# AUTOMOTIVE COLLISION REPAIR

**Division: Career Technical Education** 

Career Technical Education (https://catalog.nocccd.edu/cypress-college/degrees-certificates/automotive-collision-repair/Margaret Fernandez (Interim)
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### **Division Dean**

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# **Department Coordinator**

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## **Faculty**

Larry Ramos Daniel Snook

#### **Counselors**

Dr. Jane Jepson Jeannie Mltsch Cassie Rodriguez

- Auto Collision 1: Detail Technician Certificate (https:// catalog.nocccd.edu/cypress-college/degrees-certificates/ automotive-collision-repair/auto-collision-1-detail-techniciancertificate/)
- Auto Collision 2: Paint and Refinishing Certificate (https://catalog.noccod.edu/cypress-college/degrees-certificates/automotive-collision-repair/auto-collision-2-paint-and-refinishing-certificate/)
- Auto Collision 3: Structural Certificate (https://catalog.nocccd.edu/ cypress-college/degrees-certificates/automotive-collision-repair/ auto-collision-3-structural-certificate/)
- Auto Collision 4: Appraisal & Management Certificate (https://catalog.nocccd.edu/cypress-college/degrees-certificates/automotive-collision-repair/auto-collision-4-appraisal-management-certificate/)
- Auto Collision Advanced Technician Associate in Science Degree (https://catalog.nocccd.edu/cypress-college/degrees-certificates/automotive-collision-repair/auto-collision-advanced-technician-associate-in-science-degree/)

- Auto Collision Repair Fundamentals Associate in Science Degree (https://catalog.nocccd.edu/cypress-college/degrees-certificates/automotive-collision-repair/auto-collision-repair-fundamentals-associate-in-science-degree/)
- Collision Repair I-CAR Gold Certificate (https://catalog.nocccd.edu/ cypress-college/degrees-certificates/automotive-collision-repair/ collision-repair-i-car-gold-certificate/)

#### ACR 020 C Auto Detail-Car Care-Beg

3 Units

Term hours: 36 lecture and 54 laboratory. This is an introductory automotive detailing and car care course. Detailing chemicals, processes, tools and equipment are covered in the class. Topics include the theory, diagnosis of paint conditions, and communication with the customer. Laboratory activities will emphasize skill competency in paint condition identification, washing, waxing, polishing and interior care.

#### ACR 021 C Advanced Auto Detailing

3 Units

Prerequisite(s): ACR 020 C or AC/R 120 C with a grade of C or better.

Term Hours: 36 Lecture and 54 Laboratory. This is an advanced course in automotive detailing and car care. Topics include: starting a detailing business, location determination, customer service, and advanced detailing techniques. Laboratory activities include receipt and delivery of customer vehicles, use of chemicals, and advanced detailing.

#### ACR 101 C Auto Collision Repair Technician I (formerly ACR 001 C)

6 Units

Term hours: 54 lecture and 162 laboratory. This course covers the fundamentals of automotive collision repair with an emphasis on safety, proper use of tools, and industry standards and regulations. An overview of technical principles and in-depth cover of sheet metal straightening and welding practices will also be discussed. \$20 materials fee payable at registration. (CSU)

#### ACR 102 C Auto Collision Repair Technician II (formerly ACR 002 C)

6 Units

Prerequisite(s): ACR 101 C with a grade of C or better

Term hours: 54 lecture and 162 laboratory. This course continues to cover the fundamentals of automotive collision repair with an emphasis on safety, proper use of tools, industry standards and progressive skills development. An overview of technical principles and in-depth coverage of sheet metal straightening and welding practices will also be discussed. \$20 materials fee payable at registration. (CSU)

#### ACR 103 C Auto Collision Repair Technician III (formerly ACR 003 C)

6 Units

Prerequisite(s): ACR 102 C with a grade of C or better

Term hours: 54 lecture and 162 laboratory. This course is the third course in progressive skills development and covers major body repairs with welded panel replacement, panel alignment, upholstery removal and replacement. Glass removal and replacement, advanced metal work, including straightening of frames will also be discussed. \$20 materials fee payable at registration. (CSU)

#### ACR 104 C Auto Collision Repair Technician IV (formerly ACR 004 C)

6 Units

Prerequisite(s): ACR 103 C with a grade of C or better

This course is the fourth course in progressive skills development in collision repair. Students will learn advanced techniques in all areas to include body electrical systems, M.I.G. welding, power windows, tail gates, employer-employee relations, shop-related business procedures and rust proofing. \$20 materials fee payable at registration. (CSU)

#### ACR 107 C Refinishing Technician I (formerly ACR 007 C)

5 Units

Term hours: 90 lecture and 54 laboratory. This is the first introductory course to the auto motive refinishing industry. Topics include refinishing techniques with water based materials and urethane topcoat, equipment, procedures and techniques necessary to properly prepare and refinish a wide range of automotive vehicles. \$20 materials fee payable at registration. (CSU)

#### ACR 108 C Refinishing Technician II (formerly ACR 008 C) 6 Units Prerequisite(s): ACR 107 C with a grade of C or better.

