**TOPS University Associate of Applied Science in Technical Studies in Automotive Technology**

*Postsecondary Partner: South Louisiana Community College (SLCC)*

## Overview

Learn how to troubleshoot automotive problems of all kinds using the latest engine analyzers, handheld scanners, and other computerized diagnostic equipment. Students learn everything from basic engine systems to computerized fuel injection, anti-lock brakes, passenger restraint systems, computerized engine controls, and much more.

Courses included in this program include Intro to Automotive Technology, Brakes, Electronics, Transmission, Transaxle and Manual Drives, Engine Performance, Steering and Suspension, Engine Repair, and Heating and Air Conditioning. Graduates can earn an associate degree in Technical Studies or a technical diploma.

## Capstone Credentials

| Regional (Emerging) | Basic | Advanced | Fast Forward Advanced Plus |
|---|---|---|---|
| -S/P2 Automotive Service Safety AND Automotive Service Pollution Prevention | -ASE Student Certificate:<br>• Automobile Service Technology<br>• Automotive Transmission and Transaxle<br>• Brakes<br>• Electrical/Electronic Systems<br>• Engine Performance<br>• Engine Repair<br>• Heat and Air Conditioning<br>• Maintenance and Light Repair<br>• Manual Drivetrain and Axles<br>• Steering and Suspension | -Technical Diploma-Automotive Technology<br>-ASE Student Certificate (3+ certifications from the basic list) | -Associate of Applied Sciences: Automotive Technology |

**Core Academic Course*
***Jump Start CTE Course*

| Grade 9 | |
|---|---|
| **Semester 1** | **Semester 2** |
| *English I 120331 | *Foreign Language I |
| *Fine Arts Requirement | *Algebra I 160321 |

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|---|---|
| *Physical Science 150802 | ** General Technology Education (Introduction to Skilled Crafts) 110010 or Jobs for America's Graduates 1 042010 or Agriscience I 010301 |
| *Physical Education I 190105 | *½ Physical Education II 190106 ½ Health Education 190500 |

| **Grade 10** | |
|---|---|
| **Semester 1** | **Semester 2** |
| *English II 120332 | *Foreign Language II |
| *Algebra II 160322 | *Geometry 160323 |
| *World History 220401 | *U.S. History 220403 |
| *Biology 150301 | *Chemistry 150401 |

*Additional and/or equivalent TOPS core aligned courses can be found in Bulletin 741.*

| **Grade 11** | | | |
|---|---|---|---|
| **Semester 1** | | **Semester 2** | |
| **Postsecondary Course** | **LDOE Course/Code** | **Postsecondary Course** | **LDOE Course/Code** |
| *Mathematics for Workforce Occupations-WFMA 1003 | *Technical Math DE-165010 | *Math 1105 College Algebra | *Algebra III: DE-CMAT 1213 College Algebra 160500 |
| *Rhetoric & Composition ENG 1010 | *English III: DE-CENL 1013 English Composition I 120601 | *Environmental Science ENSC 1000 | *Environmental Science: DE-CEVS 1103 Environmental Science 150914 |
| *American National Government POLI 1100 | *US Government: DE-CPOL 2013 Intro to American Government 220514 | **Electronics I AUTO 1604 | **DE Electronics I 311502 |
| **Introduction to Automotive Technology AUTO 1002 | **DE Automotive Technician I 310312 | **Electronics II AUTO 1614 | **DE Electronics II 311512 |
| **Brakes AUTO 1504 | **TBD | **Transmission, Transaxle, & Manuel Drives AUTO 1215 | **TBD |
| | *World Geography 220401 | | **Workplace Safety 311923 or Intro to Computational Thinking 061141 or Intro to Computational Thinking (LSU Partnership) 061140 |

| Grade 12 | | | |
|---|---|---|---|
| **Semester 1** | | **Semester 2** | |
| **Postsecondary Course** | **LDOE Course/Code** | **Postsecondary Course** | **LDOE Course/Code** |
| *Introduction to Fiction ENG 2055 or British Literature ENG 2020 | *English IV: DE-CENL 2303 Introduction to Fiction 120614 or CENL 2103 British Literature I 120608 | **Engine Repair AUTO 2114 | **DE Engine Diagnosis and Repair 310392 |
| **Engine Performance I AUTO 1225 | **DE Engine Performance I: Components and Systems 310390 | **Heating and AC AUTO 2204 | **TBD |
| **Steering and Suspension AUTO 1406 | **DE Steering and Suspension Systems 310381 | **Engine Performance II AUTO 2304 | **DE Engine Performance II: Advanced Drivability 310394 |
| | Agriscience II 010302 or CDF Qualifying Pre-apprenticeship I (Electrical) (2 credits) 080231 or CDF Qualifying Internship I (2 credits) 080200 | | CDF Qualifying Pre-apprenticeship II (Electrical) (2 credits) 080234 or CDF Qualifying Internship II (2 credits) 080201 |

*This pathway framework is an outline of how the approved courses can be implemented. Schools may opt to rearrange the order of course sequencing in order to meet local scheduling requirements. Additionally, Fast Forward pathways are dynamic and the Jump Start Review Panel will consider course equivalents on an as needed basis.*