

# Automotive Service Endorsement

## *Specifications, Competencies & Requirements*

### PURPOSE

This endorsement is meant for certified teachers interested in teaching **Automotive Service** courses. It attaches to a current Utah Educator License with a license area of concentration in **Secondary** or **CTE** Education.

Upon attachment of this endorsement to a Utah educator license, educators will be approved to teach the following USBE courses:

Automotive, Intro  
ASE Chassis MLR  
ASE Engine MLR  
ASE Brakes  
ASE Electrical/Electronics

ASE Steering & Suspension  
ASE Engine Performance  
Small Engine Repair  
Power Motor Sports Repair

### ENDORSEMENT TYPES

#### *Prerequisite*

Demonstrate an understanding of Career and Technical Education (CTE) basics.

CTE Knowledge

#### *Associate Level Requirements*

Applicants must complete **THREE** of the following competency requirements. The associate level endorsement is valid for up to three school years before it expires. Associate-level endorsements are non-renewable.

Brakes  
Steering & Suspension  
Automotive Electrical & Electronics  
Engine Performance  
Engine Repair  
Maintenance & Light Repair  
EV Safety  
Auto, Diesel, & Collision Shop Management  
CTSO Knowledge

#### *Professional Level Requirements*

The applicant must meet **ALL** the competency areas listed above for the professional level.

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### COMPETENCY DETAILS & DESCRIPTIONS

#### *Prerequisite*

#### 1. CTE Knowledge

Demonstrate an understanding of CTE basics:

- Explain how CTE links learning to specific Utah industries and what its main goals are.
- Know the licenses and endorsements needed to teach specific CTE courses.

- Describe how CTE is organized into clusters and pathways at the state, district (LEA), and school levels, and how this helps students succeed after graduation.
- Locate and use the state's strands and standards in lesson plans.
- Explore CTE student organizations (CTSOs) and professional groups and explain how they support students and teachers.
- Explain how advisory boards, with industry members, make sure programs meet job market needs and maintain safe learning environments.
- Understand the basics of securing funding, planning for the future of the program, and participating in the state Program of Quality Review (PQR) to ensure program excellence.

Select one of the following options:

- **USBE Course:** [CTE Orientation](#)
- **Complete THREE years of full-time CTE Teaching in Utah**
- **Currently hold a professional-level CTE endorsement**

### *Endorsement Competencies*

#### **2. Brakes**

Demonstrate an understanding of the principles of braking systems, including hydraulic, mechanical, and electronic components. Diagnose brake-related issues using appropriate tools and techniques. Perform brake repairs, replacements, and adjustments efficiently and accurately to the manufacturer's specifications. Demonstrate a priority for safety protocols when working with brake systems. Demonstrate effective communication regarding brake-related concerns. Maintain knowledge of updated industry advancements and new brake technologies.

Select one of the following options:

- **USBE Microcredential:** Automotive Services: Brakes
- **AUTO 1500 - Brakes - Theory** (Utah State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.
- **ASE A5:** Brakes
- **Industry Certification:** Verifiable certificate covering the required competency skills.

#### **3. Steering & Suspension**

Demonstrate an understanding of the principles of steering and suspension systems. Diagnose steering and suspension-related issues using appropriate tools and techniques. Perform four-wheel alignments efficiently and accurately to the manufacturer's specifications. Demonstrate a priority for safety protocols when working with steering and suspension systems. Demonstrate effective communication regarding steering and suspension-related concerns. Maintain knowledge of updated industry advancements and new steering and suspension technologies.

Select one of the following options:

- **USBE Microcredential:** Automotive Services: Steering & Suspension
- **AUTO 144 - Suspension & Steering - Theory** (Utah State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.

- **ASE A4:** Suspension & Steering
- **Industry Certification:** Verifiable certificate covering the required competency skills.

## 4. Automotive Electrical & Electronics

Demonstrate an understanding of the construction, operation, and repair of electrical components within a vehicle. Maintain an electrically safe working area, use the required personal protective equipment. Diagnose and repair vehicle electrical systems, including the ability to read and interpret wiring diagrams and use diagnostic tools. Demonstrate knowledge in current industry standards and safety practices related to electrical components and hybrid systems.

*Select one of the following options:*

- **USBE Microcredential:** Automotive Electrical & Electronics
- **AUTO 1600 - Electrical & Electronics I Theory** (Utah State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.
- **ASE A6:** Electronic/Electrical Systems
- **Industry Certification:** Verifiable certificate covering the required competency skills.

