SUBJECTS AND COURSES

COURSE DESCRIPTIONS - AUTOMOTIVE BODY ABR 224 **REPAIR (ABR)**

ABR 111 Non Structural Repair

Students are introduced to basic principles of non-structural panel repairs. Topics include shop safety, identification and use of hand/ power tools, panel preparation, sheet metal repairs, and materials. **5 Credit Hours** Prerequisite(s): As required by program.

Non Structural Panel Replacemt

Students are introduced to basic principles of non-structural panel replacement. Topics include replacement and alignment of bolt-on panels, full and partial panel replacement procedures, and attachment methods. Upon completion, students should be able to replace and align non-structural panels. Prerequisite(s): As required by program **5 Credit Hours**

ABR 122 Surface Preparation

This course introduces students to methods of surface preparation for vehicular refinishing. Topics include sanding techniques, metal treatment, selection of undercoats, and proper masking procedures. Prerequisite(s): As required by program 5 Credit Hours

ABR 123 Paint Applicant and Equipment

This course introduces students to methods of paint application and equipment used for vehicular refinishing. Topics include spray gun and related equipment use, paint mixing, matching, and applying the final topcoat. Prerequisite(s): As required by program 5 Credit Hours

ABR 151 Safety and Environmental Pract

This course is designed to instruct the student in the safe use of tools, equipment, and appropriate work practices. Topics include OSHA requirements, the right to know laws, EPA regulations as well as state and local laws. This is a CORE course. **5 Credit Hours**

ABR 154 Auto Glass and Trim

This course is a study of automotive glass and trim. Emphasis is placed on removal and replacement of structural and nonstructural glass and automotive trim. Upon completion, students should be able to remove and replace automotive trim and glass. Prerequisite(s): As required by **5 Credit Hours** program

ABR 156 Auto Cut & Welding

Students are introduced to the various automotive cutting and welding processes. Emphasis is placed on safety, plasma arc, oxy-acetylene cutting, resistance type spot welding, and Metal Inert Gas (MIG) welding. Upon completion, students should be able to safely perform automotive **5 Credit Hours** cutting and welding procedures.

Automotive Structural Analysis ABR 213

Students learn methods of determining structural misalignment. Topics include methods of inspection, types of measuring equipment, data sheets, and identifying types of structural damage. Prerequisite(s): As required by program **5 Credit Hours**

Automotive Structural Repair ABR 214

This course provides instruction in the correction of structural damage. Topics include types and use of alignment equipment, anchoring and pulling methods, and repair/replacement of structural components. Prerequisite(s): As required by program **5 Credit Hours**

ABR 223 Automotive Mechanical Componen

This course provides instruction in collision related mechanical repairs. Emphasis is placed on diagnosis and repairs to drive train, steering/suspension components, and various other mechanical repairs. Prerequisite(s): As required by program **5 Credit Hours**

Automotive Electrical Comp

This course provides instruction in collision related electrical repairs and various restraints systems, including seat belts, seat belt tensioners, and airbags. Topics include basic DC theory, types of diagnostic equipment, circuit protection, wire repair, use of wiring diagrams, airbag modules, and impact sensors. Prerequisite(s): As required by program **5 Credit Hours**

ABR 255 Steering and Suspension

This course introduces students to the various types of suspension and steering systems used in the automotive industry. Emphasis is placed on system components, suspension angles and the effect of body/frame alignment on these components and angles. Prerequisite(s): As required by program **5 Credit Hours**

Paint Defects and Final Repair ABR 265

This course introduces students to methods of identifying paint defects, causes, cures, and final detailing. Students learn to troubleshoot and correct paint imperfections. Prerequisite(s): As required by program **5 Credit Hours**