



ASSOCIATE OF APPLIED SCIENCE

AUTOMOTIVE TECHNOLOGY

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

2024-25 Catalog
Effective Summer 2024

2250

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

| TECHNICAL Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
|-------------------------------|--|---------------------|--|------------------------|
| AUT122 | Automotive Systems and Engine Technology | 4 | AUT121 | |
| AUT124 | Vehicle Chassis Systems | 4 | AUT121 | |
| AUT125 | Automotive Electrical and Accessory Systems | 4 | AUT121 | |
| AUT221 | Fuel and Emissions Management Systems | 3 | AUT125 | |
| AUT222 | Engine System Performance Diagnosis | 3 | AUT125 | |
| AUT223 | Advanced Automotive Electronics | 3 | AUT125 | |
| AUT227 | Computerized Vehicle Control | 3 | AUT125 | |
| AUT233 | Automotive Diagnostic Applications | 2 | AUT223 | |
| AUT234 | Alternative Fuels and Advanced Automotive Technologies | 2 | AUT223 | |
| | <i>See Technical Elective list page**</i> | <i>2-5</i> | <i>Check for prerequisites</i> | |
| Total | | 30-33 | | |
| NON-TECH Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
| SSC101 | Student Success Seminar^^ | 1 | <i>Take first semester</i> | |
| AUT121 | Automotive Technical Skills | 2 | | |
| AUT123 | Engine Diagnosis and Major Service | 4 | AUT121 | |
| AUT126 | Automotive HVAC Systems | 2 | AUT121 | |
| AUT225 | Automotive Drivetrain 1 | 3 | AUT121 | |
| AUT226 | Automotive Drivetrain 2 | 3 | AUT121 | |
| ENG124 | College Composition^ | 3 | Co-ENG024 or Co-ENG011 or Proficiency | |
| ENG221 | Technical Report Writing | 3 | ENG124 | |
| MTH107 or MTH125 | Industrial Math^ or College AlgebraΩ | 3 or 4 | <i>Check for prerequisites</i> | |
| PHL122 | Ethics | 3 | | |
| BUS122 | Basic Economics^ | 3 | IDS102 or Proficiency | |
| Total | | 30 | | |
| TOTAL CREDIT HOURS | | 60-64 | | |

^Based upon SSC placement score

^^To promote student success, this course should be taken in the first semester

Ω MTH125 College Algebra should be taken by students planning to transfer to a four-year university

**See Technical Elective list page.

PART-TIME STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

Course Sequence

The semester-by-semester listing below provides the normal scheduling option for part-time associate degree students who plan to finish in eight semesters.

| <u>First Semester</u> | | <u>Credit Hours</u> | <u>Pre- and Co-requisites</u> |
|-------------------------|---|---------------------|--|
| SSC101 | Student Success Seminar^^ | 1 | <i>Take first semester</i> |
| AUT121 | Automotive Technical Skills | 2 | |
| AUT122 | Automotive Systems and Engine Applications | 4 | AUT121 |
| AUT123 | Engine Diagnosis and Major Service | 4 | AUT121 |
| MTH107 | Industrial Math^ | 3 | |
| or | or | or | <i>Check for prerequisites</i> |
| MTH125 | College AlgebraΩ | 4 | |
| | | 14-15 | |
| <u>Second Semester</u> | | | |
| AUT124 | Vehicle Chassis Systems | 4 | AUT121 |
| AUT125 | Automotive Electrical and Accessory Systems | 4 | AUT121 |
| AUT126 | Automotive HVAC Systems | <u>2</u> | AUT121 |
| ENG124 | College Composition^ | <u>3</u> | Co-ENG024 or Co-ENG011 or Proficiency |
| | | 13 | |
| <u>Third Semester</u> | | | |
| AUT222 | Engine Systems Performance Diagnosis | 3 | AUT125 |
| AUT223 | Advanced Automotive Electronics | 3 | AUT125 |
| AUT225 | Automotive Drivetrain 1 | <u>3</u> | AUT121 |
| | | 9 | |
| <u>Fourth Semester</u> | | | |
| AUT221 | Fuel and Emissions Management Systems | 3 | AUT125 |
| AUT226 | Automotive Drivetrain 2 | 3 | AUT121 |
| AUT227 | Computerized Vehicle Control | <u>3</u> | AUT125 |
| | | 9 | |
| <u>Fifth Semester</u> | | | |
| PHL122 | Ethics | 3 | |
| | | 3 | |
| <u>Sixth Semester</u> | | | |
| BUS122 | Basic Economics^ | 3 | IDS102 or Proficiency |
| ENG221 | Technical Report Writing | <u>3</u> | ENG124 |
| | | 6 | |
| <u>Seventh Semester</u> | | | |
| AUT233 | Automotive Diagnostics Applications | <u>2</u> | AUT223 |
| | | 2 | |
| <u>Eighth Semester</u> | | | |
| AUT234 | Alternative Fuels and Advanced Automotive Systems | 2 | AUT223 |
| | <i>See Technical Elective list page**</i> | <u>2-5</u> | <i>Check for prerequisites</i> |
| | | 4-7 | |
| | TOTAL CREDITS | 60-64 | |

