

AUTO BODY REPAIR

Programs

- Advanced Auto Body Repair Certificate in Applied Science (<https://catalog.gvltec.edu/school-advanced-manufacturing-transportation-technology/auto-body-repair/advanced-auto-body-repair/>)
- Auto Body Repair Associate in Applied Science (<https://catalog.gvltec.edu/school-advanced-manufacturing-transportation-technology/auto-body-repair/auto-body-repair-aas/>)
- Auto Body Repair Certificate in Applied Science (<https://catalog.gvltec.edu/school-advanced-manufacturing-transportation-technology/auto-body-repair/auto-body-repair-certificate/>)
- Estimating and Appraiser Certificate in Applied Science (<https://catalog.gvltec.edu/school-advanced-manufacturing-transportation-technology/auto-body-repair/estimating-and-appraiser-certificate/>)

Courses

ABR 102 Mig Welding (2-5-3)

Offered Spring Semester

Prerequisite: ABR 104

This course is an introduction to the welding of high strength steels used in modern unibody vehicles.

ABR 104 Auto Body Fundamentals (2-5-3)

Offered Fall Semester

This course is a basic study of fundamental issues important for an entry-level auto body technician. Topics include an introduction to safety, tools and equipment, as well as career exploration opportunities.

ABR 105 Structural Measuring and Analysis (2-5-3)

Offered Fall Semester

Prerequisite: ABR 104

This course is an introduction to modern vehicle designs and their engineered safety features. Emphasis is placed on vehicle damage analysis and three-dimensional measuring.

ABR 106 Non-Structural Plastic and Metal Repairs (2-5-3)

Offered Fall Semester

Prerequisite: ABR 104

This course is an exploration of plastic repair procedures and metal straightening techniques.

ABR 107 Refinishing Fundamentals (2-5-3)

Offered Fall Semester

Prerequisite: ABR 104

This course is an exploration of refinishing preparation techniques in the automotive industry. Emphasis is placed on the application of undercoats and detailing processes.

ABR 109 Accessories (2-5-3)

Offered Summer Semester

This course is an introduction to automotive air conditioning, power windows, power seats and other accessories in late model vehicles.

ABR 114 Estimating Fundamentals (2-5-3)

Offered Summer Semester

Prerequisites: ABR 104

This course is a study of basic estimating principles to include vehicle identification, electronic estimating systems, damage analysis and processing of information relating to insurance claims.

ABR 115 Structural Repair Planning and Correction (2-5-3)

Offered Spring Semester

Prerequisite: ABR 105

This course is the study of repair planning and methods for making corrective structural pulls to late-model, collision-damaged vehicles. Emphasis is placed on the straightening of unibody, space-frame and full-frame vehicles.

ABR 116 Non-Structural Panel Replacement and Trim (2-5-3)

Offered Spring Semester

Prerequisite: ABR 106

This course is a study of the assembly and disassembly of automotive replacement panels to include welded, bonded and bolted panels.

ABR 117 Refinishing Application Processes (2-5-3)

Offered Spring Semester

Prerequisite: ABR 107

This course is a study of mixing and applying automotive topcoats, including spray gun set-up, mixing equipment and spraying equipment for solvent and waterborne refinishes.

ABR 118 Refinishing II (2-5-3)

Offered Summer Semester

Prerequisite: ABR 127

This course covers overall refinishing with the newest type paints.

ABR 119 Estimating Repairs (1-3-2)

Offered Fall Semester

This course covers writing estimates on damaged vehicles using collision repair guides.

ABR 124 Advanced Estimating Procedures (2-5-3)

Offered Fall Semester

Prerequisites: ABR 114

This course is an in-depth review of computerized estimating systems, digital photography and vehicle scheduling processes as they relate to automotive estimating.

ABR 126 Non-Structural Advanced Materials (2-5-3)

Offered Fall Semester

Prerequisites: ABR 102, ABR 116

This course is an exploration of non-traditional vehicle materials and the repair processes that accompany them.

ABR 127 Refinishing Color Tinting and Blending (2-5-3)

Offered Summer Semester

Prerequisite: ABR 117

This course is a study of finish matching techniques to include color theory, tinting and blending as they apply to today's automotive finishes.

ABR 132 Shop Management Concepts (2-5-3)

Offered Spring Semester

Co-requisite: ABR 124

This course covers basic leadership skills and automotive shop management procedures.

ABR 135 Structural Sectioning and Frame Replacement (2-5-3)

Offered Summer Semester

Prerequisites: ABR 102, ABR 115

This course covers the various sectioning procedures used in the repair of today's vehicles as they relate to structural components of the vehicle.

ABR 136 Metal Shaping and Fabrication (2-5-3)

Offered Spring Semester

Prerequisite: ABR 126

This course covers metal shaping and fabrication of vehicle parts using metal forming equipment.

ABR 137 Advanced Refinishing Processes (2-5-3)

Offered Spring Semester

Prerequisite: ABR 127

This course covers the use of specialty finishes and custom paint applications.

ABR 142 Mechanical Systems (2-5-3)

Offered Fall Semester

Prerequisite: ABR 115

This course is a study of braking, steering and suspension systems as they relate to returning a vehicle to pre-accident condition.

ABR 143 Auto Body Electrical Systems (2-5-3)

Offered Fall Semester

Prerequisite: ABR 104

This course is an exploration of basic circuitry and electrical problems associated with collision-damaged vehicles.

ABR 144 Heating, Cooling and Air Conditioning Systems (2-5-3)

Offered Spring Semester

Prerequisites: ABR 142, ABR 143

This course is an introduction to engine heating and cooling systems used in modern vehicles. Other topics include the automotive air conditioning system.