

COLLISION REPAIR TECHNOLOGY (CRT)

QUICK FACTS: CRT COURSES

- **Instructional School:** Industry, Engineering, and Trades
- **Department:** Automotive Service and Collision Repair

CRT 115 Safety and Welding for Collision Repair

(6 Credits, Fall)

Orientation and application of shop safety practices, tool safety, shop equipment theories, and welding mild steel and automotive sheet metals for collision repair. Students will perform basic welding processes and techniques of GMAW (MIG) welding, resistance welding, basic oxyacetylene, and plasma air arc cutting of automotive sheet metals. Students will gain knowledge of the proper use of equipment, tools, and safety that meet or exceed industry standards. PREREQ: Completion of (or placement into) ENGL 101 and MATH 118, program orientation, and Collision Repair Technology major. COREQ: CRT 125. (3 lecture hours, 8 lab hours, 6 credits)

CRT 125 Basic Collision Repair

(6 Credits, Fall)

Practical application and basic theory of metal finishing and minor body repair including straightening and prepping sheet metals; removal and installation of necessary trim and hardware to facilitate repair procedures; repair and replacement of welded and bonded exterior panels; and proper use of plastic fillers, abrasives, sanding techniques, and air tools. Students will learn detailing and polishing fundamentals including pre-wash, paint defect identification, exterior polishing, interior renovation, environmental hazards, and proper use of detailing equipment. Students will gain knowledge of general safety and health practices, including the use of chemicals, detailing products, and personal protective equipment that meets or exceeds industry standards. PREREQ: Program orientation, Collision Repair Technology major, and CRT 115. (1 lecture hours, 14 lab hours, 6 credits)

CRT 135 Estimating, Damage Analysis, and Structural Repair

(6 Credits, Spring)

Overview of the estimating process, from handwritten to electronic estimating, basic measuring systems, computerized measuring systems, and estimating collision damage and painted surfaces. Students will learn to accurately identify vehicle make and model, options, and trim packages, as well as how to assess the damage and determine repair techniques and processes for structural repair. Students will also learn how to set up, measure, and read a body dimension sheet; and put together a repair plan and parts list. PREREQ: CRT 115 and CRT 125. COREQ: CRT 145. (1 lecture hours, 14 lab hours, 6 credits)

CRT 145 Intermediate Collision Repair

(6 Credits, Spring)

Students will use learned skills in the repair of minor collision damage, frame bench repair techniques, panel replacement, and proper plastic repair procedures. Includes primer guns and their adjustments, primers and undercoats, basic sanding techniques, and preparation of a variety of surfaces for collision damage repair. Students will also learn procedures for the replacement of movable and fixed glass and the mechanical components of today's modern vehicles. PREREQ: CRT 115 and CRT 125. COREQ: CRT 135. (1 lecture hours, 14 lab hours, 6 credits)

CRT 215 Refinishing for Collision Repair

(6 Credits, Fall)

Identification of tools, components, safety practices, and processes used in the advanced levels of collision repair. Students will learn advanced techniques of prep and painting and be able to produce industry-level results in the following areas: painting, color matching, blending, color sanding, polishing, and shading. PREREQ: CRT 135 and CRT 145. COREQ: CRT 235. (1 lecture hours, 14 lab hours, 6 credits)

CRT 235 Advanced Collision Repair and Refinishing

(6 Credits, Fall)

Identification of tools, components, safety practices, and processes used in the advanced levels of collision repair and refinishing. Students will apply their newly developed skills in the areas of collision damage repair, welding or gluing of panel replacement, unibody collision repair, automotive electrical systems and diagnosis, custom refinishing, and advanced refinishing techniques. PREREQ: CRT 135 and CRT 145. COREQ: CRT 215. (1 lecture hours, 14 lab hours, 6 credits)

CRT 260 Collision Repair Cooperative

(12 Credits, Spring)

This cooperative education course offers CRT students an experience-based opportunity to explore their future careers through the completion of multiple short-term internships with local dealerships and independent shops. Students will apply their classroom learning to real-world situations and develop the interpersonal and job-readiness skills that are needed to be successful in the collision repair field. PREREQ: CRT 215 and CRT 235. (3 lecture hours, 27 lab hours, 12 credits)

Refer to [How to Read Course Descriptions](#) for an explanation of elements found in the course descriptions above.