Course Information Form (CIF)

Course Code: ACR 291

Course Title: Collision Repair Advanced Aluminum Repair

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 47.0603
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 2-2-3
Credit Hour Distribution:

Lecture: 2	Lab: 2	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Basic and advanced cosmetic straightening of aluminum and aluminum body filler applications. Principles of Metal Inert Gas (MIG) welding setup and tuning, emphasizing personal and vehicle safety during the welding processes.

General Course Objectives

Students will learn basic and advanced cosmetic straightening of aluminum and aluminum body filler applications.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 059

Prerequisites

Credit in ACR 272

Methods of Evaluation

2 exams, 8 lab sheets, and 2 practical exams.

Instructional Materials and Additional Supplies

Auto Collision Repair and Refinishing, Michael Crandall

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Aluminum Repair Safety	1. Identify PPE safety requirements for aluminum repairs. 2. Demonstrate proper PPE use in lab.	2	2	0
Straightening Aluminum Exterior Panels	1. Use OEM service information to evaluate the repair plan. 2. Use industry-approved techniques to remove collision repair damage from aluminum panels.	10	10	0
Repair and Replacement of Aluminum Body Components	1. Use OEM service information to evaluate the repair plan. 2. Complete industry-standardized procedures to repair and replace aluminum body components.	10	10	0
Welding Aluminum Body and Structural Components	1. Use OEM service information and repair plan to set up and select the correct aluminum welding operation. 2. Weld aluminum body panels and structures damaged by collision events.	5	5	0
Estimating and Developing Repair Plans for Aluminum Repairs	1. Inspect collision-damaged aluminum vehicles. 2. Develop repair plans and cost estimates for repair.	3	3	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	30	0