^Based upon SSC placement score

^^To promote student success, this course should be taken in the first semester

Ω MTH125 College Algebra should be taken by students planning to transfer to a four-year university

**See Technical Elective list page.

| TECHNICAL ELECTIVES: Two (2) credit hours minimum | | | | 2250 |
|---|---|---------|------------------------|---------------------|
| Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
| AUT128 | Automotive Diesel Engine Performance | 2 | | |
| AUT130 | Automotive Safety and Shops Standards | 2 | | |
| AUT131 | Automotive Detailing Business Practices | 2 | | |
| AUT132 | Automotive Exterior Detailing | 3 | | |
| AUT133 | Automotive Interior Detailing | 2 | AUT132 | |
| AUT134 | Automotive Under-Hood and Under-Car Detailing | 2 | AUT132 | |
| AUT135 | Advanced Automotive Detailing Techniques | 3 | AUT132 | |
| AUT136 | Practical Automotive Detailing Applications | 2 | AUT132 | |
| AUT137 | ASE Test Preparation | 2 | | |
| AUT138 | Applied Automotive Principles | 4 | | |
| AUT141 | Steering, Suspension, and Braking Operations | 2 | | |
| AUT142 | Auto Electrical Systems Toyota | 2 | | |
| AUT143 | Heating Ventilation and Air Conditioning for Light Vehicles | 1 | | |
| AUT253 | Computerized Engine Control Systems | 2 | | |
| AUT171 | Introduction to Honda PACT | 1 | | |
| AUT172 | Honda Engine Mechanical | 2 | | |
| AUT173 | Honda Steering and Suspension | 1 | AUT124 | |
| AUT174 | Honda Braking Systems | 1 | AUT124 | |
| AUT175 | Honda Electrical Systems | 2 | AUT125 | |
| AUT176 | Honda HVAC Systems | 1 | AUT125 | |
| AUT277 | Honda Computerized Engine | 2 | AUT223 | |
| AUT271 | Honda Fuel and Emissions System | 1 | AUT221 | |
| AUT273 | Honda Advanced Diagnostic Applications | 1 | AUT223 | |
| AUT275 | Honda Manual Transmissions | 1 | AUT225 | |
| AUT276 | Honda Automatic Transmissions | 1 | AUT226 | |
| AUT181 | Intro to CAT Lift Trucks | 1 | AUT121 | |
| AUT182 | CAT Operator Safety Training | 1 | AUT121 | |
| AUT183 | CAT Service Information System | 1 | AUT121 | |
| AUT184 | CAT Hydraulic Systems | 1 | AUT121 | |
| AUT185 | CAT Internal Combustion Engine | 2 | AUT121 | |
| AUT186 | CAT Masts and Lift Mechanisms | 1 | AUT121 | |
| AUT187 | CAT Electrical Systems | 3 | AUT121 | |
| AUT188 | CAT Steering Systems | 1 | AUT121 | |
| AUT189 | CAT Braking Systems | 1 | AUT121 | |
| AUT281 | CAT Differentials and Front Axles | 1 | AUT121 | |
| AUT282 | CAT Transmissions | 2 | AUT121 | |
| AUT283 | CAT Fuel Systems (LP, Gasoline) | 2 | AUT121 | |
| AUT254 | Automotive Aftermarket Vehicle Interior Modifications | 3 | AUT125 | |
| AUT255 | Automotive Aftermarket Vehicle Exterior Modifications | 3 | AUT125 | |
| AUT256 | Automotive Aftermarket Vehicle Powertrain Modifications | 3 | AUT123 | |
| AUT257 | Automotive Aftermarket Vehicle Chassis Modifications | 3 | AUT124 | |
| AUT191 | Automotive CO-OP 1 | 2 | | |
| AUT192 | Automotive CO-OP 2 | 2 | | |
| AUT193 | Automotive CO-OP 3 | 2 | | |
| AUT194 | Automotive CO-OP 4 | 2 | | |
| AUT 224 | Automotive Diesel Systems | 2 | AUT 121 | |
| AUT228 | Auto Service Management | 2 | | |
| AUT230 | Technical Project | 2 | | |
| TOY101 | Introduction to Toyota T-TEN | 3 | | |
| TOY102 | Toyota Electrical Systems I | 5 | TOY101 | |
| TOY103 | Toyota Steering, Suspension, and Handling | 5 | TOY102 | |
| TOY104 | Toyota Engine Diagnosis and Repair | 5 | TOY101 | |
| TOY105 | Toyota Engine Controls I | 5 | TOY104 | |
| TOY106 | Toyota Manual Transmissions and Drivetrains | 5 | TOY102 | |
| TOY201 | Toyota Electrical Systems II | 5 | TOY102 | |
| TOY202 | Toyota Automotive Braking Systems | 5 | TOY201 | |
| TOY203 | Toyota HVAC Systems | 5 | TOY201 | |
| TOY204 | Toyota Engine Controls II | 5 | TOY105 | |
| TOY205 | Toyota Automatic Transmissions | 5 | TOY204 | |