services

Career Pathway: Family & Human Services

**JUNIOR HIGH / MIDDLE SCHOOL**
College and Career Awareness

**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>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Terminology *</td>
</tr>
<tr>
<td>Psychology</td>
</tr>
<tr>
<td>Sociology</td>
</tr>
</tbody>
</table>

**EXPLORER COURSES:** Choose one or more of the following courses.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Health, Intro +</td>
</tr>
<tr>
<td>Health Science, Intro</td>
</tr>
<tr>
<td>Human Development *</td>
</tr>
</tbody>
</table>

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual and Family Relationships *</td>
</tr>
<tr>
<td>Personal and Family Finance *</td>
</tr>
</tbody>
</table>

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

The courses listed below are under development. Available SY 2023-2024. NOTE: Course names may change.

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Health</td>
</tr>
<tr>
<td>Health Science</td>
</tr>
<tr>
<td>Mental &amp; Counseling Health</td>
</tr>
<tr>
<td>CTE Internship</td>
</tr>
<tr>
<td>Apprenticeship</td>
</tr>
</tbody>
</table>

**POSTSECONDARY:** There are many options for education and training beyond high school.

Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)

Utah Majors.org: [Majors Guide](http://utahmajors.org)

* 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>College Level</th>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt; Autism Technician</td>
<td>&gt; Alcohol &amp; Drug Counselor</td>
<td>&gt; Behavioral Health Specialist</td>
</tr>
<tr>
<td></td>
<td>&gt; Community Health Worker</td>
<td>&gt; Community/Social Service</td>
<td>&gt; Child Welfare Worker</td>
</tr>
<tr>
<td></td>
<td>&gt; Job Coach</td>
<td>&gt; Assistant</td>
<td>&gt; Specialist</td>
</tr>
<tr>
<td></td>
<td>&gt; Life Coach</td>
<td>&gt; Psychiatric Technician</td>
<td>&gt; Psychiatric RN</td>
</tr>
<tr>
<td></td>
<td>&gt; Peer Support Specialist</td>
<td>&gt; Licensed Vocational Nurse</td>
<td>&gt; Social Worker</td>
</tr>
<tr>
<td></td>
<td>&gt; Registered Behavior Tech.</td>
<td></td>
<td>&gt; Vocational Rehab. Worker</td>
</tr>
</tbody>
</table>

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](http://credentialsofvalue.org)

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

---

**Student Testimonial**

“I have come to love the CTE program because it provides me with the opportunity to find both my strengths and my passions. CTE classes are essential to students, like me, who grew up in less populous areas. CTE is the medium through which students display their talent. CTE classes help mold students into who they want to be.”

Andrew Grunander
Box Elder High School

**LEARN MORE ABOUT OCCUPATIONS AND WAGES**

**Human Services**

UtahCTE.org: [Fact Sheet](http://utahcte.org/fact-sheet)
Department of Workforce Services [Utah Occupational Explorer](http://utahoccupationalexplorer.org)

**FCCLA | HOSA**

is the Career and Technical Student Organization (CTSO) for the students in the Family & Human Services Career Pathway.

[FCCLAinc.org](http://fcclainc.org) | [UtahFCCLA.org](http://utahfccla.org)
Utah FCCLA flyer
[HOSON.org](http://hosa.org) | [UTHOSA.wordpress.com](http://uthosa.wordpress.com)
Utah HOSA flyer

Published January 2022
Revised February 2022
ADA Compliant February 2022
Career Cluster: Human Services

Career Pathway: Personal Care Services

Junior High / Middle School
College and Career Awareness

High School
Supporting Courses: Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)
Entrepreneurship *

Explorer Courses: Choose one or more of the following courses.
Accounting 1 *
Business Management *
Business Math and Personal Finance *

Concentrator Courses: To be a concentrator you must pass one of the following courses AND one explorer course.
Barbering * Hair Design
Basic Esthetician and Skin Care Nail Technician/Specialist Manicurist *
Cosmetology *

Completer Courses: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
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.

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Barber</td>
<td>&gt; N/A</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; Cosmetologist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Hair Designer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Manicurists and Pedicurists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Skincare Specialist (Esthetician)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
“The cosmetology CTE courses I took in high school helped teach me the basic knowledge I need to continue in the field. I learned all the tips and tricks to methods and was taught that there is more than just one way to do task.”

