Automotive Collision Repair Technology II Introduces concepts in auto painting with an emphasis on the handling of materials and equipment in modern automotive technologies. Instruction should also emphasize computerized frame diagnosis, computerized color-mixing, and computerized estimating of repair costs. Additional academic skills taught in this course include precision measurement and mathematical calibrations as well as scientific principles related to adhesive compounds, color-mixing, abrasive materials, metallurgy, and composite materials.

- DOE Code: 5544
- Recommended Grade Level: Grade 12
- Recommended Prerequisites: Automotive Collision Repair Technology I
- Credits: 2-3 credits per semester, maximum of 6 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with postsecondary courses for Dual Credit:
  - Ivy Tech
    - AUBR 103- Auto Paint Fundamentals
  - Vincennes University
    - BODY 150/L-Body Repair II and Body Repair Lab

Dual Credit
This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Application of Content and Multiple Hour Offerings
Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences. When a course is offered for multiple hours per semester, the amount of laboratory application or work-based learning needs to be increased proportionally.

Career and Technical Student Organizations (CTSOs)
Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in SkillsUSA, the CTSO for this area.

Content Standards
Domain – Personal/Soft Skills
Core Standard 1 Students apply and adapt appropriate workplace behaviors needed for career success to prepare for further education and training programs.

Standards
ACRTII-1.1 Identify the appropriate resources for task completion
ACRTII-1.2 Use effective interpersonal skills to complete group assignments
ACRTII-1.3 Demonstrate leadership skills
ACRTII-1.4 Evaluate data for work assignments
ACRTII-1.5 Apply concepts for effective critical thinking, decision making, and problem-solving techniques
ACRTII-1.6 Choose appropriate tools and technology for task completion
ACRTII-1.7 Integrate quality assurance measures and safeguards
ACRTII-1.8 Incorporate effective listening and speaking skills
ACRTII-1.9 Perform mathematical calculations correctly
ACRTII-1.10 Establish a responsible work ethic
ACRTII-1.11 Establish accepted standards for ethical behavior
ACRTII-1.12 Develop a personal career goal and develop objectives for achieving the goal
ACRTII-1.13 Formulate employment and career pathway opportunities related to established career interest(s)
ACRTII-1.14 Develop a continuing education plan that identifies further education and training options
ACRTII-1.15 Complete exams leading to certifications recognized by business and industry
ACRTII-1.16 Develop skills needed to enter the workforce
ACRTII-1.17 Identify resources that keep workers current in the career field
ACRTII-1.18 Develop skills and attitudes needed for lifelong learning
ACRTII-1.19 Devise effective money management strategies

Domain – Safety/Shop Basics
Core Standard 2 Students integrate safety and basic shop procedures into activities as appropriate to comply with professional and governmental safety standards.

Standards
ACRTII-2.1 Perform various personal and shop safety practices
ACRTII-2.2 Categorize various types of fasteners and their grades
ACRTII-2.3 Use appropriate tools and unit conversion techniques to measure vehicle components
ACRTII-2.4 Use proper shop safety practices while in the lab(s)—this includes wearing safety glasses (goggles) at all times while in the lab(s)
ACRTII-2.5 Identify specific fasteners and their uses—this includes all of the various fasteners used on the automobile to attach a variety of body panels and pieces to the body and/or frame of the vehicle
ACRTII-2.6 Identify various hand and power tools and demonstrate their safe and proper use, storage, and maintenance—this also includes proper storing and oiling of air tools

Domain – Refinishing
Core Standard 3 Student analyzes the processes involved to paint and refinish a vehicle.

Standards
ACRTII-3.1 Identify metal conditioners as they relate to the different metals
ACRTII-3.2 Use primers and sealers according to their uses (per manufacturer’s specifications) as a base for final finishes—this includes the proper mixing and application of both primers and sealers
ACRTII-3.3  Distinguish between the different paint finishes including enamel, urethane, and lacquer finishes and their applications
ACRTII-3.4  Estimate the proper amount of paint needed for a specific job
ACRTII-3.5  Determine the proper type of thinner or reducer needed for a specific job
ACRTII-3.6  Show proper spraying techniques using production type equipment for spraying finishes
ACRTII-3.7  Demonstrate proper spraying techniques using production type equipment for spraying lacquer and enamel finishes
ACRTII-3.8  Demonstrate proper use and application of base coat/clear coat systems
ACRTII-3.9  Clean and maintain spray equipment to remove excess materials remaining after spraying
ACRTII-3.10  Safely handle, store, and remove toxic body shop materials
ACRTII-3.11  Prepare the jam area of a body part for painting
ACRTII-3.12  Remove paint defects using proper procedures

Domain – Estimating

Core Standard 4  Students analyze vehicle paint damage to estimate repair costs in terms of man hours and materials needed.

Standards
ACRTII-4.1  Calculate costs for various refinishing projects to prepare accurate estimates to customers
ACRTII-4.2  Calculate the flat time for refinishing a project