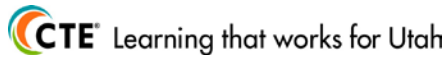


# Utah Career and Technical Education Career Pathway

## 2018-2019 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 Plant Science Career Pathway. FFA brings relevance to the classroom through industry-based competitive events and community service.

**Workforce Trends**  
 According to the U.S. Department of Labor, employment of conservation scientists and foresters is projected to grow 7 percent through the year 2024.

Nationwide, employment of landscape architects is projected to grow 5 percent through the year 2024.

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

#### Career Pathway: Plant Science

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
<i>Choose two credits from the following courses:</i>			
30.01.00.00.152	Floriculture	.50	2.00 credits
30.01.00.00.150	Floriculture and Greenhouse Management	1.00	
30.01.00.00.154	Greenhouse Management	.50	
30.01.00.00.160	Landscape Management	.50	
30.01.00.00.165	Nursery Operation	.50	
30.02.00.00.080	Plant and Soil Science 1	1.00	
30.02.00.00.010	Plant and Soil Science 2	1.00	
<b>ELECTIVE COURSES</b>			
30.01.00.00.050	Agricultural Science 1	1.00	1.00 credit
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	
30.01.00.00.070	Landscape Architecture, Introduction	1.00	
37.01.00.00.150	Leadership Principles 1	1.00	
30.01.00.00.200	Summer Agriculture Program	.25	
	Supervised Agriculture Experience Program (capstone experience)		
30.01.00.00.090	Sustainable Urban Agriculture	1.00	
41.00.00.00.030	Workplace Skills	.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.**

**Plant Science is:**  
 > High demand

**Sample Occupations Requiring:**  
High School Diploma  
 > Florist  
 > Greenhouse Worker  
 > Tree Trimmers and Pruners

Certificate  
 > Crop Scout  
 > Irrigation Specialist  
 > Pesticide Handler/Applicator

Assoc. or Technical Degree  
 > Arborist  
 > Landscape Technician  
 > Turf Manager

Baccalaureate Degree  
 > Career and Technical Education Teacher  
 > Crop Advisor  
 > Landscape Designer/Architect

Graduate or Prof. Degree  
 > Agronomist  
 > Extension Specialist  
 > Microbiologist

**Student Testimonial**  
 "I took my first agriculture class, which everyone assumes is strictly about farm animals, and it introduced me to plant biology. The classes took place mostly in the school greenhouse, where I learned to grow plants and flowers from seeds. This is where I found my passion."  
 Madyson Smith

### 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.

<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>
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 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).		

**Utah Business and Industry Facts**  
 In Utah, the value of crops including nursery and greenhouse crops is \$575 million. Hay and forage has the highest values of sales at \$297 million.

**CTE Skill Certificates**

Competency-based student assessments, measured by core standards and competencies needed to be successful in the workforce.

**UtahFutures: College and Career Planning**

Visit [UtahFutures.org](http://UtahFutures.org) for salary projections, labor market demand, and training options.

In 2016-2017, 105,691 CTE skill certificates were awarded to high school students. Students' knowledge and performance is demonstrated as part of the Skill Certificate process.

In 2016-2017, the graduation rate for students who concentrated in a CTE Career Pathway was 95 percent, compared to Utah's statewide graduation rate of 86 percent.