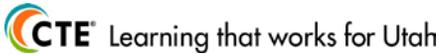


# Utah Career and Technical Education Career Pathway

## 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 CTSSO for students in the Natural Resource Systems Career Pathway. FFA brings relevance to the classroom through industry-based competitive events and community service.</p> <p><b>Workforce Trends</b> With the multitude of natural resources in Utah there are a vast number of career opportunities within eight federal and state divisions.</p>	<h3 style="margin: 0;">Career Cluster: Agriculture, Food &amp; Natural Resources</h3> <h4 style="margin: 0;">Career Pathway: Natural Resource Systems</h4> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr style="background-color: #00a651; 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></td> <td colspan="2" style="text-align: center;"><i>Choose two of the following courses:</i></td> <td></td> </tr> <tr> <td>30.01.00.00.116</td> <td>Aquaculture, Introduction</td> <td style="text-align: center;">1.00</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">2.00 credits</td> </tr> <tr> <td>30.03.00.00.001</td> <td>Natural Resource Science 1</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>30.03.00.00.010</td> <td>Natural Resource Science 2</td> <td style="text-align: center;">1.00</td> </tr> <tr style="background-color: #00a651; color: white;"> <td colspan="4" style="text-align: center;">ELECTIVE COURSES</td> </tr> <tr> <td>30.01.00.00.050</td> <td>Agricultural Science 1</td> <td style="text-align: center;">1.00</td> <td rowspan="10" style="text-align: center; vertical-align: middle;">1.00 credit</td> </tr> <tr> <td>30.01.00.00.001</td> <td>Aquaculture, Advanced</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>37.01.00.00.150</td> <td>Leadership Management Principles</td> <td style="text-align: center;">1.00</td> </tr> <tr> <td>30.03.00.00.003</td> <td>Natural Resource Science Semester</td> <td style="text-align: center;">.50</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> <td></td> </tr> <tr> <td>41.00.00.00.030</td> <td>Workplace Skills</td> <td style="text-align: center;">.50</td> <td></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>3.00 credits for completion</b></td> </tr> </tbody> </table> <p style="font-size: small; margin-top: 5px;">Foundation courses taken beyond the required credits can be used as elective credit.</p> <p style="text-align: center; margin-top: 10px;"><b>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.</b></p>	CORE CODE	FOUNDATION COURSES (required)	CREDITS			<i>Choose two of the following courses:</i>			30.01.00.00.116	Aquaculture, Introduction	1.00	2.00 credits	30.03.00.00.001	Natural Resource Science 1	1.00	30.03.00.00.010	Natural Resource Science 2	1.00	ELECTIVE COURSES				30.01.00.00.050	Agricultural Science 1	1.00	1.00 credit	30.01.00.00.001	Aquaculture, Advanced	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	37.01.00.00.150	Leadership Management Principles	1.00	30.03.00.00.003	Natural Resource Science Semester	.50	30.01.00.00.200	Summer Agriculture Program	.25		Supervised Agriculture Experience Program (capstone experience)			41.00.00.00.030	Workplace Skills	.50		<b>3.00 credits for completion</b>				<p><b>Natural Resource Systems is:</b></p> <ul style="list-style-type: none"> <li>&gt; High skill</li> <li>&gt; High wage</li> <li>&gt; High demand</li> </ul> <p><b>Sample Occupations Requiring:</b></p> <p style="font-size: x-small; color: #00a651;"><u>High School Diploma</u></p> <ul style="list-style-type: none"> <li>&gt; Forest/Conservation Worker</li> <li>&gt; Logger</li> <li>&gt; Truck Driver</li> </ul> <p style="font-size: x-small; color: #00a651;"><u>Certificate</u></p> <ul style="list-style-type: none"> <li>&gt; Firefighter</li> <li>&gt; Heavy Equipment Operator</li> <li>&gt; Pesticide Handler/Applicator</li> </ul> <p style="font-size: x-small; color: #00a651;"><u>Assoc. or Technical Degree</u></p> <ul style="list-style-type: none"> <li>&gt; Arborist</li> <li>&gt; Fisheries Technician</li> <li>&gt; Forestry Technician</li> </ul> <p style="font-size: x-small; color: #00a651;"><u>Baccalaureate Degree</u></p> <ul style="list-style-type: none"> <li>&gt; Career and Technical Education Teacher</li> <li>&gt; Conservation Officer/Scientist</li> <li>&gt; Wildlife Biologist</li> </ul> <p style="font-size: x-small; color: #00a651;"><u>Graduate or Prof. Degree</u></p> <ul style="list-style-type: none"> <li>&gt; Extension specialist</li> <li>&gt; Forester</li> <li>&gt; Marine Biologist</li> </ul>
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<p><b>Student Testimonial</b></p> <p style="font-size: x-small;">“I enrolled in all of the CTE courses in the Natural Resource Science Pathway. The courses added depth to my understanding. Summer Ag enhanced my practical knowledge in the field. All of this together helped me along my planned path to reach my personal and occupational goals.”</p> <p style="text-align: right; font-size: x-small;">Cache Bisel</p>	<h3 style="margin: 0;">HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING</h3> <p style="font-size: small; 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: 20%; background-color: #00a651; color: white; text-align: center; padding: 5px;"><b>12th Grade</b></td> <td style="width: 20%; background-color: #ff9900; color: white; text-align: center; padding: 5px;"><b>1-Year Certificate</b></td> <td style="width: 20%; background-color: #99cc33; color: white; text-align: center; padding: 5px;"><b>2-Year Associate or Technical Degree</b></td> <td style="width: 20%; background-color: #ffcc00; color: white; text-align: center; padding: 5px;"><b>4-Year Bachelor's Degree</b></td> <td style="width: 20%; background-color: #999999; 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; font-size: x-small;"> <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 style="font-size: x-small;">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.</p>																																																												
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<p style="font-size: x-small; color: #00a651;"><b>CTE Skill Certificates</b></p> <p style="font-size: x-small;">Competency-based student assessments, measured by core standards and competencies needed to be successful in the workforce.</p>	<p style="text-align: center; font-size: x-small; color: #00a651;"><b>UtahFutures: College and Career Planning</b></p> <p style="text-align: center; font-size: x-small;">Visit <a href="http://UtahFutures.org">UtahFutures.org</a> for salary projections, labor market demand, and training options.</p>																																																																		
<p style="font-size: x-small;">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 style="font-size: x-small;">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>																																																																		