

## Connecting High School to College and Career

Career and Technical Education (CTE) provides critical learning and hands-on skills through 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 connects from high school to college for a specific degree and/or career. A Pathway will save you time and money toward a college degree.

### 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 college?
- What does it cost to go to college?

### Ask yourself:

- Why should I plan?
- Why should I study?
- Why should I graduate from high school?

### Ask yourself:

- How can I make a lot of money?
- How do I find a career?
- How can Pathways help me?

*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  
[www.utahcte.org](http://www.utahcte.org).

Utah State Office of Education  
250 East 500 South P.O. Box 144200  
Salt Lake City, UT 84114-4200  
Patti Harrington, Ed.D., State Superintendent of Public Instruction  
Mary Shumway, State Director of Career and Technical Education



Agricultural Education  
*Natural Resources Science and Mgmt.*

## High School to College and Career PATHWAYS



CAREER AND TECHNICAL EDUCATION  
*Giving Students the Edge*





# High School to College and Career Pathway: Secondary

Area of Study: Agricultural Education

## Pathway: Natural Resources Science & Management

Middle School		State Requirements			High School Suggested Education Plan				College & Careers																																			
7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	Middle School	High School	9 <sup>th</sup> Grade Suggested	10 <sup>th</sup> Grade Suggested	11 <sup>th</sup> Grade Suggested	12 <sup>th</sup> Grade Suggested	Beyond High School																																				
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts 3.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	(1 additional credit—class of 2011)	<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><b>Sample Occupations</b></p> <ul style="list-style-type: none"> <li>&gt; Agricultural Education Teacher</li> <li>&gt; Fish &amp; Game Officer</li> <li>&gt; Fish Hatchery Manager</li> <li>&gt; Forest Worker</li> <li>&gt; Mining Engineer</li> <li>&gt; Outfitter/Guide</li> <li>&gt; Park Manager</li> <li>&gt; Water Technician</li> <li>&gt; Wildlife Firefighter</li> <li>&gt; Wildlife Officer</li> </ul> <p>For more information on salary projections, labor market demand, and training options, visit <a href="http://www.careers.utah.gov">www.careers.utah.gov</a></p>																																				
Pre-Algebra 1.00	Elem. Algebra or Applied Math 1.00	2.00	Math 2.00	Geometry or Applied Math II 1.00	Intermediate Algebra 1.00	(1 additional credit—class of 2011)																																						
Science .50	Science 1.00	1.50	Science 2.00	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 2.50	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																																								
/			Financial Literacy .50	Financial Literacy .50																																								
			Computer Tech. .50	Computer Technology .50																																								
CTE Intro 1.00		1.00	Career and Technical Education 1.00	<p style="text-align: center;"><b>Career and Technical Education Recommended Pathway Courses</b></p> <p style="text-align: center;">(Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.)</p> <p style="text-align: center;"><b>CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Course #</th> <th>Foundation Courses: (required)</th> <th>Credit</th> </tr> </thead> <tbody> <tr> <td>03.0111</td> <td>Natural Resource Science I</td> <td>1.00</td> </tr> <tr> <td>03.0121</td> <td>Natural Resource Science II</td> <td>1.00</td> </tr> <tr> <td colspan="3"><b>Elective Courses:</b></td> </tr> <tr> <td>01.0111</td> <td>Agricultural Business Management</td> <td>1.00</td> </tr> <tr> <td>01.0311</td> <td>Agricultural Science I</td> <td>1.00</td> </tr> <tr> <td>01.0351</td> <td>Aquaculture, Introductory</td> <td>1.00</td> </tr> <tr> <td>01.0361</td> <td>Aquaculture, Advanced</td> <td>1.00</td> </tr> <tr> <td>01.0802</td> <td>Ag. Communications &amp; Leadership (capstone)</td> <td>1.00</td> </tr> <tr> <td>32.0199</td> <td>Student Internship (Critical Workplace Skills)</td> <td>.50</td> </tr> <tr> <td>01.0100</td> <td>Summer Agriculture Program</td> <td>.25</td> </tr> <tr> <td></td> <td>Supervised Agriculture Experience Program (capstone experience)</td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">3.00 credits for completion</p>					Course #	Foundation Courses: (required)	Credit	03.0111	Natural Resource Science I	1.00	03.0121	Natural Resource Science II	1.00	<b>Elective Courses:</b>			01.0111	Agricultural Business Management	1.00	01.0311	Agricultural Science I	1.00	01.0351	Aquaculture, Introductory	1.00	01.0361	Aquaculture, Advanced	1.00	01.0802	Ag. Communications & Leadership (capstone)	1.00	32.0199	Student Internship (Critical Workplace Skills)	.50	01.0100	Summer Agriculture Program	.25		Supervised Agriculture Experience Program (capstone experience)	
Course #	Foundation Courses: (required)	Credit																																										
03.0111	Natural Resource Science I	1.00																																										
03.0121	Natural Resource Science II	1.00																																										
<b>Elective Courses:</b>																																												
01.0111	Agricultural Business Management	1.00																																										
01.0311	Agricultural Science I	1.00																																										
01.0351	Aquaculture, Introductory	1.00																																										
01.0361	Aquaculture, Advanced	1.00																																										
01.0802	Ag. Communications & Leadership (capstone)	1.00																																										
32.0199	Student Internship (Critical Workplace Skills)	.50																																										
01.0100	Summer Agriculture Program	.25																																										
	Supervised Agriculture Experience Program (capstone experience)																																											
<p><b>Workforce Trends</b></p> <p>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.</p> <p><b>Get the Facts</b></p> <p>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.</p>		<p>Core Curriculum and elective requirements may vary district to district. Check with your school counselor.</p> <p>Concurrent enrollment course offerings vary by school and district.</p>		<p>Many Utah post-secondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional post-secondary Pathways for details.</p>																																								
				<p>Supervised Agriculture Experience Program (capstone experience)</p>																																								

**Note:** For more information, talk to your school counselor.