Alexas Walker
Tooele High School

LEARN MORE ABOUT OCCUPATIONS AND WAGES

Human Services
UtahCTE.org: Fact Sheet
Department of Workforce Services Utah Occupational Explorer

SkillsUSA is the Career and Technical Student Organization (CTSO) for the students in the Personal Care Services Career Pathway.
SkillsUSA.org | UtahSkillsUSA.org
SkillsUSA flyer

SkillsUSA
Learning that works for Utah
# Career Cluster: Law, Public Safety, Corrections & Security

## Career Pathway: Protective Services

### Junior High / Middle School
- College and Career Awareness

### High School

**Supporting Courses:** Suggested high school courses that support the Career Pathway (Courses DO NOT count towards the Pathway)
- Emergency Medical Response *
- Emergency Medical Technician *
- Medical Forensics *
- Commercial Photography 1 *
- Cybersecurity Forensics *
- Principles of Cyber Defense and Ethics

**Explorer Courses:** Choose one or more of the following courses.
- Behavioral Health, Intro +
- Criminal Justice, Intro *
- Exploring Computer Science
- Law Enforcement *
- Health Science, Intro
- Information Technology, Intro +

**Concentrator Courses:** To be a concentrator you must pass one of the following courses AND one explorer course.
- Criminal Law *
- Careers in Law Enforcement *
- Fire Science *
- Corrections *

**Completer Courses:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- CTE Internship
- Apprenticeship

**Postsecondary:** There are many options for education and training beyond high school.
- Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)
- UtahMajors.org: [Majors Guide](http://UtahMajors.org)

* concurrent enrollment course  + recommended explorer course

### High School to Postsecondary Education and Training

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Firefighter</td>
<td>N/A</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; First-Line Supervisor of Fire Fighting and Prevention Workers</td>
<td></td>
<td>&gt; Criminal Justice and Law Enforcement Teachers, postsecondary</td>
</tr>
</tbody>
</table>

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

### Student Testimonial

"Firefighting is in my blood. I love being on the scene with my grandfather and learning from him and my fellow firefighters. The pungent smell of smoke really gets me excited to get my career moving. I have never wanted anything more in my life than to be a firefighter."

Nate Buchanan
Morgan High School

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Law, Public Safety, Corrections & Security**

Utah CTE.org: [Fact Sheet](http://UtahCTE.org)

Department of Workforce Services
[Utah Occupational Explorer](http://UtahOccupationalExplorer)

### SkillsUSA

is the Career and Technical Student Organization (CTSO) for the students in the Protective Services Career Pathway.

SkillsUSA.org | UtahSkillsUSA.org
SkillsUSA flyer

SkillsUSA flyer
# Career Cluster: Manufacturing

## Career Pathway: Manufacturing & Production

### Junior High / Middle School
- College and Career Awareness
- Exploring Technology

### High School

#### Supporting Courses:
- Suggested high school course that supports the Career Pathway (Course DOES NOT count towards the Pathway)
  - Secondary Math 2

#### Explorer Courses:
- Choose one or more of the following courses.
  - Biomanufacturing 1
  - CAD Mechanical Design 1*
  - CAM Automated Manufacturing
  - Manufacturing Technology
  - Medical Technology
  - Manufacturing Principles 1
  - Plastics 1+
  - Woods 1+

#### Concentrator Courses:
- To be a concentrator you must pass one of the following courses AND one explorer course.
  - Biomanufacturing 2
  - Composites 2
  - Manufacturing Technology
  - Manufacturing Principles 1
  - Plastics 2
  - Woods 2

#### Completer Courses:
- To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
  - Woods 3
  - CTE Internship
  - Apprenticeship

### Postsecondary:
- There are many options for education and training beyond high school.
  - Utah System of Higher Education: [ushe.edu](http://ushe.edu) (Utah’s public colleges and universities)
  - UtahMajors.org: [Majors Guide](http://UtahMajors.org)

* 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Production Technician</td>
<td>N/A</td>
<td>&gt; CTE Teacher &gt; Manufacturing Engineer</td>
</tr>
</tbody>
</table>

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

"I would like a career as a manufacturing engineer and go on to pursue my own business in the manufacturing industry. CTE gave me experience for what my career will be like. CTE also [allowed me] to be able to work on the skills that I need to improve on in that specific area."

Garret Maycock
Tooele High School

---

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Manufacturing**

UtahCTE.org: [Fact Sheet](#)

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

---

### SkillsUSA | TSA

is the Career and Technical Student Organization (CTSO) for students in the Manufacturing & Production Career Pathway.

