# CRT 245R

**Division:** Career and Technical Education
**Department:** Collision Repair and Refinishing Technology
**Course:** CRT 245R
**Title:** Practical Collision Repair
**Catalog Description:**

Techniques of collision repair are taught on new and older vehicles. Special needs of specific students may also be covered, e.g., welding, spraying, preparation of surface, estimating, and preparation for Automotive Service Excellence (ASE) certificates. This course may be repeated. A maximum of 2 credits will be allowed toward completion of degree.

**General Education Requirements:** N/A
**Semesters Offered:** TBA
**Credit/Time Requirement:** Credit: 2; Lecture: 1; Lab: 3
**Clock/Hour Requirements:** 60
**Offered for Non-Credit:** No
**Prerequisites:** None

**Corequisites:** None

**Justification:**

The Inter-Industry Conference on Auto Collision Repair (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.

**Student Learning Outcomes:**

Upon successful completion, students will be able to:

- remove detachable chrome, name plates, wiper arms, etc., and replace after painting
- locate all defective finish areas and remove defective finish by grinding/sand blasting
- featheredge scratches and chips
- paint so that featheredges show no rips, tears, or discernible tapering
- treat rusty metal arms with various products
- wet-sand painted areas with proper sanding grit while avoiding chrome and glass damage
- dry-sand painted areas.

**Content:**

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

- hazard management

- vehicle pre-washed with detergent
- vehicle wax and grease removed
- all petroleum based residue removed
- feathering scratches and chips to satisfactory taper
- areas to be primed and masked (wheels, glass, chrome, plastic)
- applying tools to sheet metal
- selecting and applying correct primer filler and additives
- primer filler properly mixed and applied
- spot putty applied
- hand sanding (wet or dry) prepared area
- primed area blocked and sanded
- fine panel ridge lines restored
- vehicle blown out with all dust and water removed
- masking performed with no overlapped or underlapped edges
- final wax and grease solvent applied
- complete refinishing of vehicle.

**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 courese and on custom projects.
- Students will apply the techniques acquired on the job and pass 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)