



# Atlantic Technical College Master Automotive Service Technology Program Syllabus 2024-2025



**Instructor Name:** Mr. Mark Armbrust  
**Department Name:** Transportation, Distribution & Logistics  
**Office/Classroom Location:** Coconut Creek HS, Room 412  
**Phone Number:** 754 322-0350  
**Email Address:** mark.armbrust@browardschools.com

**Instructor Office Hours:**  
**M-F:** 1:35-3:35 PM  
 (By appointment only)

**Student Hours:**

**Monday – Friday**

6:50 AM – 9:50 AM

(District CDE 11<sup>th</sup> and 12<sup>th</sup> Graders)

**Lunch**

9:50 AM – 10:20 AM

**Break**

10:20 AM – 10:35 AM

10:35 AM – 1:35 PM

*NOTE: All students are expected to be present during their entire scheduled class time(s). All classroom breaks will occur on an “as needed” basis. The wall clock in the classroom will serve as the official time.*

**Program Name:** Automotive Service Technology

**Career Cluster:** Transportation, Distribution and Logistics

| OCP | Course Name / Title   | Hours                   |
|-----|---|-------------------------|
| A   | AER0014/Automotive Service Assistor                         | 300 hours               |
| E   | AER0453/Automotive Suspension and Steering Technician       | 150 hours               |
| F   | AER0418/Automotive Brake System Technician                  | 150 hours               |
| G   | AER0360/Automotive Electrical/Electronic System Technician  | 300 hours               |
| H   | AER0172/ Automotive Heating and Air Conditioning Technician | <u>150 hours</u>        |
|     |   | <b>1200 total hours</b> |

**Technical College Policy/ High School Student Attendance:**

**Dual Enrolled High School/Attendance Policy:**

A student, who has had at least five unexcused absences, or absences for which the reasons are unknown, within a calendar month, or 10 unexcused absences, or absences, for which the reasons are unknown, within a 90-calendar-day period, may be exhibiting a pattern of non-attendance (F.S.1003.26 (1) (b)) and the School Board of Broward County, Policy 5.5.

|  |  |               |     |     |     |              |     |               |     |                    |     |
|--|--|---------------|-----|-----|-----|--------------|-----|---------------|-----|--------------------|-----|
| <p><b>Required Materials/Supplies:</b><br/>Loaned to students:</p> <ul style="list-style-type: none"> <li>• Halderman, James, Automotive Technology: Principles, Diagnosis, and Service 7<sup>th</sup> Edition, Pearson 2024.<br/>ISBN# <u>9780138302924</u></li> </ul> <p><b>Optional to purchase from the bookstore:</b></p> <ul style="list-style-type: none"> <li>• Motor Age A-1 to A-8 ASE Training Books</li> </ul>   | <p><b>Required Materials/Supplies</b><br/>Purchased from ATC Bookstore:</p> <ul style="list-style-type: none"> <li>• Unex Safety Glasses</li> <li>• Notebooks</li> <li>• Writing Utensils (pen and pencil)</li> </ul> <p><b>Optional:</b></p> <ul style="list-style-type: none"> <li>• Pocket Flashlight</li> </ul>  |               |     |     |     |              |     |               |     |                    |     |
| <p><b>Grading System:</b></p> <p>A 90 - 100%<br/>B 80 - 89%<br/>C 70 - 79%<br/>D 60 - 69%<br/>F 0 - 59%<br/>I Incomplete</p>   | <p><b>Additional Program Specific Grading Information:</b></p> <table border="0"> <tr> <td>Employability</td> <td>10%</td> </tr> <tr> <td>Lab</td> <td>35%</td> </tr> <tr> <td>Module Tests</td> <td>20%</td> </tr> <tr> <td>Textbook/Quiz</td> <td>15%</td> </tr> <tr> <td>Web Based Learning</td> <td>20%</td> </tr> </table>  | Employability | 10% | Lab | 35% | Module Tests | 20% | Textbook/Quiz | 15% | Web Based Learning | 20% |
| Employability  | 10%  |               |     |     |     |              |     |               |     |                    |     |
| Lab  | 35%  |               |     |     |     |              |     |               |     |                    |     |
| Module Tests   | 20%  |               |     |     |     |              |     |               |     |                    |     |
| Textbook/Quiz  | 15%  |               |     |     |     |              |     |               |     |                    |     |
| Web Based Learning   | 20%  |               |     |     |     |              |     |               |     |                    |     |
| <p><b>Lab Work:</b></p> <p>Each course requires that the student must have the following percentage of lab work competed:</p> <ul style="list-style-type: none"> <li>• P1- 95%</li> <li>• P2- 80%</li> <li>• P3- 50%</li> </ul>  | <p><b>Online Course Grading Policy:</b></p> <ul style="list-style-type: none"> <li>• Web Based Learning courses must have a 70% or higher to complete the course.</li> <li>• Quizzes and tests will be graded on first attempts only. (NO Resets)</li> <li>• Failure to complete a course before the due date will result in a 50% deduction for that course.</li> </ul> |               |     |     |     |              |     |               |     |                    |     |
| <p><b>View Your Grades:</b><br/><b>Grades can be viewed online by following the directions below:</b></p> <ol style="list-style-type: none"> <li>1. Go to <a href="https://browardfocus.com">https://browardfocus.com</a> (access FOCUS using Chrome, Firefox or Safari)</li> <li>2. Student ID which is on your student schedule.</li> <li>3. Passcode: Student's date of birth formatted as PMM/DD/YYYY.<br/><i>Two digits for the month, two digits for the day and Four digits for the year.</i></li> </ol>  |  |               |     |     |     |              |     |               |     |                    |     |
| <p><b>Classroom/ Lab Rules:</b></p> <ol style="list-style-type: none"> <li>1. <i>Must complete safety online course and pass the safety test with a 90% or better before working in shop.</i></li> <li>2. <i>Must wear safety glasses at all times when in shop.</i></li> <li>3. <i>Do not use equipment if you have not been trained to use it correctly.</i></li> <li>4. <i>Must have proper shop clothing to work (no flip flops, loose fitting clothing, etc.)</i></li> <li>5. <i>Clean any oil spills immediately.</i></li> <li>6. <i>Do not distract anyone who is working on a project.</i></li> <li>7. <i>No running or throwing things</i></li> <li>8. <i>All vehicles in the shop must have a repair order before work can begin.</i></li> <li>9. <i>The keys of any vehicle in the shop will be given to the instructor and not returned until the vehicle has been cleared by the instructor.</i></li> </ol> |  |               |     |     |     |              |     |               |     |                    |     |