Term hours: 90 lecture and 54 laboratory. This is the second course in the series to the automotive paint and refinishing industry. Progressive skill development in a variety of products and techniques for proper preparation and application will also be discussed. This course aligns with industry standards for safety and quality. \$20 materials fee payable at registration. (CSU)

#### ACR 109 C Refinishing Technician III (formerly ACR 009 C) 6 Units Prerequisite(s): ACR 108 C with a grade of C or better.

In this course, students will learn advanced level skills in the progressive series of ACR 107 C, ACR 108 C and this course in custom painting materials and techniques. Skills in a variety of paints and techniques will be acquired. \$20 materials fee payable at registration. (CSU)

#### ACR 110 C Vinyl Wrap Application

3 Units

Term hours: 45 Lecture and 27 Laboratory. This course will give an understanding of products related to the application of vinyl and its related uses. \$125 materials fee payable at registration. Pass/No Pass/Letter Grade Option.(CSU)

#### ACR 112 C Collision Damage Appraisal (formerly ACR 012 C) 3 Units

This course is designed to prepare students to enter the field of collision damage appraisal. Students will learn how to write repair estimates on damaged vehicles. This course will cover frame straightening, glass, paint, and the use of various manuals. (CSU)

# ACR 113 C Computerized Automotive Damage Appraisal (formerly ACR 013 C) 3 Units

Term hours: 54 lecture. This course is designed for students who have ha previous estimating training or some experience in automotive damage appraisal. Students will learn computer-based estimating software used in the collision repair industry. This course will give the student an opportunity to develop skills in computer-assisted estimate writing. (CSU)

# ACR 130 C Electrical Systems and Component Repair (formerly ACR 030 C) 4 Units

*Prerequisite(s)*: Completion of, or concurrent enrollment in ACR 102 C, ACR 103 C or ACR 104 C, or employment in the industry.

Term hours: 54 lecture and 54 laboratory. This course will include advanced techniques in auto collision repair. Topics included are collision-related electrical repairs, supplemental restraint system (SRS) sheet mold compound (SMC), interior and exterior plastic repairs, plastic welding, bumper energy absorbing systems, air conditioning, sun roofs, aluminum repair and welding. Students are given practical application for diagnosis, repair and servicing on both laboratory and live projects. \$20 materials fee payable at registration. (CSU)

# ACR 140 C Structural Alignment Repair (formerly ACR 040 C) 4 Units Prerequisite(s): Completion of or concurrent enrollment in ACR 102 C or ACR 103 C or ACR 104 C, or employment in the industry.

Term hours: 54 lecture an 54 laboratory. This course will emphasize the diagnosis and restructuring of the unitized automobile, light truck frame and body, use of manuals, structural restoration, centerline gauge use, dedicated measurement systems, sectioning techniques, corrosion protection, relationship of suspension and structural components. (CSU)

#### ACR 150 C ACR/Special Projects

2-3 Units

Term hours: 18 lecture and 48-108 laboratory depending on units attempted. This course is designed to offer students a supervised independent program to continue and broaden their studies in automotive collision repairs. May be taken for credit 4 times.

# ACR 160 C Collision Repair Management (formerly ACR 060 C) 3 Units This advanced skills course is designed for ACR students pursuing a management and sales career in the collision repair industry. Areas covered include: vehicle check-in, movement/tracing, financial statement analysis, production management, insurance practices with collision repair facilities, Bureau of Automotive Repair rules, quality control methods, equipment purchase/lease decisions, inventory, shop layout and design, managing

Bureau of Automotive Repair rules, quality control methods, equipment purchase/lease decisions, inventory, shop layout and design, managing multiple stores and new car dealership collision repair centers and human resources. NATEF, ICAR, insurance industry standards and compliance are also covered. (CSU)

#### ACR 170 C Automotive Color Matching (formerly ACR 070 C) 3 Units

Term hours: 54 lecture. This course is an introduction to the concepts and techniques of matching colors applied to automobiles. This course covers color, light and vision theory, spray gun application techniques, and extensive use of solid, metallic, and pearl color match exercises. This course will be using automotive paint mixing systems. Students will be required to provide certain safety and respiratory protection equipment. (CSU)

#### ACR 298 C Automotive Collision Repair Seminar

0.5-12 Units

Prerequisite(s): May be required

Advisory: May be required

Corequisite: May be required. Term hours: 0-216 lecture and/or 0-1080 laboratory depending on units attempted. This is a course for students who wish to increase their knowledge of automotive collision repair. Various topics will be offered. Unit credit may range from 1/2 to 12 units in any given semester. Consult the class schedule to verify credit for a particular semester. Pass/No Pass or Letter Grade option. Fees may be required-Payable at Registration. (CSU)

At Cypress College, there are Department Program Student Learning Outcomes and Degree & Certificate Program Student Learning Outcomes.

# <u>Department Program Student Learning</u> Outcomes:

The courses taught by this department contribute to the following ISLO/PSLOs: A-Breadth of Knowledge, Competencies, and Skills; specifically, the following ISLO/PSLO subcategories: A1-Career Technical Education.

# <u>Degree & Certificate Program Student Learning</u> Outcomes:

The program student learning outcomes for each award can be found on the specific degree or certificate page.