

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.

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
Agricultural Systems Technology

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: Agricultural Systems Technology

Middle School		State Requirements			High School Suggested Education Plan				College & Careers																																									
7 th Grade	8 th Grade	Middle School	High School	9 th Grade Suggested	10 th Grade Suggested	11 th Grade Suggested	12 th 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)																																										
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	Agricultural Science I 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																																													
Keyboarding .50			Computer Tech.	.50	Computer Technology .50																																													
CTE Intro 1.00		1.00	Career and Technical Education	1.00	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																																													
Workforce Trends According to the U.S. Department of Labor, the growing interest in worldwide standardization of agricultural equipment should result in increased employment of agricultural engineers. Job opportunities should also result from the increasing demand for agricultural products, the continued efforts for more efficient agricultural production, and the increasing emphasis on the conservation of resources. Get the Facts Students enrolled in high school agricultural courses are looking to join a \$3.5-4.0 billion Utah industry.		Core Curriculum and elective requirements may vary district to district. Check with your school counselor. Concurrent enrollment course offerings vary by school and district.		<table border="1"> <thead> <tr> <th>Course #</th> <th>Foundation Courses: (required)</th> <th>Credit</th> </tr> </thead> <tbody> <tr> <td>01.0211</td> <td>Agricultural Systems Technology I</td> <td>1.00</td> </tr> <tr> <td>01.0221</td> <td>Agricultural Systems Technology II</td> <td>1.00</td> </tr> <tr> <td colspan="3">Elective Courses:</td> </tr> <tr> <td>01.0111</td> <td>Agricultural Business Management</td> <td>1.00</td> </tr> <tr> <td>01.0241</td> <td>Agricultural Machinery Technology</td> <td>1.00</td> </tr> <tr> <td>01.0231</td> <td>Agricultural Mechanics, Advanced</td> <td>1.00</td> </tr> <tr> <td>01.0311</td> <td>Agricultural Science I</td> <td>1.00</td> </tr> <tr> <td>01.0802</td> <td>Ag. Communications & Leadership (capstone)</td> <td>1.00</td> </tr> <tr> <td>48.0508</td> <td>Welding Technician – Entry Level</td> <td>1.00</td> </tr> <tr> <td>48.0510</td> <td>Welding Technician – Advanced Level</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>				Course #	Foundation Courses: (required)	Credit	01.0211	Agricultural Systems Technology I	1.00	01.0221	Agricultural Systems Technology II	1.00	Elective Courses:			01.0111	Agricultural Business Management	1.00	01.0241	Agricultural Machinery Technology	1.00	01.0231	Agricultural Mechanics, Advanced	1.00	01.0311	Agricultural Science I	1.00	01.0802	Ag. Communications & Leadership (capstone)	1.00	48.0508	Welding Technician – Entry Level	1.00	48.0510	Welding Technician – Advanced Level	1.00	32.0199	Student Internship (Critical Workplace Skills)	.50	01.0100	Summer Agriculture Program	.25		Supervised Agriculture Experience Program (capstone experience)		2.00 credits
				Course #	Foundation Courses: (required)	Credit																																												
				01.0211	Agricultural Systems Technology I	1.00																																												
				01.0221	Agricultural Systems Technology II	1.00																																												
				Elective Courses:																																														
				01.0111	Agricultural Business Management	1.00																																												
				01.0241	Agricultural Machinery Technology	1.00																																												
				01.0231	Agricultural Mechanics, Advanced	1.00																																												
				01.0311	Agricultural Science I	1.00																																												
				01.0802	Ag. Communications & Leadership (capstone)	1.00																																												
				48.0508	Welding Technician – Entry Level	1.00																																												
				48.0510	Welding Technician – Advanced Level	1.00																																												
				32.0199	Student Internship (Critical Workplace Skills)	.50																																												
				01.0100	Summer Agriculture Program	.25																																												
	Supervised Agriculture Experience Program (capstone experience)																																																	
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.				1.00 credits																																														
				3.00 credits for completion																																														

Beyond High School

There are a number of options for education and training beyond high school, depending on your career goals.

- > Certificate
- > Associate degree
- > Bachelor's degree
- > Professional degree
- > On-the-job training
- > Apprenticeship
- > Military training

Sample Occupations

- > Agricultural Education Teacher
- > Agricultural Engineer
- > Agricultural Engineer Technician
- > Diesel Mechanic
- > Equipment Parts Mgr.
- > Environmental Tech.
- > Heavy Equipment Operator
- > Machinist
- > Recycling Technician
- > Welder

For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov.

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