- [SkillsUSA.org](#)
  - [TSAweb.org](#)
- [UtahSkillsUSA.org](#)
  - [UtahTSA.org](#)
- SkillsUSA flyer | Utah TSA flyer

---

132107-CW

Published January 2022
Revised February 2022
ADA Compliant February 2022
Career Cluster: Manufacturing

Career Pathway: Welding & Machining

JUNIOR HIGH / MIDDLE SCHOOL
College and Career Awareness

HIGH SCHOOL
Exploring Technology

EXPLORER COURSES: Choose one or more of the following courses.
- Machining 1 *
- Metal Working 1
- Sheet Metal
- Welding Technician, Entry Level *

CONCENTRATOR COURSES: To be a concentrator you must pass one of the following courses AND one explorer course.
- Machining 2 *
- Welding Technician, Intermediate Level *

COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- Non-Destructive Testing *
- Welding-Pipe Fitting
- Welding-Structural Fitting
- Welding Technician, Advanced Level *
- 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.

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Tool and Die Maker</td>
<td>&gt; Machine Tool Technician</td>
<td>&gt; CTE Teacher</td>
</tr>
<tr>
<td>&gt; Tool Maker</td>
<td>&gt; Welding Technician</td>
<td>&gt; Machine Tool Engineer</td>
</tr>
<tr>
<td>&gt; Welder</td>
<td></td>
<td>&gt; Welding Engineer</td>
</tr>
</tbody>
</table>

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.

LEARN MORE ABOUT OCCUPATIONS AND WAGES
Manufacturing
UtahCTE.org: Fact Sheet
Department of Workforce Services
Utah Occupational Explorer

FFA | SkillsUSA
is the Career and Technical Student Organization (CTSO) for students in the Welding & Machining Career Pathway.
FFA.org | SkillsUSA.org
UtahFFA.org | UtahSkillsUSA.org
Utah FFA flyer | SkillsUSA flyer

Student Testimonial
“The welding and agricultural classes [I took in high school] gave me the needed skills to be successful in my career and in all aspects of life.”
Erica McPherson
Delta High School

132004-BD
Published January 2022
Revised February 2022
ADA Compliant February 2022
# Career Pathway: Automotive

## Career Cluster: Transportation, Distribution & Logistics

### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness
- Exploring Technology

### HIGH SCHOOL

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

#### EXPLORER COURSES:
Choose one or more of the following courses.
- Automotive, Introduction *
- Collision Non-Structural Repair *
- Small Engine Repair
- Basic Automotive Collision Repair
- Electronics 1 *
- Transportation Technology
- Bicycle Repair Training
- Machining 1 *
- Welding Technician, Entry Level *

#### CONCENTRATOR COURSES:
To be a concentrator you must pass one of the following courses AND one explorer course.
- ASE Chassis MLR *
- Collision Structural Repair
- ASE Engine MLR *
- Electric Vehicle

#### COMPLETER COURSES:
To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- ASE Diesel Brakes *
- ASE Engine Performance *
- Collision Refinishing and Painting *
- ASE Electrical/Electronics *
- ASE Steering and Suspension *
- Professional Driver

#### 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

---

### 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>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Automotive Service Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Tire Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Quick Lube Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Fleet Administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Master Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Restoration Specialist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; CTE Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; OEM Trainer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Technical Researcher and Developer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Technical Salesperson</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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](http://www.careerpathways.utah.gov/

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

---

### Student Testimonial
"My overall goal of taking CTE courses was to become an automotive technician. I found my passion during my sophomore year and ever since then I’ve been staying on track with the automotive industry. I took collision and refinishing, and I love it. I found my passion in life and intend to make a full career out of it."

Tyrell Przybycien
Spanish Fork High School

---

### LEARN MORE ABOUT OCCUPATIONS AND WAGES
**Transportation, Distribution & Logistics**
- UtahCTE.org: [Fact Sheet](http://www.uteach.org)
- Department of Workforce Services: [Utah Occupational Explorer](http://www.uteach.org)

### SkillsUSA
is the Career and Technical Student Organization (CTSO) for students in the Automotive Career Pathway.
- [SkillsUSA.org | UtahSkillsUSA.org](http://www.uteach.org)
- [SkillsUSA flyer](http://www.uteach.org)

---

* concurrent enrollment course  + recommended explorer course
# Career Cluster: Transportation, Distribution & Logistics

