

AUTOMOTIVE COLLISION AND REFINISHING (ACRF)

ACRF 1100 Credits: 2.5

Occupational Safety Total Hours: 50

Students learn their rights and responsibilities in the workplace according to local, Provincial and National safety regulations and to identify job hazards and provide a safe workplace. The course focuses on Workplace Hazardous Materials Information Systems (WHMIS), fire prevention, personal protective equipment (PPE), emergency procedures and environmental safety such as hazardous material handling, storage and disposal. Additionally, students are introduced to vehicle hazards such as alternate fuel and electric vehicles, supplemental Restraint Systems (SRS).

ACRF 1101 Credits: 2

Occupational Safety (E) Total Hours: 56

Students learn their rights and responsibilities in the workplace according to local, Provincial and National safety regulations and to identify job hazards and provide a safe workplace. The course focuses on Workplace Hazardous Materials Information Systems (WHMIS), fire prevention, personal protective equipment (PPE), emergency procedures and environmental safety such as hazardous material handling, storage and disposal. Additionally, students are introduced to vehicle hazards such as alternate fuel and electric vehicles, supplemental Restraint Systems (SRS).

ACRF 1110 Credits: 4.5

Industry Readiness Total Hours: 135

Students document personal successes and achievements and develop a personal learning plan to become competent in those skills that may be lacking throughout the program. Students conduct research to create an updated resume for employment in the Collision Repair and Refinishing Industry. Additionally, students prepare for a professional presentation for potential employers.

ACRF 1116 Credits: 12

Shop Experience (E) Total Hours: 360

The purpose of this 350 hour work practicum is to provide students opportunities to apply practical skills and knowledge learned in the courses of this program in authentic learning environments. Opportunities are provided by; students working in industry in a sponsor shop, working in the VCC or High School collision repair shop, or a combination of these based on the individual student situation.

ACRF 1120 Credits: 5

Construction and Components Total Hours: 100

This course begins with a brief history of the automobile followed by the evolution of the automotive technologies and materials and how vehicles are manufactured today. Students are introduced to vehicle body styles, structures and body components. A major focus of this course is the removal and installation vehicle trim, hardware, decals and stripes to assist repair and refinishing processes.

ACRF 1121 Credits: 3.5

Construction & Components (E) Total Hours: 100

This course begins with a brief history of the automobile followed by the evolution of the automotive technologies and materials and how vehicles are manufactured today. Students are introduced to vehicle body styles, structures and body components. A major focus of this course is the removal and installation vehicle trim, hardware, decals and stripes to assist repair and refinishing processes.

ACRF 1130 Credits: 3.5

Tools, Equipment & Maintenance Total Hours: 75

Students learn to identify, operate and maintain hand, electric and pneumatic tools. Students are introduced to pneumatic power systems, basic refinishing equipment and hydraulic equipment used in the industry. This course also focuses on safe vehicle lifting procedures using various lifting equipment.

ACRF 1131 Credits: 2.5

Tools and Equipment (E) Total Hours: 75

Students learn to identify, operate and maintain hand, electric and pneumatic tools. Students are introduced to pneumatic power systems, basic refinishing equipment and hydraulic equipment used in the industry. This course also focuses on safe vehicle lifting procedures using various lifting equipment.

ACRF 1140 Credits: 3

Welding Heating Cutting Steel Total Hours: 75

Students begin this course learning to safely perform oxyacetylene welding, cutting and heating operations to establish basic skills as a foundation for additional welding processes. Then, students learn to perform gas metal arc welding processes as well as troubleshooting, equipment maintenance and safe welding practices. The course concludes with an industry standard weld performance qualification test.

ACRF 1141 Credits: 2.5

Weld Heat Cut Steel (E) Total Hours: 75

Students begin this course learning to safely perform oxyacetylene welding, cutting and heating operations to establish basic skills as a foundation for additional welding processes. Then, students learn to perform gas metal arc welding processes as well as troubleshooting, equipment maintenance and safe welding practices. The course concludes with an industry standard weld performance qualification test.

