AUTOMOTIVE COLLISION REPAIR: STRUCTURAL DAMAGE (CERT)

CERTIFICATE OF ACHIEVEMENT

The Automotive Collision Repair Structural Damage Certificate continues the course of study beyond the entry level certificate. Structural damage analysis, straightening, repair and replacement of structural panels and advanced welding techniques are emphasized within the program. Steering, suspension and power train damage including wheel alignment theory and practice for collision damaged vehicles are included within the course content.

Program Student Learning Outcomes

- Students will analyze structural damage to automotive vehicles and properly repair them to OEM standards
- Students will retrieve vehicle-specific repair information from OEM technical information websites.
- Students will properly perform frame inspection and repair on automotive structures.
- Students will set up welding equipment and perform required welds according to manufacturer recommendations.
- Students will properly identify the base materials used to make automotive parts, and select appropriate repair materials and methods to restore damaged parts to factory specifications.
- Students will properly repair automotive metal and plastic parts to industry standards.
- Students demonstrate proper use of measuring and gauging systems.
- Students visually inspect and analyze structurally damaged vehicles and properly measure and replace damaged structural panels using a variety of measuring and repairing equipment to industry standards.
- Students perform GMAW (MIG), and STRSW welding applications on automotive steels.
- Students will perform structural automotive welds in accordance with the I-CAR welding qualification test requirements.

Program Requirements

Code Number	Course Title	Units
Required Courses		
AB 151	Non-Structural Repair	4.5
AB 152	Structural Damage Repair	4.5
Required Electives		
AB 153	Steering, Suspension and Powertrain Damage	4.5
AB 155	Structural Panel Replacement	4.5
AB 157	Structural Automotive Welding	2.0
AB 181	Non-Structural Damage Estimating	3.0
Total Units		**23**