

AUTOMOBILE COLLISION REPAIR AND REFINISHING TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE DEGREE

The ever-increasing numbers of vehicles on the highways, coupled with the high cost of original purchase and replacement, have created a demand for trained collision repair technicians. This demand is currently exceeding the supply, and future indications are that this trend will continue. A student may exit this program after completing two semesters and receive an Automobile Collision Repair Technician or Automobile Refinishing Technician Certificate of Applied Science. Graduates in our Automobile Repair and Refinishing program may find career opportunities with auto repair shops, auto parts stores, windshield repair shops and other automotive related businesses. See our website at www.msbillings.edu/careers for graduate data.

Automobile Collision Repair Technicians perform structural and cosmetic repairs on automobiles with unitized body construction in preparation for refinishing. Responsibilities include minor sheet metal repair, welding of mild and high-strength steels, panel replacement, and measuring with laser and mechanical measuring systems.

Automobile Refinishing Technicians prepare and refinish vehicles. Students perform panel and overall refinishing using the latest techniques and equipment. Basic knowledge and skills in refinishing are developed with hands-on practice of current techniques.

Upon successful completion of this program a student will be able to:

Repair:

- Perform demonstrations with basic tools in body damage repair situations, according to lectures and demonstrations shown.
- Perform welding operations using resistance and metal inert gas equipment.
- Disassemble multiple vehicle panels including hood, fenders, doors and bumpers, reassemble and align according to manufacturers' recommendations.
- Identify and diagnose door hardware malfunctions, including latches, lock assemblies and window regulators.
- Apply gasket and adhesive methods to remove and replace stationary automobile glass

Refinishing:

- Select and use proper safety equipment for personal and environmental protection against hazards from the refinish industry.
- Use appropriate application skills and correct maintenance procedures in refinishing equipment according to the manufacturer's specifications.
- Apply automotive undercoat products per manufacturer's specifications through proper application techniques.
- Select and apply correct automotive basecoat/clearcoat products per manufacturer's specifications.
- Using the proper techniques and products, prepare a substrate by correctly cleaning and abrading the surface before the application of automotive undercoats.

Code	Title	Credits
Required Courses		
ABDY 101	Introduction to Estimating	2
ABDY 110	Intro to Collision Repair	4

ABDY 120	Non-Structral Collision Repair	6
ABDY 150	Refinish Safety	2
ABDY 160	Automotive Undercoats	4
ABDY 170	Automotive Topcoats	6
ABDY 201	Advanced Estimating	1
ABDY 220	Structural Collision Repair	6
ABDY 240	Aluminum Repair	4
ABDY 270	Advanced Refinishing	6
ABDY 275	Waterborne Paint Systems	3
ABDY 280	Custom Painting	5
or ABDY 298	Internship/Cooperative Educ	
AST 285	ASE Exam Prep: Section One	1
CAPP 120	Introduction to Computers	3
COMX 106	Comm in a Dynamic Workplace	3
M 114	Extended Technical Mathematics	3
TRID 140	Auto Sheet Mtl Strct MIG Wldng	2
TRID 181	Transport Elect Systems Lec	2
TRID 182	Transport Elect Systems Lab	2
TRID 152	Vehicle Htg, Vent & AC	3
WRIT 121	Intro to Technical Writing	3
or WRIT 122	Intro to Business Writing	
Total Minimum Credits		71

Students should check the course descriptions for required prerequisites. Math and English requirements are usually determined by performance on placement tests or transfer credits.

Suggested Plan of Study

Code	Title	Credits
Fall Even Years		
ABDY 101	Introduction to Estimating	2
ABDY 110	Intro to Collision Repair	4
ABDY 120	Non-Structral Collision Repair	6
TRID 140	Auto Sheet Mtl Strct MIG Wldng	2
M 114	Extended Technical Mathematics	3
Total		17
Spring Odd Years		
ABDY 201	Advanced Estimating	1
ABDY 220	Structural Collision Repair	6
ABDY 240	Aluminum Repair	4
CAPP 120	Introduction to Computers	3
TRID 181	Transport Elect Systems Lec	2
TRID 182	Transport Elect Systems Lab	2
Total		18
Fall Odd Years		
ABDY 150	Refinish Safety	2
ABDY 160	Automotive Undercoats	4
ABDY 170	Automotive Topcoats	6
TRID 152	Vehicle Htg, Vent & AC	3
WRIT 121	Intro to Technical Writing	3
or WRIT 122	Intro to Business Writing	
Total		18
Spring Even Years		

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ABDY 270	Advanced Refinishing	6
ABDY 275	Waterborne Paint Systems	3
ABDY 280 or ABDY 298	Custom Painting Internship/Cooperative Educ	5
AST 285	ASE Exam Prep: Section One	1
COMX 106	Comm in a Dynamic Workplace	3
Total		18