

The **AS degree** will be awarded upon satisfactory completion of the major course requirements listed below and the General Education requirements for the Associate in Arts Degree listed in the Degrees and Programs section of this Catalog.

A **Certificate of Achievement in Auto Body** will be awarded to those students completing a minimum of 25 units as outlined below with a 2.0 GPA.

### Career Opportunities

The Auto Body and Paint program prepares students to enter the job market as trained and qualified technicians.

Upon registering for a class in the Auto Body and Paint program, the student will receive a list of required basic tools. **The student will be expected to provide tools that relate to the particular course in which he/she has enrolled.** The purpose of this requirement is to assure that students graduating from the program who wish to enter the trade possess the necessary tools.

### Program Learning Outcomes

*Upon completion of this program a student will be able to:*

- Explain through essay and orally each of the undercoat categories and demonstrate application to substrates.
- Make necessary computation of VOC's and log these computations into BAAQMD acceptable standards.
- Analyze and correct paint failures and problems.
- Disassemble, clean, test, and diagnose spray guns used under Sec. 8, Rule 45.

### Degree Major/Certificate Requirements:

| DEPT/NO.                     | TITLE                                         | UNITS     |
|------------------------------|-----------------------------------------------|-----------|
| AUTOB 10                     | Basic Auto Body Repair Concepts               | 10        |
| AUTOB 20                     | Advanced Repair Concepts                      | 10        |
| MATH 225                     | Math for Technicians (or higher)              | 3         |
| AUTOB 12                     | Service Welding for Transportation Technology | 2         |
| A TECH 026                   | Introduction to Automotive Electrical Systems | 4         |
| <b>Total Required Units:</b> |                                               | <b>29</b> |

**Recommended Course Sequence**

|                               | COURSE                        |                                                                                          | UNITS        | REQUIREMENT | COA GE AREA               |
|-------------------------------|-------------------------------|------------------------------------------------------------------------------------------|--------------|-------------|---------------------------|
| <b>FALL 1</b>                 | AUTOB 10                      | Basic Auto Body Repair Concepts                                                          | 10           | Major       |                           |
|                               | AUTOB 12                      | Service Welding for Transportation Technology                                            | 2            | Major       |                           |
|                               | MATH 15                       | Mathematics for Liberal Arts Students <sup>1</sup>                                       | 3            | Major       | 4B                        |
| <b>Total Number of Units:</b> |                               |                                                                                          | <b>15</b>    |             |                           |
| <b>SPRING 1</b>               | AUTOB 20                      | Advanced Repair Concepts                                                                 | 10           | Major       |                           |
|                               | ENGL 1A<br>ENGL 1AS           | Composition and Reading <b>or</b><br>Composition and Reading (w/ support)                | 4 or 5       | GE          | 4A                        |
|                               | CIS 205                       | Computer Literacy                                                                        | 1            | GE          | 4C                        |
| <b>Total Number of Units:</b> |                               |                                                                                          | <b>15-16</b> |             |                           |
| <b>FALL 2</b>                 | COMM 6<br>COMM 20             | Intercultural Communication <b>or</b><br>Interpersonal Communication Skills              | 3            | GE          | (2 or 4D) <b>or</b><br>4D |
|                               | SOC 5<br>PSYCH 18             | Minority Groups <b>or</b><br>Psychology of Race and Ethnicity in the U.S.                | 3            | GE          | 2 & 5                     |
|                               | SPAN 1A<br>VIET 1A            | Elementary Spanish <b>or</b><br>Elementary Vietnamese                                    | 5            | GE          | 3                         |
|                               | GEOG 1                        | Physical Geography                                                                       | 3            | GE          | 1                         |
|                               | <b>Total Number of Units:</b> |                                                                                          |              | <b>14</b>   |                           |
| <b>SPRING 2</b>               | MUSIC 10<br>BUS 54            | Music Appreciation <b>or</b><br>Small Business Management <sup>2</sup>                   | 3            | Elective    |                           |
|                               | PSYCH 9A<br>BUS 10            | Psychology of Interpersonal Relations <b>or</b><br>Introduction to Business <sup>2</sup> | 3            | Elective    |                           |
|                               | COMM 1A<br>BUS 208            | Introduction to Speech <b>or</b><br>Communication Skills for Technicians <sup>2</sup>    | 3            | Elective    |                           |
|                               | ATECH 26                      | Auto Electrical Systems                                                                  | 4            | Elective    |                           |
|                               | ART 46                        | 2-D Visual Design                                                                        | 3            | Elective    |                           |
| <b>Total Number of Units:</b> |                               |                                                                                          | <b>16</b>    |             |                           |

<sup>1</sup> Students can choose to take any other degree applicable math course.

<sup>2</sup> Student can complete a Small Business Administration Certificate if they complete BUS 54, 10, and 208.

Please meet with a counselor to develop a personalized education plan to help you meet your specific goals.