10. Be aware of what is going on around you at all times.

11. All electronic devices must be silent and out of sight during instructional time. This includes cell phones, earbuds, smartwatches, headphones, mp3 players, etc. The school and/or teacher are not responsible for lost or stolen devices/personal belongings of any kind.

**Please Note:** Working in the shop is a privilege that can be revoked if these rules are not followed.

**ASE Industry Credentials:**

ASE Certification: Students are eligible to take one of the eight (8) ASE tests.  
Exam costs are free to students who have earned a C grade or higher in each course.  
ASE tests are given off-site.

**Outstanding Student Recognition Information:**

A gold seal will be applied to a Program Completion Certificate or an Applied Technology Diploma if the student has earned a 3.5 GPA or higher in their Career and Technical Education (CTE) classes.

**Program Name:** Automotive Service Technology

**Course Number:** AER0014

**Course Name:** Automotive Services Assistor

**Occupational Completion Point:** A

**Intended Outcomes:**

1.0 - Proficiently explain and apply required shop and personal safety tasks relating to the automotive industry.

2.0 - Explain and apply required tasks associated with the proper use and handling of tools and equipment relating to the automotive industry.

3.0 - Demonstrate proficiency in preparing vehicle for routine pre/post maintenance and customer services.

**Course Number:** AER0453

**Course Name:** Automotive Suspension and Steering Technician

**Occupational Completion Point:** E

**Intended Outcome:**

4.0 - Explain and apply proficiently the diagnosis, service and repair of front and rear suspensions systems, wheel alignment, and wheels and tires.

**Course Number:** AER0418

**Course Name:** Automotive Suspension and Steering Technician

**Occupational Completion Point:** F

**Intended Outcome:**

5.0 – Explain and apply proficiently the diagnosis, service and repair of drum/disc brake, hydraulics, power assist units, electronic brakes, traction control, stability control systems and miscellaneous (when bearings, parking brake, electrical, etc.) systems.

**Course Number:** AER0360

**Course Name:** Automotive Electrical/Electronic System Technician

**Occupational Completion Point:** G

**Intended Outcome:**

6.0- Explain and apply proficiently the diagnosis, service and repair of electrical/electronic system components, battery, starting, charging, lighting, gauges, warning devices, driver information, horn, wiper/washer and accessory systems.

**Course Number:** AER0172

**Course Name:** Automotive Heating and Air Conditioning Technician

**Occupational Completion Point:** H

**Intended Outcome:**

7.0- Explain and apply proficiently the diagnosis, service and repair of heating and air conditioning, refrigeration, compressors, compressor clutches, evaporators, receiver driers, accumulators, condensers, heating and engine cooling, related control systems, refrigerant recovery, and recycling and handling.

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