## 5. Engine Performance

Demonstrate an understanding of computer-controlled engine systems and the ability to diagnose and repair emission failures and drivability problems. Proficiency in performing tests and diagnostics on starting systems, charging systems, and electrical components, as well as interpreting complex data from diagnostic equipment. Demonstrate knowledge of evolving technologies and maintain a commitment to safety and environmental regulations, ensuring all services meet the high-quality standards set by the industry

*Select one of the following options:*

- **USBE Microcredential:** Automotive Service: Engine Performance
- **AUTO 1800 - Engine Performance I Theory** (Utah State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.
- **ASE A8:** Engine Performance
- **Industry Certification:** Verifiable certificate covering the required competency skills.

## 6. Engine Repair

Demonstrate an understanding of the principles of internal combustion engine systems. Diagnose engine-related issues using appropriate tools and techniques. Perform engine repairs and adjustments efficiently and accurately to the manufacturer's specifications. Demonstrate a priority for safety protocols when working with engine systems. Demonstrate effective communication regarding engine-related concerns. Maintain knowledge of updated industry advancements and new engine technologies.

*Select one of the following options:*

- **USBE Microcredential:** Automotive Service: Engine Repair
- **AUTO 1100 Engine Repair Theory** (Utah State University)

- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.
- **ASE A1:** Engine Repair
- **EETC (Equipment and Engine Training Council Certification)** Four-Stroke Engine AND Two-Stroke Engine Certifications
- **Industry Certification:** Verifiable certificate covering the required competency skills.

## 7. Maintenance & Light Repair

Demonstrate broad knowledge of A1-A8 maintenance. Diagnose and perform maintenance and light repairs across systems, understanding vehicle service information, and adhering to safety precautions. Retrieve and record diagnostic trouble codes (DTCs), verify engine warning indicators, and service engine components while following the latest industry standards and environmental practices in accordance with manufacturer's specifications.

*Select one of the following options:*

- **USBE Microcredential:** Automotive Service: Maintenance & Light Repair
- **AUTO 1020 - Vehicle Maintenance** (Utah State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.
- **ASE G1:** Maintenance & Light Repair
- **Industry Certification:** Verifiable certificate covering the required competency skills.

## 8. EV Safety

Demonstrate an understanding of EV and hybrid safety, including mechanical and electronic safety components. Diagnose hybrid safety issues using appropriate tools and techniques. Demonstrate a priority for safety protocols when working with high voltage EV systems. Demonstrate effective communication regarding high voltage concerns. Maintain knowledge of updated industry advancements and new EV technologies.

*Select one of the following options:*

- **USBE Microcredential:** Automotive Service: EV Safety
- **ATTC 4520 - EV3: Hybrid & Electric Vehicle Safety** (Weber State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.
- **ASE Level 1: xEV Electrical Safety Awareness Certification**
- **ASE L3: Light Duty Hybrid/Electric Vehicle Specialist**
- **Equivalent Industry Certification:** Verifiable certificate covering the required competency skills.

## 9. Auto, Diesel, & Collision Shop Management

Demonstrate best practices relevant to Automotive/Diesel shop management:

- Equipment & tool management
- Shop management
- Safety

Select **one** of the following options:

- **USBE Microcredential:** Auto, Diesel, & Collision Shop Management
- **AUTO 1000 - Introduction to Transportation Technology I** (Utah State University)
- **College Course:** Transcripts showing passing grade of relevant course(s), and course description covering the required competency skills.

## 10. CTSO Knowledge

Demonstrate Career and Technical Student Organization (CTSO) knowledge:

- **Help students lead:** Give students opportunities to build their leadership abilities and take charge.
- **Mentor students:** Offer guidance to help students set goals and overcome difficulties as they grow.
- **Manage the organization:** Coordinate meetings, events, and budgets, and handle administrative tasks smoothly.
- **Create helpful programs:** Develop activities that match the CTSO's goals of building leadership, exploring careers, and developing skills.
- **Communicate effectively:** Clearly talk with students, school leaders, and community members, and promote the CTSO.
- **Work with others:** Partner with teachers, businesses, and other organizations to create opportunities like internships and community service.
- **Advocate for CTE:** Promote Career and Technical Education and work to get the resources and recognition it needs.
- **Keep learning:** Stay up-to-date on CTSO management and trends in CTE.
- **Focus on student success:** Support students' interests and celebrate their accomplishments.

Select **one** of the following options:

- **Attend a CTSO Fall Leadership Conference:** Reflected on MIDAS transcripts.
- **USBE Course:** [SkillsUSA Utah Advisor Training](#)
- **USBE Microcredential:** Career & Technical Student Organizations