## Recommended Course Sequence

| COURSE                        |          | UNITS                                         | REQUIREMENT |       |
|-------------------------------|----------|-----------------------------------------------|-------------|-------|
| FALL 1                        | AUTOB 10 | Basic Auto Body Repair Concepts               | 10          | Major |
|                               | AUTOB 12 | Service Welding for Transportation Technology | 2           | Major |
|                               | MATH 225 | Math for Technicians (or higher)              | 3           | Major |
| <b>Total Number of Units:</b> |          | <b>15</b>                                     |             |       |

|                               |          |                                                              |    |          |
|-------------------------------|----------|--------------------------------------------------------------|----|----------|
| SPRING 1                      | AUTOB 20 | Advanced Repair Concepts                                     | 10 | Major    |
|                               | AUTOB 16 | Introduction to Automotive Plastic Parts Repair <sup>1</sup> | 2  | Elective |
| <b>Total Number of Units:</b> |          | <b>12</b>                                                    |    |          |

<sup>1</sup> Recommended for workforce preparation.

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The **AS degree** will be awarded upon satisfactory completion of the major course requirements listed below and the General Education requirements for the Associate in Arts Degree listed in the Degrees and Programs section of this Catalog.

A **Certificate of Achievement in Auto Paint** will be awarded to those students completing a minimum of 27 units as outlined below with a 2.0 GPA.

## Career Opportunities

The Auto Body and Paint program prepares students to enter the job market as trained and qualified technicians.

Upon registering for a class in the Auto Body and Paint program, the student will receive a list of required basic tools. **The student will be expected to provide tools that relate to the particular course in which he/she has enrolled.** The purpose of this requirement is to assure that students graduating from the program who wish to enter the trade possess the necessary tools.

## Program Learning Outcomes

*Upon completion of this program a student will be able to:*

- Explain through essay and orally each of the undercoat categories and demonstrate application to substrates.
- Make necessary computation of VOC's and log these computations into BAAQMD acceptable standards.
- Analyze and correct paint failures and problems.
- Disassemble, clean, test, and diagnose spray guns used under Sec. 8, Rule 45.

## Degree Major/Certificate Requirements:

| DEPT/NO.                     | TITLE                                           | UNITS     |
|------------------------------|-------------------------------------------------|-----------|
| MATH 225                     | Math for Technicians (or higher)                | 3         |
| AUTOB 30                     | Paint Preparation/Equipment                     | 10        |
| AUTOB 40                     | Advanced Study/Refinishing                      | 10        |
| A TECH 16                    | Introduction to Automotive Plastic Parts Repair | 2         |
| <b>Total Required Units:</b> |                                                 | <b>25</b> |

## Recommended Course Sequence

|        | COURSE            |                                                                             | UNITS | REQUIREMENT | COA GE AREA               |
|--------|-------------------|-----------------------------------------------------------------------------|-------|-------------|---------------------------|
| FALL 1 | AUTOB 30          | Basic Methods of Paint Preparation and Equipment                            | 10    | Major       |                           |
|        | MATH 15           | Mathematics for Liberal Arts Students <sup>1</sup>                          | 3     | Major       | 4B                        |
|        | COMM 6<br>COMM 20 | Intercultural Communication <b>or</b><br>Interpersonal Communication Skills | 3     | GE          | (2 or 4D) <b>or</b><br>4D |

**Total Number of Units: 16**

|          |                     |                                                                           |        |       |    |
|----------|---------------------|---------------------------------------------------------------------------|--------|-------|----|
| SPRING 1 | AUTOB 40            | Advanced Study in Refinishing                                             | 10     | Major |    |
|          | AUTOB 16            | Introduction to Automotive Plastic Parts Repair                           | 2      | Major |    |
|          | ENGL 1A<br>ENGL 1AS | Composition and Reading <b>or</b><br>Composition and Reading (w/ support) | 4 or 5 | GE    | 4A |

**Total Number of Units: 16-17**

|                    |                                                                        |                                              |          |          |       |
|--------------------|------------------------------------------------------------------------|----------------------------------------------|----------|----------|-------|
| FALL 2             | SPAN 1A                                                                | Elementary Spanish <b>or</b>                 | 5        | GE       | 3     |
|                    | VIET 1A                                                                | Elementary Vietnamese                        |          |          |       |
|                    | CIS 205                                                                | Computer Literacy                            | 1        | GE       | 4C    |
|                    | SOC 5                                                                  | Minority Groups <b>or</b>                    | 3        | GE       | 2 & 5 |
|                    | PSYCH 18                                                               | Psychology of Race and Ethnicity in the U.S. |          |          |       |
|                    | ART 20                                                                 | Beginning Drawing and Composition            | 3        | Elective |       |
| MUSIC 10<br>BUS 54 | Music Appreciation <b>or</b><br>Small Business Management <sup>2</sup> | 3                                            | Elective |          |       |

