



# 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 <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)																																										
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	<b>Career and Technical Education Recommended Pathway Courses</b> (Students may select individual courses for exploration, or a complete Pathway for an in-depth focus.) <b>CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL</b>																																													
<b>Workforce Trends</b> 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.  <b>Get the Facts</b> 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"><b>Elective Courses:</b></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 &amp; 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	<b>Elective Courses:</b>			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	1.00 credits	3.00 credits for completion
				Course #	Foundation Courses: (required)	Credit																																												
				01.0211	Agricultural Systems Technology I	1.00																																												
				01.0221	Agricultural Systems Technology II	1.00																																												
				<b>Elective Courses:</b>																																														
				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.																																																		

### 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](http://www.careers.utah.gov).

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