

SKILL CERTIFICATE IN AUTOMOTIVE ELECTRICAL TECHNOLOGY

Students completing this certificate will acquire skills and knowledge required to perform diagnosis, service and repair of automotive electrical and electronic systems. Upon program completion it is expected the student will develop employment entry level knowledge and skills necessary for the proper diagnosis and repair of automotive starting and charging systems, diagnosing and repair of automotive computer systems and diagnosis of automotive electrical accessories. Additionally, the capstone course prepares students for employment in the area of hybrid and electric vehicle technology.

Program Outcomes

- Use the proper automotive terminology to discuss systems operation, methods of diagnosis and needed repairs.
- Prepare a written estimate of needed system repairs and estimate the related costs.
- Practice safety in the repair and service associated with electrical, hydraulic and mechanical systems.
- Students will demonstrate abilities to describe components and apply necessary skills for their respective approach to select the proper method to diagnose, repair and test automotive systems.
- Demonstrate proficiency in the use of automotive diagnostic equipment to evaluate system performance and determine needed repairs.

Career Opportunities

Entry-level employment opportunities include, but are not limited to automotive electrical systems diagnosis and repair, servicing, diagnosing and replacing worn and defective electronic accessory components and the maintenance of automotive battery, starting and charging systems. This certificate is designed to meet national certification and training standards (ASEEF) for automotive service excellence (ASE) testing and certification category (A6) as well as advanced level certification (L3).

Program Requirements

| Code | Title | Units |
|------------------------------|---------------------------------------------------------|-------|
| REQUIRED CERTIFICATE COURSES | | |
| AUTO 130 | Introduction to Automotive Technology | 3 |
| AUTO 136 | Automotive Electrical Systems | 4 |
| AUTO 273 | Hybrid Electric Alternative Fuel Vehicles Technology L3 | 5-6 |
| or AUTO 243 | Automotive Advanced Computer Controls | |
| = | | |
| TOTAL | | 12-13 |

The Skill Certificate requirements include completion of the certificate courses with a "C" or better grade in each course. Required and support courses may be substituted with the approval of the Industry & Technology Division Chair.