**Total Number of Units: 15**

|          |                     |                                                                                          |   |          |   |
|----------|---------------------|------------------------------------------------------------------------------------------|---|----------|---|
| SPRING 2 | GEOG 1              | Physical Geography                                                                       | 3 | GE       | 1 |
|          | ART 46              | 2-D Visual Design                                                                        | 3 | Elective |   |
|          | COMM 1A<br>BUS 208  | Introduction to Speech <b>or</b><br>Communication Skills for Technicians <sup>2</sup>    | 3 | Elective |   |
|          | PSYCH 9A<br>BUS 10  | Psychology of Interpersonal Relations <b>or</b><br>Introduction to Business <sup>2</sup> | 3 | Elective |   |
|          | DANCE 68<br>KIN 54A | Modern Dance 1 <b>or</b><br>Cross Fitness I – Fundamentals                               | 1 | Elective |   |

**Total Number of Units: 13**

<sup>1</sup> Students can choose to take any other degree applicable math course.

<sup>2</sup> Student can complete a Small Business Administration Certificate if they complete BUS 54, 10, and 208.

Please meet with a counselor to develop a personalized education plan to help you meet your specific goals.

## Recommended Course Sequence

|          | COURSE                                                    | UNITS | REQUIREMENT |
|----------|-----------------------------------------------------------|-------|-------------|
| FALL 1   | AUTOB 30 Basic Methods of Paint Preparation and Equipment | 10    | Major       |
|          | MATH 225 Math for Technicians (or higher)                 | 3     | Major       |
|          | <b>Total Number of Units:</b>                             |       | <b>13</b>   |
| SPRING 1 | AUTOB 40 Advanced Study in Refinishing                    | 10    | Major       |
|          | AUTOB 16 Introduction to Automotive Plastic Parts Repair  | 2     | Elective    |
|          | <b>Total Number of Units:</b>                             |       | <b>12</b>   |

Please meet with a counselor to develop a personalized education plan to help you meet your specific goals.

## Auto Body and Paint (AUTOB)

The Auto Body and Paint program prepares students to enter the job market as trained and qualified technicians, and allows students to continue toward a Baccalaureate degree in advanced schools of technology, as teachers or to broaden their skills in management, design or business. Lecture and laboratory instruction covers safety, trade ethics, use of hand and power tools, as well as theory, repair and painting of automobiles.

### **AUTOB 10**

#### **Basic Auto Body Repair Concepts**

- 10 units, 6 hours lecture, 12 hours laboratory (GR)
- Recommended preparation: AUTOB 12
- Acceptable for credit: CSU

Basic techniques of auto body repair: Repair of collision-damaged automobiles, and power tools and welding and cutting equipment used in the collision repair industry; emphasis on the "invisible" repair. 0949.00

### **AUTOB 12**

#### **Service Welding for Transportation Technology**

- 2 units, 1 hour lecture, 3 hours laboratory (GR)
- Acceptable for credit: CSU

Transportation welding technology: Basic techniques of welding; safety, set-up, and operational procedures performed in Oxyacetylene, MIG, and welding operations. 0949.00

### **AUTOB 16**

#### **Introduction to Automotive Plastic Parts Repair**

- 2 units, 1 hour lecture, 3 hours laboratory (GR)
- Prerequisite: AUTOB 10 or AUTOB 30

Introduction to automotive plastic part refinishing: Theory, principles, techniques, equipment requirements and legal responsibilities for the safe application of automotive finishes for plastic automotive parts. 0949.00

### **AUTOB 20**

#### **Advanced Auto Body Repair Concepts**

- 10 units, 6 hours lecture, 12 hours laboratory (GR)
- Recommended preparation: Autob 10
- Acceptable for credit: CSU

Advanced techniques of auto body repair: State-of-the-art measuring systems and frame pulling techniques, safe and efficient use of hydraulic equipment; analysis of the repair or replacement of sheetmetal, fiberglass, and SMC panels; cost estimating of damage repairs using computerized or printed manuals. 0949.00

### **AUTOB 30**

#### **Basic Methods of Paint Preparation and Equipment**

- 10 units, 6 hours lecture, 12 hours laboratory
- (GR or P/NP)
- Acceptable for credit: CSU

Introduction to automotive refinishing: Theory, principles, techniques, equipment requirements, and legal responsibilities for the safe application of automotive finishes. 0949.00

### **AUTOB 40**

#### **Advanced Study in Refinishing**

- 10 units, 6 hours lecture, 12 hours laboratory (GR)
- Recommended preparation: Autob 30
- Acceptable for credit: CSU

Methodology and associated skills to perform spot, panel, and complete refinishing of substrates: Catalyzed and non-catalyzed materials and their safe usage; causes, cures and prevention of paint failures; custom finishes and their usage. 0949.00

### **AUTOB 49**

#### **Independent Study in Auto Body and Paint**

- .5-5 units, .5-5 hours lecture (GR or P/NP)
- Acceptable for credit: CSU

In-depth exploration of an area or problem of the student's choice not covered by regular catalog offerings in Auto Body and Paint. Student must obtain approval from an appropriate faculty member. For more details, see the section on independent study in the college catalog. 0949.00