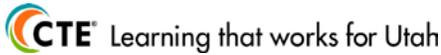


# Utah Career and Technical Education Career Pathway

## 2017-2018 School Year



<p><b>CTSO Information</b> Career and Technical Student Organizations (CTSO) align with the national Career Clusters® and the Utah CTE Career Pathways.</p> <p>FFA is the CTSO for students in the Agricultural Systems Technology Career Pathway. FFA brings relevance to the classroom through industry-based competitive events and community service.</p> <p><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 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.</p>	<h3 style="margin: 0;">Career Cluster: Agriculture, Food &amp; Natural Resources</h3> <h3 style="margin: 0;">Career Pathway: Agricultural Systems Technology</h3> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr style="background-color: #00a6c9; color: white;"> <th style="width: 15%;">CORE CODE</th> <th style="width: 55%;">FOUNDATION COURSES (required)</th> <th style="width: 15%;">CREDITS</th> <th style="width: 15%;"></th> </tr> </thead> <tbody> <tr> <td>30.01.00.00.030</td> <td>Agricultural Systems Technology 1</td> <td style="text-align: center;">1.00</td> <td rowspan="2" style="text-align: center; vertical-align: middle;">2.00 credits</td> </tr> <tr> <td>30.01.00.00.040</td> <td>Agricultural Systems Technology 2</td> <td style="text-align: center;">1.00</td> </tr> <tr style="background-color: #00a6c9; color: white;"> <th colspan="4" style="text-align: center;">ELECTIVE COURSES</th> </tr> <tr> <td>30.01.00.00.020</td> <td>Agricultural Machinery Technology</td> <td style="text-align: center;">1.00</td> <td rowspan="15" style="text-align: center; vertical-align: middle;">1.00 credit</td> </tr> <tr> <td>30.01.00.00.001</td> <td>Agricultural Mechanics, Advanced</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>30.01.00.00.050</td> <td>Agricultural Science 1</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>30.02.00.00.050</td> <td>Biology-Agricultural Science</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>32.02.00.00.110</td> <td>Business Communication 1</td> <td style="text-align: center;">.50</td> </tr> <tr> <td>32.02.00.00.111</td> <td>Business Communication 2</td> <td style="text-align: center;">.50</td> </tr> <tr> <td>32.02.00.00.140</td> <td>Business Management</td> <td style="text-align: center;">.50</td> </tr> <tr> <td>30.01.00.00.140</td> <td>Farm and Ranch Management</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>38.03.00.00.020</td> <td>Industrial/Agricultural Technology (IAT)</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>37.01.00.00.150</td> <td>Leadership Management Principles</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>40.10.00.00.110</td> <td>Welding Technician, Entry Level</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>40.10.00.00.112</td> <td>Welding Technician, Intermediate Level</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>40.10.00.00.114</td> <td>Welding Technician, Advanced Level</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>30.01.00.00.200</td> <td>Summer Agriculture Program</td> <td style="text-align: center;">.25</td> </tr> <tr> <td></td> <td>Supervised Agriculture Experience Program (capstone experience)</td> <td></td> </tr> <tr> <td>41.00.00.00.030</td> <td>Workplace Skills</td> <td style="text-align: center;">.50</td> </tr> <tr> <td colspan="4" style="text-align: center; font-weight: bold;">3.00 credits for completion</td> </tr> </tbody> </table> <p style="text-align: center; font-weight: bold; margin-top: 10px;">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.</p>	CORE CODE	FOUNDATION COURSES (required)	CREDITS		30.01.00.00.030	Agricultural Systems Technology 1	1.00	2.00 credits	30.01.00.00.040	Agricultural Systems Technology 2	1.00	ELECTIVE COURSES				30.01.00.00.020	Agricultural Machinery Technology	1.00	1.00 credit	30.01.00.00.001	Agricultural Mechanics, Advanced	1.00	30.01.00.00.050	Agricultural Science 1	1.00	30.02.00.00.050	Biology-Agricultural Science	1.00	32.02.00.00.110	Business Communication 1	.50	32.02.00.00.111	Business Communication 2	.50	32.02.00.00.140	Business Management	.50	30.01.00.00.140	Farm and Ranch Management	1.00	38.03.00.00.020	Industrial/Agricultural Technology (IAT)	1.00	37.01.00.00.150	Leadership Management Principles	1.00	40.10.00.00.110	Welding Technician, Entry Level	1.00	40.10.00.00.112	Welding Technician, Intermediate Level	1.00	40.10.00.00.114	Welding Technician, Advanced Level	1.00	30.01.00.00.200	Summer Agriculture Program	.25		Supervised Agriculture Experience Program (capstone experience)		41.00.00.00.030	Workplace Skills	.50	3.00 credits for completion				<p><b>Agricultural Systems Technology is:</b></p> <ul style="list-style-type: none"> <li>&gt; High skill</li> <li>&gt; High demand</li> </ul> <p><b>Sample Occupations Requiring:</b></p> <p><u>High School Diploma</u></p> <ul style="list-style-type: none"> <li>&gt; Heavy Equipment Operator</li> <li>&gt; Truck Driver</li> <li>&gt; Welder, Cutters, Solderers, and Brazers</li> </ul> <p><u>Certificate</u></p> <ul style="list-style-type: none"> <li>&gt; Hydraulic Technician</li> <li>&gt; Maintenance Service Tech.