



Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics career cluster focuses on planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes transportation infrastructure planning and management, logistics services, and mobile equipment and facility maintenance. This career cluster includes occupations ranging from automotive mechanic, avionics technician, and automotive entrepreneur to pilots and logistics planning professionals.

Statewide Program of Study: Automotive and Collision Repair

The Automotive and Collision Repair program of study focuses on the occupational and educational opportunities associated with servicing, repairing, and refinishing various types of vehicles. This program of study includes diagnosing and servicing vehicles and learning about processes, technologies, and materials used in reconstructing vehicles.

Secondary Courses for High School Credit

Level 1

- Level 2** • Automotive Basics

- Level 3** • Automotive Technology I: Maintenance and Light Repair

- Level 4** • Automotive Technology II: Automotive Service
• Extended Career Prep for Programs of Study



Example Postsecondary Opportunities

Apprenticeships

- Automotive Technician Apprenticeship

Associate Degrees

- Automobile/Automotive Mechanics Technology
- Autobody/Collision and Repair Technology

Bachelor's Degrees

- Autobody/Collision and Repair Technology
- Heavy Equipment Maintenance Technology

Additional Stackable IBCs/License

- Automobile and Light Truck Certification (A1 – A9)



Example Aligned Occupations

Automotive Service Technicians and Mechanics

Median Wage: \$44,809
Annual Openings: 6,285
10-Year Growth: 10%

Bus and Truck Mechanics and Diesel Engine Specialists

Median Wage: \$50,967
Annual Openings: 3,096
10-Year Growth: 19%

First-Line Supervisors of Mechanics, Installers, and Repairers

Median Wage: \$66,535
Annual Openings: 5,019
10-Year Growth: 19%

Aligned Advanced Academic Courses

Dual Credit	Dual credit offerings will vary by local education agency.
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Students who earn all of the college credits in this program of study will be eligible to graduate from Southwest Texas Junior College with a Level I certificate in Automotive Technology.

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities

- Shadow an automotive technician at a car dealership
- Intern at a rental car company and assist technicians with vehicle maintenance
- Work at a local automotive repair shop and hold both customer service duties and automatic repair duties

Expanded Learning Opportunities

- Join a related automotive association and attend events
- Participate in SkillsUSA

Aligned Industry-Based Certifications

- ASE Entry Level Automobile Maintenance and Light Repair (MR)
- ASE Entry-Level Automobile Automatic Transmission/Transaxle (AT)
- ASE Entry-Level Automobile Brakes (BR)
- ASE Entry-Level Automobile Electronic/Electrical Systems (EE)
- ASE Entry-Level Automobile Engine Performance (EP)
- ASE Entry-Level Automobile Engine Repair (ER)
- ASE Entry-Level Automobile Heating and Air Conditioning (AC)
- ASE Entry-Level Automobile Manual Drive Train and Axles (MD)
- ASE Entry-Level Automobile Service Technology
- ASE Entry-Level Automobile Suspension and Steering (SS)
- ASE Entry-Level Collision Mechanical and Electrical Components (ME)
- ASE Entry-Level Collision Non-Structural Analysis and Damage Repair (SR)
- ASE Entry-Level Collision Painting and Refinishing (PR)
- ASE Entry-Level Collision Structural Analysis and Damage Repair
- ASE Refrigerant Recovery and Recycling

Successful completion of the Automotive and Collision Repair program of study will fulfill requirements of the Business and Industry endorsement.



COURSE INFORMATION

COURSE NAME	COURSE NUMBER AND CREDITS	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Automotive Basics	8720 (1 credit)	admission criteria in the student handbook	10
Automotive Technology I Dual Credit	8721D1 and 8721D2 (2 credits)	Auto Basics and SWTX requirements	11
Automotive Technology II Dual Credit	8722D1 and 8722D2 (2 credits)	Automotive Technology I and SWTX requirements	12
Extended Career Prep for Programs of Study Reg or DC	8607 (3 credits) or 8607DC & D2 (3 credits)	Automotive Basics DC: pre-req & SWTX reqs.	12

COURSE DESCRIPTIONS

Automotive Basics:

Students gain knowledge and skills in the safe application, design, production, and assessment of products, services, and systems. This knowledge includes the history, laws and regulations, and common practices used in the logistics of warehousing and transportation systems. Students will gain basic knowledge of modes of transportation including air, rail, roads, water, cable, pipeline, and space. Safety regulations will be explored through OSHA.

Automotive Technology I Dual Credit:

College Credits: AUMT 1407, 1410, & 2417

Students will be given hands-on activities ranging from simple automotive maintenance to using automotive software and equipment in order to understand the inner working of vehicles. Students will get real world experience in the automotive field.

Automotive Technology II Dual Credit:

College Credits: AUMT 1416, 1445, & 2434

Students gain advanced knowledge of the function of the major automotive systems and the principles of diagnosing and servicing these systems. Students will visit dealerships in San Antonio and will ask questions to see real life work in progress. Students will work toward earning certification in one or more areas.

Extended Career Prep for Programs of Study Reg or DC:

College Credit: BMGT 1382

Students are given the opportunity to work in their program of study while earning high school credit and develop employment experiences, which must be related to the student's current program of study alongside advanced classroom instruction. The goal is to prepare students with a variety of skills to transition from job- to career-mindedness. This course provides a continuing focus on collaborative feedback between the employer, teacher, and student. Students are taught about finding their future careers, keeping, as well as leaving, a job, and how to expound on their employable talents.

Courses in yellow are Level 3 or 4 courses.

