Auto Body and Collision Repair Technology

Western Monroe & Orleans Counties
WEMOCO
Career & Technical Education Center

Science, art and technique: equal partners in auto body and collision repair

Students learn the fundamentals of repairing and refinishing damaged vehicles, including the fundamentals of metal straightening, MIG-welding, plastic fillers, plastic repair, major collision repair, hardware repair and service, detailing, and refinishing. The artistic skills applied in decorative auto painting are also introduced.

Units of Study

- Identifying Plastic Parts
- Worker Protection
- Tools and Equipment
- Paint Mixing
- Body Fillers
- Metal Straightening
- Repairs to Fiber-Reinforced Plastics
- Adhesively Bonded Panel
- Spray Guns
- Compressed Air
- MIG Welding
- Jacking and Lifting
- Spray Environment
- Vehicle Construction
- Waterborne Refinishing
- Steering and Suspension
- Plastic Welding
- VOC Rules and Regulations
- Customer Relations
- Glass
- Electrical
- Estimating
- Brakes
- Aluminum Welding
- Plastic Welding
- Career Opportunities and Ethics

Integrated Academics

- English
- Science

Licensing / Industry- Based Certifications

- I CAR Intro Series
- I CAR Non-Structural
- I CAR Refinishing

Work-Based Learning

CTE programs bring students into the workplace for real life experiences. Businesses that support our Auto Body and Collision program:

- Gerber Collision
- Qualicoat

Articulation Agreements

- Alfred State
- Ohio Technical College
- SUNY Canton
- SUNY Morrisville

Career Paths

All CTE programs correlate to many career paths.

↓ Start Here

- Detailer
- Entry Level Technician

Go Here ↓

with more education & experience

- Auto Body Repair Technician
- Auto Estimator
- Auto Body Shop Owner

Explore more:

https://www.careerzone.ny.gov/
https://www.onetonline.org/find/

WEMOCO Career & Technical Education Center
Monroe 2-Orleans Board of Cooperative Educational Services
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@WEMOCOCTE
Your Educational Partner of Choice
BOCES 2

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Employability Profile

Work-Related Skills

Productivity and Accountability

Follows procedures to meet expectations and deadlines

Displays consistent work performance and quality of work

Flexibility and Adaptability

Works effectively in varied roles and responsibilities

Responds well to and implements feedback

Initiative and Self-Direction

Identifies, prioritizes, and completes tasks without direct oversight

Seeks to learn and develop new knowledge and skills

Leadership and Responsibility

Leverages strengths of others to accomplish a goal

Takes ownership of one's work, performance, behavior, and actions

Communication

Articulates thoughts and ideas clearly and effectively through speaking and writing

Practices active listening skills

Collaboration

Works effectively with others

Open and responsive to new and diverse perspectives

Critical Thinking and Problem Solving

Asks questions to lead to better solutions

Identifies possible options and their outcomes

Electrical Repair

Test and Replace Bulbs

Repair Broken Wire

Charge Battery

Jump Battery

Tires

Lifting Vehicle

Rotate Tires

Torque Lug Nuts

Non-Structural Panel Replacement and Alignment

Outer Panels

Inner Panels

Panel Adhesives Application

Metal Bonding

Metal Straightening

Use Body Hammers

Use Dolly Blocks and Spoons

Use Hydraulic Jacks and Lifts

Heat Shrinking Metal

Use Stone Wheel Grinder

Use Disc Grinder

Use Stud Welder

Body Fillers Application

Plastic Fillers

Polyester Finishing Putties

Moveable Glass and Hardware

Remove and Replace Door Glass

Corrosion Protection

Undercoating Products

Undercoating Application

Refinishing Safety and Environmental Practices

Interpret MSDS Sheets

Safety Equipment and Procedures Application

Structural Damage Analysis

Reading Specs/Charting Damage

Use Tape Rule

Use Tram Gauge

Welding

Setup MIG Welder

Perform MIG Weld Joints

Aluminum Welding

Cutting and Heating Processes

Operate a Plasma Cutter

Heating and Cutting using Oxy-Acetylene

Surface Preparation

Cleaners/Solvent Washes

Wet/Dry Sanding

Featheredging (Block, Chemical, DA)

Metal Cleaners/Conditioners

Self-Etching Primer-Mixing and Application

Primer/Surfacers-Mixing and Application

Masking

Sealers Application

Automotive Finishes Application

Polyurethane Enamel

Urethane Basecoat/Clearcoat

Tri Coat Systems

Waterbase System

Repairing Refinishing Problems

Runs and Sags

Fish-eyes

Orange Peel

Spray Equipment Adjustment

Spray Equipment Cleaning

Plastic Repair

Repair TPO

Repair Non-TPO

Repair SMC

Refinish Plastics

Estimating

Interpret Estimate

Interpret Crash Book

Write an Estimate

Pre-Delivery Detailing

Color Sanding and Denibbing

Washing Exterior

Interior Cleaning

Touch-up