



Automotive Collision Technology Curriculum Map CIP # 47.0603

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
Level I	<p><u>Introduction to Automotive Collision & Safety</u> Use of PPE Shop Safety Proper handling & Disposal of Hazardous Materials Safe use of Hand & Power Tools Safety Data Sheets (SDS) Metal Finishing Body Fillers</p>	<p><u>Refinishing & Equipment Safety</u> Environmental Regulations Proper Personal Protection Equipment (PPE) Automotive Finishes Different Paint Systems Paint Defects Surface Preparation Apply Undercoats Operate Spray Booth and Mixing Room Spray Guns S/P2 Safety Certifications to be completed</p>	<p><u>Application of Refinish Materials & Cutting and Welding</u> Corrosion Protection Apply Undercoats Apply different top coats Paint Manufactures Mix Ratios Blending Operations of various top coats Cutting Processes Welding Safety Various welds used in Auto Collision Repair</p>	<p><u>Shop Area Practice</u> Combined Skills to Practice on Live Customer Work. Practice Blending Techniques Practice Metal Fabrication Practice Body Fillers Practice Welding</p>
Level II	<p><u>1st Quarter</u> <u>Vehicle Design & Construction</u> Different Vehicle Construction Types Structural and Nonstructural Panels of Unibody Construction Various Metals used in Construction of Vehicles Glass & Hardware Movable and Stationary Glass Window Regulators, Motors, & Channels</p>	<p><u>2nd Quarter</u> <u>Panel Replacement & Alignment</u> Identify Full or Partial Panel Replacement Bonded, Bolted, Riveted, or Welded Panels Remove and Instal Various Panels Remove and Instal Wheel Assemblies Aim Headlights</p>	<p><u>3rd Quarter</u> <u>Trim and Hardware and Restraint Systems</u> Determine Types of Fasteners Remove & Replace Various Trim and Badges Remove & Install Seats Remove & Install interior Parts and Hardware Research Auto Manufactures' Recommended Safety Procedures to Repair SRS Systems Identify Supplemental Restraint Systems Remove & Install Seat Belt Components</p>	<p><u>4th Quarter</u> <u>Shop Area Practice</u> Combined Skills to Practice on Live Customer Work Practice Year 1 Skills Practice R&I of Various Assemblies of Vehicles Practice R&I of Various Interior Parts & Assemblies Practice R&I of Movable Glass Prep Students for Cooperative Education <u>I-CAR is being revised Summer 2024</u> <u>Certifications will TBA</u></p>
Level III	<p><u>1st Quarter</u> <u>Structural Component Repair & Damage Analysis/ Detailing</u> Various Types of Structural Damage Body Dimension Specifications Various Structural Measurements Identify Different Types of Structural Damages Paint Correction Clean Interior, Exterior, and Glass</p>	<p><u>2nd Quarter</u> <u>Structural Straightening/ Plastic Repair</u> Mount & Anchor a Vehicle to a Pulling System Measure Vehicle Structure & Interpret Data to Pull back to Factory Specifications Identify Various Types of Plastics Repair Plastics by Welding or Adhesives Recommended Repairs for Advanced Driver Assistance Systems (ADAS)</p>	<p><u>3rd Quarter</u> <u>Estimating Damage Analysis, & Advanced Technology</u> Identify Vehicles using VIN numbers Collecting Customer Data Use Collision Estimating Software Prepare an Estimate Pre & Post Scan a Vehicle Precautions Required with High Voltage Vehicles</p>	<p><u>4th Quarter</u> <u>Workforce Readiness</u> <u>NOCTI Completion</u> Build Resume Practice Interviews with Workforce Education Coordinator and Prospective Employers Tour Potential Employer Facilities Prepare for Post Secondary Education</p>