ACRF 1150 Credits: 7.5

Metal Panels and Components Total Hours: 175

This course introduces students to the characteristics of sheet metal, types of sheet metal damage and sheet metal tools and equipment. Students perform minor sheet metal damage repairs using a variety of panel shaping and filler contouring techniques. Additionally, students remove and install various body panels and components to industry fit and finish standards.

ACRF 1151 Credits: 6

Metal Panels & Components (E) Total Hours: 175

This course introduces students to the characteristics of sheet metal, types of sheet metal damage, and sheet metal tools and equipment. Students perform minor sheet metal damage repairs using a variety of panel shaping and filler contouring techniques. Additionally, students remove and install various body panels and components to industry fit and finish standards.

ACRF 1160 Credits: 2

Plastic Panels and Components Total Hours: 50

This course introduces students to automotive plastics identification, repair tools and equipment, and repair techniques. Students perform adhesive and weld repairs to rigid and flexible plastic interior and exterior parts.

ACRF 1161 Credits: 1.5

Plastic Panels Components (E) Total Hours: 50

This course introduces students to automotive plastics identification, repair tools and equipment and repair techniques. Students perform adhesive and weld repairs to rigid and flexible plastic interior and exterior parts.

ACRF 1170 Credits: 2

Organize Document Communicate Total Hours: 50

Students learn planning and organizational work process skills needed to productively contribute to the workflow of a collision repair facility. Additionally, students learn to locate and interpret vehicle information, technical manuals and bulletins and to interpret work orders. This course also focuses on environmental safety regulation compliance and auto insurance claims processes in British Columbia.

ACRF 1171 Credits: 1.5

Organize Document Comm (E) Total Hours: 50

Students learn planning and organizational work process skills needed to productively contribute to the workflow of a collision repair facility. Additionally, students learn to locate and interpret vehicle information, technical manuals and bulletins and to interpret work orders. This course also focuses on environmental safety regulation compliance and auto insurance claims processes in British Columbia.

ACRF 1180 Credits: 6.5

Refinish Preparation Total Hours: 150

Students identify various substrates, topcoats and conditions found with automotive finishes and procedures required to correct them in preparation for refinishing. A major focus of this course is correct sanding and stripping of surfaces, masking vehicles, applying and blocking undercoat materials and fillers. Students are introduced to coatings, solvents and additives and important information regarding safe use, handling and storage.

ACRF 1181 Credits: 5

Refinish Preparation (E) Total Hours: 150

Students identify various substrates, topcoats and conditions found with automotive finishes and procedures required to correct them in preparation for refinishing. A major focus of this course is correct sanding and stripping of surfaces, masking vehicles, applying and blocking undercoat materials and fillers. Students are introduced to coatings, solvents and additives and important information regarding safe use, handling and storage.

ACRF 1185 Credits: 4

Refinish Application Total Hours: 100

This course focuses on the spray environment, vehicle and gun setup in preparation for various topcoat applications in compliance with personal and environmental safety regulations. Students also learn spray techniques for topcoating, refinish defect prevention and defect correction processes.

ACRF 1186 Credits: 3.5

Refinish Application (E) Total Hours: 100

This course focuses on the spray environment, vehicle and gun setup in preparation for various topcoat applications in compliance with personal and environmental safety regulations. Students also learn spray techniques for topcoating, refinish defect prevention and defect correction processes.

ACRF 1190 Credits: 1.5

Interior & Exterior Detailing Total Hours: 37.5

In this course, students inspect paint finishes, correct minor paint defects and perform interior and exterior detailing processes. Students learn to perform final checks to ensure repairs are consistent with work orders and control quality standards in advance of delivery to customers.

ACRF 1191 Credits: 1

Interior Exterior Detail (E) Total Hours: 37.5

In this course student inspect paint finishes, correct minor paint defects and perform interior and exterior detailing processes. Students learn to perform final checks to ensure repairs are consistent with work orders and control quality standards in advance of delivery to customers.