

AUTO COLLISION REPAIR (ABDR)

ABDR 1303 Vehicle Design and Structural Analysis 3 Credits (2 Lec, 2 Lab)

This introduction to the collision repair industry emphasizes safety, professionalism, and vehicle structural design.

Course Type: Technical

ABDR 1307 Collision Repair Welding 3 Credits (2 Lec, 2 Lab)

This is a study of collision repair welding and cutting procedures.

Course Type: Technical

ABDR 1315 Vehicle Trim and Hardware 3 Credits (2 Lec, 2 Lab)

This is an in-depth study of vehicle trim and glass service.

Course Type: Technical

ABDR 1323 Front and Rear Wheel Alignment 3 Credits (2 Lec, 2 Lab)

This is an in-depth study of vehicle steering and suspension components including alignment, tire rotation, and balancing.

Course Type: Technical

ABDR 1431 Basic Refinishing 4 Credits (3 Lec, 3 Lab)

This is an introduction to current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Emphasis is on surface preparation, masking techniques, and refinishing of replacement parts.

Course Type: Technical

ABDR 1441 Structural Analysis and Damage Report I 4 Credits (3 Lec, 3 Lab)

This course offers expanded training in the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory body repairs. Emphasis is on the alignment of component parts such as doors, hoods, front-end assemblies, and deck lids.

Course Type: Technical

ABDR 1449 Automotive Plastic and Sheet Molding Compound Repair 4 Credits (3 Lec, 3 Lab)

This is a comprehensive course in repair of non-metal composites, including the use of various types of adhesives.

Course Type: Technical

ABDR 1519 Basic Metal Repair 5 Credits (3 Lec, 5 Lab)

This course offers in-depth coverage of basic metal principles and working techniques, including proper tool usage and product application.

Course Type: Technical

ABDR 1555 Non-Structural Metal Repair 5 Credits (3 Lec, 5 Lab)

This course demonstrates sheet metal repair skills using mechanical and hydraulic equipment. Emphasis is on attachment devices used to straighten and align exterior body panels.

Course Type: Technical

ABDR 1558 Intermediate Refinishing 5 Credits (3 Lec, 5 Lab)

This course offers expanded training in mixing and spraying of automotive topcoats. Emphasis is on formula ingredients, reducing, thinning, and special spraying techniques. This course also introduces partial panel refinishing techniques and current industry paint removal techniques.

Course Type: Technical

ABDR 2255 Collision Repair Estimating 2 Credits (2 Lec, 1 Lab)

This is an advanced course in collision estimating and development of a damage report utilizing estimating software.

Course Type: Technical

ABDR 2257 Collision Shop Management 2 Credits (2 Lec, 1 Lab)

This course covers examination of shop management functions and decision-making processes including planning, organizing, leading and staffing used in collision repair shops to ensure operational profitability.

Course Type: Technical

ABDR 2353 Color Analysis and Paint Matching 3 Credits (2 Lec, 2 Lab)

This is an advanced course in color theory, analysis, tinting, and blending techniques for acceptable paint matching.

Course Type: Technical

ABDR 2380 Cooperative Education - Autobody/Collision and Repair Technology 3 Credits (1 Lec, 14 Lab)

Career-related activities encountered in the student's area of specialization are offered through an individualized agreement among the College, employer, and student. Under the supervision of the College and the employer, the student combines classroom learning with work experience. This course also includes a lecture component. This may be a paid or unpaid experience.

Prerequisite(s): Reading level 4.

Course Type: Technical

ABDR 2502 Auto Body Mechanical and Electrical Service 5 Credits (3 Lec, 5 Lab)

This is a course in the repair, replacement, and/or service of collision damaged mechanics or electrical systems. Topics include drive train removal, re-installation and service; cooling system service and repair; exhaust system service; and emission control systems. Additional topics include wire and connector repair, reading diagrams, and troubleshooting.

Course Type: Technical

ABDR 2541 Major Collision Repair and Panel Replacement 5 Credits (3 Lec, 5 Lab)

This course covers instruction in preparation of vehicles for major repair processes, interpreting information from damage reports, planning repair sequences, selecting appropriate tools, and organizing removed parts for re-installation.

Course Type: Technical

ABDR 2549 Advanced Refinishing 5 Credits (3 Lec, 5 Lab)

This course focuses on application of multi-stage refinishing techniques and advanced skill development solving refinishing problems. Includes application of multi-stage refinishing with emphasis on formula mixing and special spraying techniques.

Course Type: Technical

ABDR 2551 Specialized Refinishing Techniques 5 Credits (3 Lec, 5 Lab)

This course focuses on advanced topics in specialty automotive refinishing. Emphasis is on refinishing of plastics, fiberglass, aluminum and galvanized panels, as well as on custom graphics and current industry innovations.

Course Type: Technical