



Green Vehicle Technology A.S. Degree

This program roadmap represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability.

Catalog: 2024-25

GE Pattern: local AA/AS

Total Units: 82

First Year

Semester 1 15 Units

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|---------------------------------|---|------|---------|
| RE | AT 100 | Technical Basics for the Automotive Professional | 3 | |
| Req | AT 105 | Mathematics for Automotive Technology | 3 | |
| Req | AT 180 | Automotive Data Acquisition | 3 | |
| Req | AT 181 | Electrical Fundamentals and Multimeter Basics | 3 | |
| GE | ENGWR 300 / 480 ^H | College Composition | 3 | Ila WC |

Semester 2 15 Units

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|---------------------|------------------------------------|------|---------|
| Req | AT 110 | Automotive Brakes | 3 | |
| RE | AT 130 | Manual Drive Trains and Axles | 3 | |
| Req | AT 311 | Suspension and Steering Systems | 3 | |
| RC | AT 314 ¹ | Automotive Engine Repair | 3 | |
| GE | MATH 300 | Introduction to Mathematical Ideas | 3 | IIb MC |

¹ AT 314 is not part of this degree but is a prerequisite to AT 333.

Second Year

Semester 3 14 Units

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|---------------------|---|------|---------|
| Req | AT 310 | Heating and Air-Conditioning Systems | 3 | |
| Req | AT 330 | Automotive Electrical Systems | 3 | |
| RC | AT 333 ² | California State Smog Check Inspector Training | 6 | |
| GE | | any Area IIIb (Life Development Skills) course | 2 | IIIb |

² AT 333 is not part of this degree but is a prerequisite to AT 332.

Semester 4 15 Units

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|--------|---|------|---------|
| Req | AT 331 | Advanced Automotive Electrical Systems | 3 | |
| Req | AT 341 | Alternative Fuels and Advanced Technology Vehicles | 3 | |

CAREER PATH

Career Options:

This program prepares students for entry-level positions in the automotive industry with emphasis on alternative fuel and electric vehicle drive systems and complete automotive systems diagnosis and repair.

Advising Notes:

• Students can substitute ESLW 340 for ENGWR 300/480.

Other Notes:

- An internship (AT 298) is highly recommended as it opens up potential employment opportunities. Students can earn at least 1 unit for related paid or unpaid work experience including volunteer and internship positions through AT 298. See the <u>Work Exper</u> ience website for more information.
- At the end of semester 5 students qualify for the Green Vehicle
 Technology certificate, the Air
 Conditioning Service certificate, the Automotive Suspension and
 Steering certificate, and the Automotive Brakes certificate.

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|--------|--|------|---------|
| Req | AT 343 | Electric Vehicle Construction, Diagnosis and Repair | 3 | |
| Req | AT 345 | Hybrid Electric Vehicle Technology, Service and Repair | 3 | |
| GE | | any Area I (Humanities) course | 3 | I |

Third Year

Semester 5 13 Units

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|---------------------|---|------|---------|
| Req | AT 332 | Engine Performance & Electronic Engine Controls | 6 | |
| Req | AT 347 | Advanced Hybrid and Electric Vehicle Technology Service and Repair | 3 | |
| Req | AT 298 ³ | Work Experience in Automotive Technology | 1 | |
| GE | | any Area IV (Natural Sciences) course | 3 | IV |

³ or AT 140

Semester 6 10 Units

| CAT. | COURSE | TITLE | UNIT | GE AREA |
|------|--------|---|------|---------|
| GE | | any Area IIIa (Physical Education) course | 1 | IIIa |
| GE | | any Area Va (American Institutions) course | 3 | Va |
| GE | | any Area Vb (Social & Behavioral Sciences) course | 3 | Vb |
| GE | | any Area VI (Ethnic/Multicultural Studies) course | 3 | VI |

| | EXPLANATION OF CATEGORIES | | | | |
|-----|---|---|--|--|--|
| RE | RE Restricted Elective Specified for this program in the course list in the catalog, which can be replaced with another confrom the same list | | | | |
| Req | Required Core | A course that is required for this program | | | |
| GE | General Education | A course that fulfills a specific general education requirement for a degree, which can be replaced with another course that meets the same requirement | | | |
| RC | Recommended Course | A course that is not part of this program but is included in its roadmap | | | |

Graduation Requirement

A course that fulfills a specific graduation requirement which can be replaced by another course that meets the same graduation requirement.



