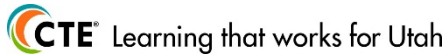


Utah Career and Technical Education Career Pathway

2019-2020 School Year



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

SkillsUSA is the CTSSO for students in the Aviation Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development.

Workforce Trends
 Rising population and income will drive demand for airline travel and the need for commercial aviation workers. Those who have attended college for at least 2 years and have experience dealing with the public should have the best prospects.

Career Cluster: Transportation, Distribution & Logistics

Career Pathway: Aviation

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
40.11.00.00.040	Private Pilot *	.50	.50 credit
ELECTIVE COURSES			
40.11.00.00.042	Aircraft Systems *	.50	2.50 credits
40.11.00.00.046	Air Transportation *	.50	
40.11.00.00.044	Aviation History *	.50	
38.01.00.00.021	Electronics 1 *	.50	
40.11.00.00.048	Flight Simulator *	.50	
08.04.00.00.050	Meteorology *	.50	
41.00.00.00.050	CTE Internship	.50	
41.00.00.00.030	Workplace Skills	.50	
3.00 credits for completion			

* Course can be taken up to 1.00 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.

Aviation is:

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

Sample Occupations Requiring:

High School Diploma

- > Aircraft Structure, Surfaces, Rigging, and System Assembler
- > Commercial Pilot

Certificate

- > Aircraft Mechanic
- > Aircraft Service Technician

Assoc. or Technical Degree

- > Air Traffic Controller

Baccalaureate Degree

- > Aircraft Co-pilot
- > Aircraft Pilot
- > Career and Technical Education Teacher
- > Flight Engineer

Graduate or Prof. Degree

- > Aviation Manager

Student Testimonial

"I plan to become a certified flight instructor and use that [credential] in order to build up my hours until I can get a job with a local airline. I learned everything I know about planes from Private Pilot Ground School [through CTE]. I even passed my written test from the information that I learn from that class."

Braden Ottley

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

According to the Utah Department of Workforce Services, air transportation companies in Utah employ 6,316 workers.

In Utah, an aircraft mechanic, an aircraft service technician, and an aircraft pilot must be licensed.

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

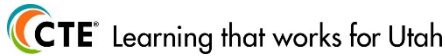
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Utah Career and Technical Education Career Pathway

2019-2020 School Year



CTSO Information

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SkillsUSA is the CTSO for students in the Aviation Maintenance Technology Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development.

Workforce Trends

Nationwide, the overall employment of aircraft mechanics and technicians is projected to increase 5 percent through the year 2026, as air traffic is expected to increase and will require addition aircraft maintenance.

Career Cluster: Transportation, Distribution & Logistics

Career Pathway: Aviation Maintenance Technology

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
40.09.00.00.001	Aircraft Regulations	2.0	4.00 credits
40.09.00.00.080	Aircraft Electrical/Hardware	2.0	
ELECTIVE COURSES			
40.00.00.00.046	Air Transportation *	.50	
40.11.00.00.042	Aircraft Systems *	.50	
38.01.00.00.021	Electronics 1 *	.50	
40.09.00.00.020	Introduction to Automotive *	.50	
41.00.00.00.050	CTE Internship	.50	
41.00.00.00.030	Workplace Skills	.50	
4.00 credits for completion			

* Course can be taken up to 1.00 credit.

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Aviation Maintenance Technology is:

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

Sample Occupations Requiring:

High School Diploma
> Aircraft Structure, Surfaces, Rigging, and System Assembler

Certificate
> Aircraft Mechanic
> Aircraft Service Technician

Assoc. or Technical Degree
> Air Traffic Controller

Baccalaureate Degree
> Aviation Manager
> Career and Technical Education Teacher

Graduate or Prof. Degree
> Aviation Manager

Student Testimonial

“The CTE courses I’ve taken in high school have really shined a light on what I want to do with my life and how I want my future career to go. It has helped me learn what I liked and what I didn’t like to do. I learned from my automotive class that I love working with my hands and fixing things.”

