Collision Repair and Refinishing Technology

Collision Repair and Refinishing Technology (A60130)

Diploma Awarded

An Associate in Applied Science degree in Collision Repair and Refinishing Technology is awarded by the college upon completion of this program.

Admissions

- Completion of a high school diploma or equivalent is required as the foundation of a career in this area.
- Many courses have prerequisites or co-requisites; check the Courses section for details.

Note: Students must furnish required hand tools, textbooks, respirator and protective clothing. A list of these items can be obtained from an instructor or the program chair. Call the program chair at 704.330.4153 for a list.

Contact Information

The Collision Repair and Refinishing Technology program is in the Public Service & Transportation Division. For more information, call the program chair at 704.330.4153 or the Public Service & Transportation Division at 704.330.4122.

General Education Requirements		
ENG 111	Writing and Inquiry	3.0
Select 3.0 credits from the following:		3.0
COM 110	Introduction to Communication	
COM 231	Public Speaking	
Select 3.0 credits from the following:		3.0
MAT 110	Mathematical Measurement and Literacy	
MAT 143	Quantitative Literacy	
MAT 152	Statistical Methods I	
MAT 171	Precalculus Algebra	
Select 3.0 credits from the following:		3.0
ART 111	Art Appreciation	
ART 114	Art History Survey I	
ART 115	Art History Survey II	
DRA 111	Theatre Appreciation	
HUM 120	Cultural Studies	
HUM 130	Myth in Human Culture	
MUS 110	Music Appreciation	
MUS 112	Introduction to Jazz	
PHI 215	Philosophical Issues	
PHI 240	Introduction to Ethics	
REL 110	World Religions	
Select 3.0 credts from the following:		3.0
ECO 251	Principles of Microeconomics	
ECO 252	Principles of Macroeconomics	
HIS 111	World Civilizations I	
HIS 112	World Civilizations II	
HIS 131	American History I	
HIS 132	American History II	
POL 120	American Government	
PSY 150	General Psychology	
SOC 210	Introduction to Sociology	
Major Requirements		
ACA 122	College Transfer Success	1.0
TRN 110	Introduction to Transport Technology	2.0
TRN 120	Basic Transportation Electricity	5.0
TRN 140	Transportation Climate Control	2.0
TRN 170	Pc Skills for Transportation	2.0
AUB 111	Painting & Refinishing I	4.0
AUB 112	Painting & Refinishing II	4.0
AUB 121	Non-Structural Damage I	3.0
AUB 131	Structural Damage I	4.0
AUB 114	Special Finishes	2.0
AUB 122	Non-Structural Damage II	4.0
AUB 132	Structural Damage II	4.0
AUB 136	Plastics & Adhesives	3.0
AUB 162	Autobody Estimating	2.0
TRN 180	Basic Welding for Transportation	3.0
Technical Electives		
Select 5.0 Credits from the Following:		5.0
AUB 141	Mechanical & Electrical Components I	
AUB 150	Automotive Detailing	
TRN 180A	Basic Welding for Transportation Lab	
TRN 140A	Transportation Climate Control Lab	
WBL 112	Work-Based Learning I	
WBL 122	Work-Based Learning II	
Total Credits		**65**

AUB 111. Painting & Refinishing I. 4.0 Credits. Class-2.0. Clinical-0.0. Lab-6.0. Work-0.0
This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards.

AUB 112. Painting & Refinishing II. 4.0 Credits. Class-2.0. Clinical-0.0. Lab-6.0. Work-0.0
This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems.
Prerequisites: Take AUB 111

AUB 114. Special Finishes. 2.0 Credits. Class-1.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards.
Prerequisites: Take AUB 111

AUB 121. Non-Structural Damage I. 3.0 Credits. Class-1.0. Clinical-0.0. Lab-4.0. Work-0.0
This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/repairing/replacing of body panels to accepted standards.

AUB 122. Non-Structural Damage II. 4.0 Credits. Class-2.0. Clinical-0.0. Lab-6.0. Work-0.0
This course covers safety, tools, and advanced body repair. Topics include shop safety, damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware.

AUB 131. Structural Damage I. 4.0 Credits. Class-2.0. Clinical-0.0. Lab-4.0. Work-0.0
This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage.

AUB 132. Structural Damage II. 4.0 Credits. Class-2.0. Clinical-0.0. Lab-6.0. Work-0.0
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards.
Prerequisites: Take AUB 131

AUB 136. Plastics & Adhesives. 3.0 Credits. Class-1.0. Clinical-0.0. Lab-4.0. Work-0.0
This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards.

AUB 141. Mechanical & Electrical Components I. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course covers the basic principles of automotive mechanical and electrical components. Topics include personal and environmental safety and suspension and steering, electrical, brake, heating and air-conditioning, cooling, drive train, and restraint systems. Upon completion, students should be able to identify system components and perform basic system diagnostic checks and/or repairs according to industry standards.

AUB 150. Automotive Detailing. 2.0 Credits. Class-1.0. Clinical-0.0. Lab-3.0. Work-0.0
This course covers the methods and procedures used in automotive detailing facilities. Topics include safety, engine, interior and trunk compartment detailing, buffing/polishing exterior surfaces, and cleaning and reconditioning exterior trim, fabrics, and surfaces. Upon completion, students should be able to improve the overall appearance of a vehicle.

AUB 162. Autobody Estimating. 2.0 Credits. Class-1.0. Clinical-0.0. Lab-2.0. Work-0.0
This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report.