## Career Pathway: Aviation

### JUNIOR HIGH / MIDDLE SCHOOL

College and Career Awareness
Exploring Technology

### 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>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1010</td>
<td></td>
</tr>
<tr>
<td>Math 1050</td>
<td></td>
</tr>
<tr>
<td>Math 1060</td>
<td></td>
</tr>
<tr>
<td>Meteorology</td>
<td></td>
</tr>
</tbody>
</table>

**EXPLORER COURSES:** Choose one or more of the following courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation History *</td>
<td></td>
</tr>
<tr>
<td>Aviation Maintenance 1</td>
<td></td>
</tr>
<tr>
<td>Machining 1 *</td>
<td></td>
</tr>
<tr>
<td>Unmanned Aerial Systems</td>
<td></td>
</tr>
</tbody>
</table>

**CONCENTRATOR COURSES:** To be a concentrator you must pass one of the following courses AND one explorer course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aviation 2</td>
<td></td>
</tr>
<tr>
<td>Aviation Maintenance 2</td>
<td></td>
</tr>
<tr>
<td>UAS Lab: Intermediate Flight</td>
<td></td>
</tr>
<tr>
<td>UAS Lab: Design, Build, and Maintain</td>
<td></td>
</tr>
<tr>
<td>UAS Lab: Exploration of Industry Applications</td>
<td></td>
</tr>
</tbody>
</table>

**COMPLETER COURSES:** To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Transportation *</td>
<td></td>
</tr>
<tr>
<td>Aviation Weather</td>
<td></td>
</tr>
<tr>
<td>Private Pilot</td>
<td></td>
</tr>
<tr>
<td>Aircraft Systems *</td>
<td></td>
</tr>
<tr>
<td>Flight Simulator *</td>
<td></td>
</tr>
<tr>
<td>Pilot Course—Unmanned Aerial Systems (UAS): Strands and Standards available SY 2023-2024</td>
<td></td>
</tr>
<tr>
<td>UAS Capstone</td>
<td></td>
</tr>
</tbody>
</table>

**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

---

### LEARN MORE ABOUT OCCUPATIONS AND WAGES

**Transportation, Distribution & Logistics**

UtahCTE.org: Fact Sheet
Department of Workforce Services Utah Occupational Explorer

---

### Student Testimonial

"I plan to become a certified flight instructor and use that [credential] in order to build up my hours until I can get a job with a local airline. I learned everything I know about planes from Private Pilot Ground School [through CTE]."

Braden Ottley
Olympus High School
# Utah Career and Technical Education

## Career Pathway Chart

### 2022-2023 School Year

### Career Cluster: Transportation, Distribution & Logistics

## Career Pathway: Diesel

### JUNIOR HIGH / MIDDLE SCHOOL
- College and Career Awareness

### HIGH SCHOOL

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

#### EXPLORER COURSES: Choose one or more of the following courses.
- Automotive, Introduction *
- Electronics 1 *
- Machining 1 *

#### CONCENTRATOR COURSES: To be a concentrator you must pass the following course AND one explorer course.
- ASE Diesel IMMR

#### COMPLETER COURSES: To be a completer you must pass a concentrator course and enough courses to equal 3.0 credits in this Pathway.
- ASE Diesel Brakes
- ASE Diesel Electrical Systems
- ASE Diesel Engine
- ASE Diesel Steering and Suspension

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

<table>
<thead>
<tr>
<th>1-2 Year Certificate</th>
<th>2-Year Associate Degree</th>
<th>4-Year Bachelor’s Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Diesel Service Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Farm Equipment Mechanic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Heavy Equipment Maintenance Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Heavy Locomotive Technician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; CTE Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Fleet Administrator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt; Logistics Operation Manager</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

“I completed a CTE Internship at a local garage in my community. Because of the courses I have taken, the safety certifications I have earned, and my internship, Jiffy Lube hired me on the spot. The CTE Pathways program helped me learn to set goals and make wise choices. CTE courses gave me real-life, marketable skills.”

Trever Gardner
Grantsville High School

## LEARN MORE ABOUT OCCUPATIONS AND WAGES

### Transportation, Distribution & Logistics
- UtahCTE.org: [Fact Sheet](#)
- Department of Workforce Services: [Utah Occupational Explorer](#)

## SkillsUSA

SkillsUSA is the Career and Technical Student Organization (CTSO) for students in the Diesel Career Pathway.
- [SkillsUSA.org](#) | [UtahSkillsUSA.org](#)
- [SkillsUSA flyer](#)

---

162004-BC
Published January 2022
Revised February 2022
ADA Compliant February 2022