



CRT 2420

Division: Career and Technical Education

Department: Collision Repair and Refinishing Technology

Course: CRT 2420

Title: Plastic Repair

Catalog Description:

This course teaches various repair methods, tools, and materials used to correctly repair plastic materials and sheet molded compound (SMC) panels in modern vehicles. It includes lecture, demonstrations, and labs and uses Inter-Industry Conference on Auto Collision Repair (I-CAR) curriculum. Students who successfully complete the course will be prepared for Automotive Service Excellence (ASE) certification.

General Education Requirements: N/A

Semesters Offered: TBA

Credit/Time Requirement: Credit: 4; Lecture: 1; Lab: 7

Clock/Hour Requirements: 128

Offered for Non-Credit: No

Prerequisites: CRT 1110

Corequisites: None

Justification:

The I-CAR curriculum is recognized as the leader in collision repair training. It also provides the necessary information to pass the ASE task lists and tests required for certification. This course was approved by the advisory committee and similar courses are taught at Utah Valley State College (CRT 2420) and Salt Lake Community College (AR 1211).

Student Learning Outcomes:

Upon successful completion, students will be able to:

- reinforce repairs for different types of repair tapers
- properly identify automotive interior and exterior plastics
- use various plastic repair methods appropriately
- know characteristics and composition of SMC panels
- describe and differentiate between panel patching and structural panel adhesives
- remove dents from a padded dash
- select an appropriate plastic welding rod
- make a plastic weld without plastic rod.

Course objectives will be accomplished by providing students with learning experiences in the following subject areas:

- hazard management
- ethics in the collision repair industry
- identification and repair decisions
- adhesive repair procedures
- plastic welding repairs
- SMC repairs
- repair of padded dashes.

General Education Outcomes:

6) Apply computational skills to a variety of contexts.

Students will be required to measure body components before and after repair work is completed to ensure that proper tolerances and allowances are achieved. These measurements are taken often and repeatedly throughout the repair process to ensure progress toward the repair. These measurements are provided by laser, tram, and steel tape in metric and U.S. standard measurements.

Key Performance Indicators:

In class:

- Student progress will be evaluated on skill levels demonstrated in lab (70%), quiz scores (10%), and a final comprehensive exam (20%).

Following class:

- Upon completion of the course, safety and competency will be demonstrated in subsequent courses and on custom projects.
- Students will apply the techniques acquired to verify they have the skills on the job and by passing national ASE certification tests.

Representative Text and/or Supplies:

- James E. Duffy, *I-CAR student textbooks and modules*, current editions, Delmar Publishers.

Optimum Class Size: 10

Maximum Class Size: 20

Signatures:

I hereby submit this course syllabus:

Andy Morgan, ,

I hereby find this course consistent with the goals and resources of the Collision Repair and Refinishing Technology Department:

Andy Morgan, , , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)