

## Automotive Manufacturing Technology A.A.S.

**Advisors – Ayers Campus:** Andrew Robertson, Electronics Building (256.835.5427) [arobertson@gadsdenstate.edu](mailto:arobertson@gadsdenstate.edu);  
 Audrey Webb, Electronics Building (256.835.5460) [awebb@gadsdenstate.edu](mailto:awebb@gadsdenstate.edu)  
**East Broad Campus:** Jack Mayfield, Industrial Automation Building (256.549.8637) [jmayfield@gadsdenstate.edu](mailto:jmayfield@gadsdenstate.edu)

|   |           | <b>STUDENT PROGRESS</b> |                       |
|---|-----------|-------------------------|-----------------------|
|   |           | <u>Grade</u>            | <u>Term Completed</u> |
| <b>Area I — Written Composition:</b> .....  | <b>3</b>  |                         |                       |
| • ENG 101 - English Composition I .....   | 3         |                         |                       |
| <b>Area II — Humanities and Fine Arts:</b> .....                                      | <b>3</b>  |                         |                       |
| • Humanities and Fine Arts Elective** .....   | 3         |                         |                       |
| <b>Area III — Natural Science or Mathematics:</b> .....                               | <b>6</b>  |                         |                       |
| • INT 104 - Principles of Technology .....  | 3         |                         |                       |
| • MTH 100 - Intermediate College Algebra <b>OR</b><br>numerically higher.....         | 3         |                         |                       |
| <b>Area IV — History, Social and Behavioral Sciences:</b> .....                       | <b>3</b>  |                         |                       |
| • Economics, Geography, History,<br>Political Science, Psychology, or Sociology ..... | 3         |                         |                       |
| <b>Area V - Technical Courses:</b> .....  | <b>22</b> |                         |                       |
| Courses listed below are required.  |           |                         |                       |
| • AUT 100 - Introduction to Automotive Concepts .....                                 | 3         |                         |                       |
| • AUT 102 - Lean Manufacturing and Industrial Safety .....                            | 3         |                         |                       |
| • AUT 104 - Blueprint Reading for Manufacturing .....                                 | 3         |                         |                       |
| • AUT 110 - DC Fundamentals .....   | 3         |                         |                       |
| • AUT 114 - Introduction to Programmable Logic Controllers .....                      | 3         |                         |                       |
| • AUT 118 - Introduction to Engineering Technology .....                              | 3         |                         |                       |
| • AUT 139 – Introduction to Robotic Programming .....                                 | 3         |                         |                       |
| • ORI 101 - Orientation to College .....  | 1         |                         |                       |
| <b>Additional Coursework:</b> .....   | <b>39</b> |                         |                       |
| • AUT 106 - Quality Control and Inspection Techniques .....                           | 3...      |                         |                       |
| • * AUT 111 - AC Fundamentals .....   | 3         |                         |                       |
| • AUT 116 – Introduction to Robotics .....  | 3         |                         |                       |
| • AUT 117 - AC/DC Machines .....  | 3         |                         |                       |
| • AUT 121 - Elements of Industrial Control .....                                      | 3         |                         |                       |
| • AUT 122 - Elements of Industrial Control Lab .....                                  | 2         |                         |                       |
| • AUT 130 - Fundamentals of Industrial Hydraulics and<br>Pneumatics.....              | 3         |                         |                       |
| • AUT 134 - Industrial Motors .....   | 3         |                         |                       |
| • AUT 136 - Principles of Refrigeration .....   | 3         |                         |                       |
| • AUT 138 - Principles of Industrial Mechanics .....                                  | 3         |                         |                       |



|  | <b>STUDENT PROGRESS</b> |                       |
|--|-------------------------|-----------------------|
|  | <u>Grade</u>            | <u>Term Completed</u> |
| • AUT 142 - Industrial Wiring ..... 3  | _____                   | _____                 |
| • AUT 150 - Introduction to Machine Shop I ..... 3   | _____                   | _____                 |
| • AUT 151 - Introduction to Machine Shop I Lab ..... 3   | _____                   | _____                 |
| • AUT 155 - Metrology ..... 3  | _____                   | _____                 |
| • AUT 186 - Principles of Industrial Maintenance Welding<br>and Metal Cutting Techniques ..... 3                               | _____                   | _____                 |
| • AUT 193 - Special Topics (Electrical/Electronic) ..... 1   | _____                   | _____                 |
| • AUT 194 - Special Topics (Electrical/Electronic) ..... 2   | _____                   | _____                 |
| • AUT 195 - Special Topics (Electrical/Electronic) ..... 3   | _____                   | _____                 |
| • AUT 221 - Advanced Programmable Logic Controllers ..... 3  | _____                   | _____                 |
| • AUT 230 - Preventive and Predictive Maintenance ..... 3  | _____                   | _____                 |
| • AUT 234 - Industrial Motor Controls I ..... 3  | _____                   | _____                 |
| • AUT 262 - Computer Integrated Manufacturing ..... 3  | _____                   | _____                 |
| • AUT 291 - Automotive Cooperative Education ..... 1   | _____                   | _____                 |
| • AUT 292 - Automotive Cooperative Education ..... 2   | _____                   | _____                 |
| • AUT 293 - Automotive Cooperative Education ..... 3   | _____                   | _____                 |
| • CIS 146 - Microcomputer Applications ..... 3   | _____                   | _____                 |
| • MDT 105 - Introduction to Computer-Aided Design (CAD) <b>OR</b><br>DDT 104 –Basic Computer-Aided Drafting and Design ..... 3 | _____                   | _____                 |
| • SPH 106 - Fundamentals of Oral Communication ..... 3   | _____                   | _____                 |

**\*Required Courses**

**Total Hours Required for Degree:..... 76**

**NOTICE(s):** For the A.A.S. Degree in Automotive Manufacturing Technology, the student must complete a minimum of 76 credit hours – a minimum of 61 in technical courses and a minimum of 15 in general education courses – all of which must be approved by the advisor. A maximum of 9 credit hours of technical electives may be selected from any approved area of Engineering Technology programs with prior written approval from the student’s major advisor. Technical courses may vary to meet the student needs and to provide options. Admission Requirement: High school diploma or GED.

The student is responsible for verifying the transferability of credit in this program to a senior institution with the appropriate senior institution advisor.

**\*\*Note:** Humanities and Fine Arts disciplines include but are not limited to the following: Literature, Ethnic Studies, Art and Art History, Foreign Language Literature, Music and Music History, Philosophy, Ethics, Religious Studies, Theater, and Dance.