

# Utah Career and Technical Education Career Pathway

## 2019-2020 School Year



**CTSO Information**  
 Career and Technical Student Organizations (CTSO) align with the national Career Clusters® and the Utah CTE Career Pathways.

FFA is the CTSO for students in the Natural Resource Science Career Pathway. FFA brings relevance to the classroom through industry-based competitive events and community service.

**Workforce Trends**  
 With the multitude of natural resources in Utah there are a vast number of career opportunities within eight federal and state divisions.

### Career Cluster: Agriculture, Food & Natural Resources

#### Career Pathway: Natural Resource Science

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
30.03.00.00.001	<a href="#">Natural Resource Science 1</a>	1.00	2.00 credits
<b>Choose two of the following courses:</b>			
30.01.00.00.116	<a href="#">Aquaculture, Introduction</a>	1.00	
40.05.00.00.020	<a href="#">Environmental Technician</a>	1.00	
30.03.00.00.010	<a href="#">Natural Resource Science 2</a>	1.00	
ELECTIVE COURSES			
30.01.00.00.050	<a href="#">Agricultural Science 1</a>	1.00	1.00 credit
30.02.00.00.050	<a href="#">Biology-Agricultural Science</a>	1.00	
32.02.00.00.110	<a href="#">Business Communication 1</a>	.50	
32.02.00.00.111	<a href="#">Business Communication 2</a>	.50	
32.02.00.00.140	<a href="#">Business Management</a>	.50	
37.01.00.00.150	<a href="#">Leadership Principles 1</a>	1.00	
	Summer Agriculture Program	.25	
	Supervised Agriculture Experience Program (capstone experience)		
41.00.00.00.050	<a href="#">CTE Internship</a>	.50	
41.00.00.00.030	<a href="#">Workplace Skills</a>	.50	
		<b>3.00 credits for completion</b>	

Foundation courses taken beyond the required credits can be used as elective credit.

**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.**

**Natural Resource Science is:**

- > High-skill
- > High-wage
- > In-demand

**Sample Occupations Requiring:**

**High School Diploma**

- > Forest/Conservation Worker
- > Logger
- > Truck Driver

**Certificate**

- > Firefighter
- > Heavy Equipment Operator
- > Pesticide Handler/Applicator

**Assoc. or Technical Degree**

- > Arborist
- > Fisheries Technician
- > Forestry Technician

**Baccalaureate Degree**

- > Career and Technical Education Teacher
- > Conservation Officer/Scientist
- > Wildlife Biologist

**Graduate or Prof. Degree**

- > Extension specialist
- > Forester
- > Marine Biologist

**Student Testimonial**

"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."

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### HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

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

12th Grade	1-Year Certificate	2-Year Associate or Technical Degree	4-Year Bachelor's Degree	More Graduate or Prof. Degree
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.  In high school a variety of certificates can be earned.		An academic degree is an award for the completion of a program or course of study over multiple years at postsecondary education institutions.  In 2016-2017, 74 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).		

**Utah Business and Industry Facts**

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.

**UtahFutures: College and Career Planning**

Visit [UtahFutures.org](http://UtahFutures.org) to explore occupations, search salary projections, access labor market information, investigate training options, and to create a plan.

Visit [UtahCTE.org](http://UtahCTE.org) to access high-quality, rigorous career-focused programs that result in attainment of credentials with labor market value.

**CTE Credentials of Value**

In 2017-2018, 112,867 CTE Skill Certifications were awarded to secondary students and 19,189 third-party certifications were earned by secondary students.

In 2017-2018, the graduation rate for students who concentrated in a CTE Career Pathway was 95 percent, compared to Utah's statewide graduation rate of 87 percent.