Sidney Gray

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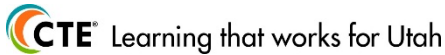
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Utah Career and Technical Education Career Pathway

2019-2020 School Year



CTSO Information

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

SkillsUSA is the CTSSO for students in the Diesel Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development.

Workforce Trends

Employment growth will result from the increased manufacturing of buses and trucks powered by durable, economical diesel engines. Opportunities are good for those with formal diesel mechanic training and experience with electronic and diagnostic equipment.

Career Cluster: Transportation, Distribution & Logistics

Career Pathway: Diesel

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
40.09.00.00.060	Diesel Technician *	.50	1.00 credit
40.09.00.00.065	Medium/Heavy Vehicle Systems *	.50	
ELECTIVE COURSES			
32.02.00.00.010	Accounting 1	.50	2.00 credits
40.09.00.00.022	ASE Brakes *	.50	
40.09.00.00.021	ASE Chassis MLR *	.50	
40.09.00.00.024	ASE Electrical/Electronics *	.50	
40.09.00.00.026	ASE Engine MLR *	.50	
40.09.00.00.025	ASE Engine Performance *	.50	
40.09.00.00.023	ASE Steering and Suspension *	.50	
40.09.00.00.005	Basic Automotive Collision Repair *	.50	
32.02.00.00.140	Business Management	.50	
38.01.00.00.021	Electronics 1 *	.50	
38.01.00.00.022	Electronics 2	.50	
32.02.00.00.220	Entrepreneurship	.50	
38.01.00.00.320	PLTW Digital Electronics	1.00	
41.00.00.00.050	CTE Internship	.50	
41.00.00.00.030	Workplace Skills	.50	
3.00 credits for completion			

* Course can be taken up to 1.00 credit.

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.

Diesel is:

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

Sample Occupations Requiring:

- High School Diploma**
- > Bus and Truck Mechanic
 - > Diesel Engine Specialist
 - > Mobile Heavy Equipment Mechanic

Certificate

- > Automotive Service Technician – ASE (Automotive Service Excellence) www.ase.com/ is a national certification for automotive service technicians.

Assoc. or Technical Degree

- > N/A

Baccalaureate Degree

- > Career and Technical Education Teacher

Graduate or Prof. Degree

- > N/A

Student Testimonial

"I completed a CTE Internship at a local garage in my community. Because of the courses I have taken, the safety certifications I have earned, and my internship, Jiffy Lube hired me on the spot. The CTE Pathways program helped me learn to set goals and make wise choices. CTE courses gave me real-life, marketable skills."

Trever Gardner

HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

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Utah Business and Industry Facts

Utah high school seniors have the opportunity to participate in the [Utah Diesel Technician Pathways program](#). The program was created by industry to open opportunities for young men and women who are interested in the diesel technician field.

CTE Skill Certificates

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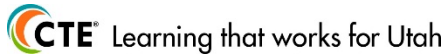
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Utah Career and Technical Education Career Pathway

2019-2020 School Year



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

SkillsUSA is the CTSO for students in the Automotive Collision Repair Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development.

Workforce Trends
 Job opportunities in the automotive industry are very good for persons with formal training in automotive body repair and mechanics.

Career Cluster: Transportation, Distribution & Logistics

Career Pathway: Automotive: Collision Repair

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
40.09.00.00.005	Basic Automotive Collision Repair *	.50	1.00 credit
<i>Choose one of the following courses:</i>			
40.09.00.00.010	Collision Non-Structural Repair *	.50	
40.09.00.00.015	Collision Refinishing and Painting *	.50	
40.09.00.00.013	Collision Structural Repair *	.50	
ELECTIVE COURSES			
32.02.00.00.010	Accounting 1	.50	2.00 credits
32.02.00.00.140	Business Management	.50	
38.01.00.00.021	Electronics 1 *	.50	
32.02.00.00.220	Entrepreneurship	.50	
40.09.00.00.020	Introduction to Automotive *	.50	
40.10.00.00.072	Machining 1 *	.50	
40.10.00.00.085	Metalworking 1 *	.50	
40.09.00.00.090	Small Engine Repair *	.50	
40.10.00.00.110	Welding Technician, Entry Level *	.50	
41.00.00.00.050	CTE Internship	.50	
41.00.00.00.030	Workplace Skills	.50	
3.00 credits for completion			

* Course can be taken up to 1.00 credit.
 Foundation courses taken beyond the required credits can be used as elective credit.

