

## Connecting High School to College and Career

Career and Technical Education (CTE) provides critical learning and hands-on skills through Career Pathways within eight Areas of Study. Students who focus on a Pathway acquire the skills necessary for entry into well-paid careers with high potential for rapid financial growth, increased levels of responsibility, and a high degree of personal satisfaction.

### CTE Pathways:

- Will jump-start your future career.
- Will give you unlimited opportunities.
- Will help you plan for life after high school—before graduation.
- Will save you time and money.

### What is a Pathway?

- A Pathway is a sequence of courses within your area of interest.
- A Pathway will connect your career interests from high school to college and/or career.
- A Pathway will help you acquire the depth of knowledge and skill linked with specific postsecondary programs that will lead to a certificate or degree and/or career.

### CTE: Keeping it REAL

- Classroom instruction connects to the REAL world of work and future career opportunities.
- Statistics indicate that CTE graduates are worth higher wages because they are more productive than other workers.

### Did you know?

Ninety percent of jobs require training beyond high school.

### Top 5 reasons to participate in CTE Career Pathways:

1. To acquire technical skills training.
2. To participate in hands-on learning.
3. To jump-start your future career.
4. To earn college credit while in high school through concurrent enrollment classes.
5. To save time and money!

### Ask yourself:

- What do I want to be doing in 5 years?
- What do I want to be doing in 10 years?

### Ask yourself:

- What classes should I take to get ready for life after high school—college and career?
- What does it cost to go to college?

### Ask yourself:

- Why should I take this class?
- Why should I plan?
- Why should I study?
- Why should I graduate from high school?

### Ask yourself:

- How can Pathways help me?
- How do I find the options that are right for me?
- How do I find a satisfying career?

*Acquiring critical learning and hands-on skills through education and training will open doors of opportunity for obtaining employment within your area of interest. Stay in school and finish your education. Your future depends on it.*

For more information log onto  
[UtahCTE.org](http://UtahCTE.org).

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Agricultural Education  
**Natural Resource Science**

## High School to College and Career PATHWAYS



CAREER AND TECHNICAL EDUCATION  
*Giving Students the Edge*



# High School to College and Career Pathway: Secondary

Career and Technical Education: Preparing Students for College and Career!



## Area of Study: Agricultural Education

### Pathway: Natural Resource Science

**Get the Facts**  
There are 600 bison that roam on Antelope Island State Park, the largest island in the Great Salt Lake; the island herd is the second oldest privately held herd in the United States. Today, the bison on the island are among the most sought-after bison in the country.

**Workforce Trends**  
Utah has a wealth of natural resources, which includes five national parks, seven national monuments, seven national forests, two national recreation areas, 45 state parks, and millions of acres of Bureau of Land Management (BLM)-administered deserts and range land. With the multitude of natural resources in Utah there are a vast amount of career opportunities within eight federal and state divisions.

CAREER AND TECHNICAL EDUCATION Recommended Pathway Courses		
(Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)		
CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL		
Course #	Foundation Courses: (required)	Credit
<i>Choose two credits from the following courses:</i>		
03.0111	Natural Resource Science I	1.00
03.0121	Natural Resource Science II	1.00
01.0351	Aquaculture, Introductory	1.00
<b>Elective Courses:</b>		
01.0111	Agricultural Business Management	1.00
01.0311	Agricultural Science I	1.00
01.0361	Aquaculture, Advanced	1.00
02.0112	Biology-Agricultural Science	1.00
03.0113	Natural Resource Science Semester	.50
01.0802	Agricultural Communication and Leadership (capstone)	1.00
32.0199	Student Internship (Critical Workplace Skills)	.50
01.0100	Summer Agriculture Program	.25
	Supervised Agriculture Experience Program (capstone experience)	

**Natural Resource Science is:**

- > High skill
- > High wage
- > Nontraditional for females

**Sample Career Occupations**

- > Agricultural Education Teacher
- > Fish & Game Officer
- > Fish Hatchery Manager
- > Forest Worker
- > Mining Engineer
- > Outfitter/Guide
- > Park Manager
- > Water Technician
- > Wildlife Firefighter
- > Wildlife Officer

2.00 credits (for Foundation Courses)

1.00 credit (for Elective Courses)

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3.00 credits for completion



Middle School		State Requirements		High School Suggested Education Plan				College and Career
7th Grade	8th Grade	Middle School	High School	9th Grade Suggested	10th Grade Suggested	11th Grade Suggested	12th Grade Suggested	Beyond High School
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts 4.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	Language Arts 12 1.00	<p>There are a number of options for education and training beyond high school, depending on your career goals.</p> <ul style="list-style-type: none"> <li>&gt; Certificate</li> <li>&gt; Associate degree</li> <li>&gt; Bachelor's degree</li> <li>&gt; Professional degree</li> <li>&gt; On-the-job training</li> <li>&gt; Apprenticeship</li> <li>&gt; Military training</li> </ul> <p>For more information on salary projections, labor market demand, and training options, visit <a href="http://www.utahfutures.org">www.utahfutures.org</a>.</p>
Math * 1.00	Math * 1.00	2.00	Math 3.00	Math * 1.00	Math * 1.00	Math * 1.00		
Science .50	Science 1.00	1.50	Science 3.00	Earth Systems 1.00	Biology-Agricultural Science or Biological Science 1.00	Plant and Soil Science or Aquaculture 1.00		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies 3.00	Geography for Life .50	World Civilizations .50	U.S. History II 1.00	U.S. Government and Citizenship .50	
P.E. 1.00	Health .50	1.50	P.E./Health 2.00	Participation Skills and Techniques .50	Fitness for Life .50 / Health Education .50 Lifetime Activities or Sport .50			
The Arts .50	The Arts .50	1.00	Fine Arts 1.50	Fine Arts Courses 1.50				
Keyboarding .50			Computer Tech. .50	Computer Technology .50				
CTE Intro 1.00		1.00	CTE 1.00	Refer to Career and Technical Education box above.				

\* Talk to your school counselor about math requirements in the new common core curriculum. Core curriculum and elective requirements may vary district to district.

Concurrent enrollment course offerings vary by school and district. Many Utah postsecondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional postsecondary Pathways for details.