

# AUTOMOTIVE CERTIFIED TECHNICIAN, TRANSPORTATION TECHNOLOGIES, AAS

## Program Code: Automotive Certified Tech-AAS

### Program Description

Associate of Applied Science, Transportation Technologies, Automotive Certified Technician program is accredited by the ASE Education Foundation, the TMCC automotive program prepares graduates for highly skilled apprentice positions as service, repair and maintenance technicians. The automotive certified technician emphasis meets the Automotive Service Excellence (ASE) standards necessary for a career in repair shops in new car dealerships or independent businesses. The program emphasizes skills in diagnosis, troubleshooting, repair and maintenance of passenger vehicles and light-duty trucks.

Automotive Career Map (<https://sites.tmcc.edu/flipbook/career-maps/>)

### Recommended Course Schedule

|  | <b>Units</b> |
|--|--------------|
| <b>1st semester</b>                        |              |
| AUTO 101 Introduction to General Mechanics | 4            |
| AUTO 111 Automotive Electricity            | 4            |
| AUTO 112 Automotive Electricity II         | 4            |
| OSH 222 General Industry Safety            | 1            |
| ENG 107 Technical Communications I         | 3            |
| <b>Semester Total</b>                      | <b>16</b>    |
| <b>2nd semester</b>                        |              |
| AUTO 136 Engine Repair                     | 5            |
| AUTO 145 Automotive Brakes                 | 5            |
| AUTO 150 Steering and Suspension Systems   | 5            |
| Science <sup>2</sup>                       | 3            |
| <b>Semester Total</b>                      | <b>18</b>    |
| <b>3rd semester</b>                        |              |
| AUTO 225 Engine Performance I              | 4            |
| AUTO 227 Engine Performance II             | 4            |
| AUTO 265 Electrical/Electronic Systems III | 4            |
| Constitution <sup>2</sup>                  | 3            |
| <b>Semester Total</b>                      | <b>15</b>    |
| <b>4th semester</b>                        |              |
| Select from electives <sup>3</sup>         | 7-9          |
| Diversity <sup>2</sup>                     | 3            |
| Communications <sup>3</sup>                | 3            |
| <b>Semester Total</b>                      | <b>13-15</b> |
| <b>Total Units</b>                         | <b>62-64</b> |

<sup>2</sup> See approved General Education list for the AAS Degree. (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>)

<sup>3</sup> See program recommendations or requirements.

### Program Requirements

AAS degrees are generally non-transfer degrees designed for students to enter the workforce.

To earn an AAS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AAS (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

| <b>Code</b>  | <b>Title</b>                      | <b>Units</b> |
|--|-----------------------------------|--------------|
| <b>General Education Requirements</b>  |                                   |              |
| <i>Diversity</i> <sup>1</sup>  |                                   | [3]          |
| <i>Communications/English</i>  |                                   | 6            |
| Communications - Recommended:  |                                   |              |
| BUS 107  | Business Speech Communications    |              |
| English - Recommended:   |                                   |              |
| ENG 107  | Technical Communications I        |              |
| <i>Fine Arts/Humanities/Social Science</i>                                     |                                   | 3            |
| <i>Human Relations</i> <sup>1</sup>  |                                   | [3]          |
| Requirement is satisfied through embedded curriculum in the following courses: |                                   |              |
| AUTO 136   | Engine Repair                     |              |
| AUTO 145   | Automotive Brakes                 |              |
| AUTO 150   | Steering and Suspension Systems   |              |
| AUTO 225   | Engine Performance I              |              |
| AUTO 227   | Engine Performance II             |              |
| <i>Mathematics</i> <sup>1</sup>  |                                   | [3]          |
| Requirement is satisfied through embedded curriculum in the following courses: |                                   |              |
| AUTO 111   | Automotive Electricity            |              |
| AUTO 136   | Engine Repair                     |              |
| AUTO 145   | Automotive Brakes                 |              |
| AUTO 150   | Steering and Suspension Systems   |              |
| AUTO 225   | Engine Performance I              |              |
| AUTO 227   | Engine Performance II             |              |
| <i>Science</i>   |                                   | 3            |
| Recommended:   |                                   |              |
| PHYS 100   | Introductory Physics              |              |
| <i>U.S./Nevada Constitutions</i>   |                                   | 3            |
| <b>Core Requirements</b>   |                                   |              |
| AUTO 111   | Automotive Electricity            | 4            |
| OSH 222  | General Industry Safety           | 1            |
| <b>Emphasis Requirements</b>   |                                   |              |
| AUTO 101   | Introduction to General Mechanics | 4            |
| AUTO 112   | Automotive Electricity II         | 4            |
| AUTO 136   | Engine Repair                     | 5            |
| AUTO 145   | Automotive Brakes                 | 5            |

|                              |   |              |
|------------------------------|---|--------------|
| AUTO 150                     | Steering and Suspension Systems             | 5            |
| AUTO 225                     | Engine Performance I                        | 4            |
| AUTO 227                     | Engine Performance II                       | 4            |
| AUTO 265                     | Electrical/Electronic Systems III           | 4            |
| <b>Elective Requirements</b> |   | <b>7-9</b>   |
| AUTO 165                     | Auto Heating and Air Conditioning           |              |
| AUTO 235                     | Engine Performance III                      |              |
| AUTO 205                     | Manual Drive Trains and Axles               |              |
| AUTO 216                     | Automatic Transmissions                     |              |
| AUTO 185                     | Introduction to Alternative Fueled Vehicles |              |
| AUTO 285                     | Hybrid Vehicle Service Techniques           |              |
| AUTO 290                     | Internship in Automotive Level I            |              |
| <b>Total Units</b>           |   | <b>62-64</b> |

<sup>1</sup> The course may also count toward degree requirements. Please consult with Academic Advising.

## Program Outcomes

Students completing the degree will:

- PSLO1: Identify and implement safety procedures involved in diagnosis, service, and repair of all major light vehicle components and systems.
- PSLO2: Analyze and interpret diagnostic and test information to formulate correct repair procedures.
- PSLO3: Demonstrate correct repair strategies and techniques by applying knowledge of system operation and demonstrating mechanical skills to accomplish repair tasks.