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Automotive Collision Repair is:
 > High skill
 > High wage
 > High demand

Sample Occupations Requiring:
High School Diploma
 > Automotive Body and Related Repairer
 > Automotive Glass Installer and Repairer
 > Automotive Service Mechanics
 > Automotive Service Technician

Certificate
 > N/A

Assoc. or Technical Degree
 > N/A

Baccalaureate Degree
 > Career and Technical Education Teacher

Graduate or Prof. Degree
 > N/A

Student Testimonial
 "My overall goal of taking CTE courses was to become an automotive technician. I found my passion late during my sophomore year and ever since then I've been staying on track with the automotive industry. I took collision and refinishing and I love it. I found my passion in life and intend to make a full career out of it."
 Tyrell Przybycien

HIGH SCHOOL TO POSTSECONDARY EDUCATION AND TRAINING

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Utah Business and Industry Facts
 According to the Utah Department of Workforce Services, more than 1,500 individuals are employed as automotive body and related repairers. Those employees with experience make an annual salary of \$41,950.

CTE Skill Certificates
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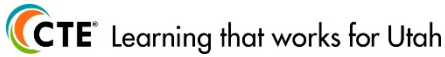
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Utah Career and Technical Education Career Pathway

2019-2020 School Year



CTSO Information

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

SkillsUSA is the CTSO for students in the Automotive Service Technician Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development.

Workforce Trends

Job opportunities in the automotive industry are expected to be very good for persons with formal training, strong diagnostic and problem-solving skills, and knowledge of electronics and mathematics.

Nationwide, employment of automotive service technicians and mechanics is projected to increase 5 percent through the year 2024.

Career Cluster: Transportation, Distribution & Logistics

Career Pathway: Automotive: Service Technician

CORE CODE	FOUNDATION COURSES (required)	CREDITS	
40.09.00.00.020	Introduction to Automotive *	.50	1.50 credits
Choose two of the following courses:			
40.09.00.00.022	ASE Brakes *	.50	
40.09.00.00.021	ASE Chassis MLR *	.50	
40.09.00.00.024	ASE Electrical/Electronics *	.50	
40.09.00.00.026	ASE Engine MLR *	.50	
40.09.00.00.025	ASE Engine Performance *	.50	
40.09.00.00.023	ASE Steering and Suspension *	.50	
ELECTIVE COURSES			
32.02.00.00.010	Accounting 1	.50	1.50 credits
40.09.00.00.005	Basic Automotive Collision Repair *	.50	
32.02.00.00.140	Business Management	.50	
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41.00.00.00.030	Workplace Skills	.50	
3.00 credits for completion			

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Visit UtahCTE.org to learn how to earn industry certification in this Career Pathway.

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Automotive Service Technician is:

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

Sample Occupations Requiring:

High School Diploma

- > Automotive Body and Related Repairer
- > Automotive Glass Installer and Repairer
- > Automotive Service Mechanics
- > Automotive Service Technician

Certificate

- > Automotive Service Technician – ASE (Automotive Service Excellence)
- www.ase.com/ is a national certification for automotive service technicians.

Assoc. or Technical Degree

- > N/A

Baccalaureate Degree

- > Career and Technical Education Teacher

Graduate or Prof. Degree

- > N/A

Student Testimonial

"I focused on a CTE Pathway in high school. I took all of the automotive classes offered to me to help me pursue my career goal of an automotive technician. The automotive classes I took will help me with my training in college."

Thomas Jex

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Utah Business and Industry Facts

According to the Utah Department of Workforce Services, there are 1,763 automotive repair and maintenance firms throughout Utah.

The occupations of Automotive Service Technicians and Mechanics is projected to experience a high volume of annual job openings.

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