</li> <li>&gt; Welder</li> </ul> <p><u>Assoc. or Technical Degree</u></p> <ul style="list-style-type: none"> <li>&gt; Agricultural Engineer Tech.</li> <li>&gt; Diesel Mechanic</li> <li>&gt; Equipment Dealer Technician</li> </ul> <p><u>Baccalaureate Degree</u></p> <ul style="list-style-type: none"> <li>&gt; Agricultural Engineer</li> <li>&gt; Career and Technical Education Teacher</li> <li>&gt; Welding Engineer</li> </ul> <p><u>Graduate or Prof. Degree</u></p> <ul style="list-style-type: none"> <li>&gt; Geospatial Analytics Scientist</li> <li>&gt; Postsecondary Teacher</li> <li>&gt; Research Engineer</li> </ul>
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<p><b>Student Testimonial</b></p> <p>“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.”</p> <p style="text-align: right;">Colton Zilles</p>	<h3 style="margin: 0;">HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING</h3> <p style="margin: 0;">There are a number of options for education and training beyond high school, depending on your career goals.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <tr> <td style="width: 15%; background-color: #00a6c9; color: white; text-align: center; padding: 5px;"><b>12th Grade</b></td> <td style="width: 15%; background-color: #ff7f0e; color: white; text-align: center; padding: 5px;"><b>1-Year Certificate</b></td> <td style="width: 15%; background-color: #2ca02c; color: white; text-align: center; padding: 5px;"><b>2-Year Associate or Technical Degree</b></td> <td style="width: 15%; background-color: #ffc107; color: white; text-align: center; padding: 5px;"><b>4-Year Bachelor's Degree</b></td> <td style="width: 15%; background-color: #6c757d; color: white; text-align: center; padding: 5px;"><b>More Graduate or Prof. Degree</b></td> </tr> </table> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%; padding: 5px;"> <p>Certificates are awarded upon the successful completion of a brief course of study, usually one year or less. Upon completion of a course of study, a certificate does not require any further action to retain.</p> <p>In high school a variety of certificates can be earned.</p> </div> <div style="width: 45%; padding: 5px;"> <p>An academic degree is an award for the completion of a program or course of study over multiple years at postsecondary education institutions.</p> <p>In 2015-2016, 73 percent of secondary students who concentrated in a CTE Career Pathway placed in postsecondary education, advanced training, military service or employment (October 1-December 31).</p> </div> </div>	<b>12th Grade</b>	<b>1-Year Certificate</b>	<b>2-Year Associate or Technical Degree</b>	<b>4-Year Bachelor's Degree</b>	<b>More Graduate or Prof. Degree</b>	<p><b>Utah Business and Industry Facts</b></p> <p>Utah agriculturists produce crops and livestock worth over \$1.8 billion annually.</p> <p>Students enrolled in high school agricultural courses are looking to join a \$22 billion industry in Utah and a \$992 billion industry nationwide.</p> <p>(Utah Department of Agriculture and Food)</p>																																																															
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<p style="text-align: center; font-weight: bold; color: #00a6c9;">CTE Skill Certificates</p> <p style="text-align: center;">Competency-based student assessments, measured by core standards and competencies needed to be successful in the workforce.</p>	<p style="text-align: center; font-weight: bold; color: #00a6c9;">UtahFutures: College and Career Planning</p> <p style="text-align: center;">Visit <a href="http://UtahFutures.org">UtahFutures.org</a> for salary projections, labor market demand, and training options.</p>																																																																					
<p>In 2015-2016, 96,190 CTE skill certificates were awarded to high school students. Students' knowledge and performance is demonstrated as part of the Skill Certificate process.</p>	<p>In 2015-2016, the graduation rate for students who concentrated in a CTE Career Pathway was 96.6 percent, compared to Utah's statewide graduation rate of 85 percent.</p>																																																																					