

## 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.

2023-24 Catalog

Effective Summer 2023

2250

Business, Engineering, and Information Technologies Division

Automotive and Transportation Department

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	
	See Technical Elective list page**	2-5	Check for prerequisites	
	Total	30-33		
NON-TECH Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
Course Number				
SSC101	Student Success Seminar^^	1	Take first semester	
	Student Success Seminar^^ Automotive Technical Skills	1 2	Take first semester	
SSC101			Take first semester AUT121	
SSC101 AUT121	Automotive Technical Skills	2		
SSC101 AUT121 AUT123	Automotive Technical Skills Engine Diagnosis and Major Service	2 4	AUT121	
SSC101 AUT121 AUT123 AUT126	Automotive Technical SkillsEngine Diagnosis and Major ServiceAutomotive HVAC Systems	2 4 2	AUT121 AUT121	
SSC101           AUT121           AUT123           AUT126           AUT225	Automotive Technical SkillsEngine Diagnosis and Major ServiceAutomotive HVAC SystemsAutomotive Drivetrain 1	2 4 2 3	AUT121 AUT121 AUT121	
SSC101           AUT121           AUT123           AUT126           AUT225           AUT226	Automotive Technical SkillsEngine Diagnosis and Major ServiceAutomotive HVAC SystemsAutomotive Drivetrain 1Automotive Drivetrain 2	2 4 2 3 3	AUT121 AUT121 AUT121 AUT121 Co-ENG024 or Co-ENG011	
SSC101           AUT121           AUT123           AUT126           AUT225           AUT226           ENG124           ENG221           MTH107	Automotive Technical SkillsEngine Diagnosis and Major ServiceAutomotive HVAC SystemsAutomotive Drivetrain 1Automotive Drivetrain 2College Composition^Technical Report WritingIndustrial Math^	2 4 2 3 3 3 3	AUT121 AUT121 AUT121 AUT121 Co-ENG024 or Co-ENG011 or Proficiency ENG124	
SSC101           AUT121           AUT123           AUT126           AUT225           AUT226           ENG124           ENG221           MTH107           or	Automotive Technical Skills         Engine Diagnosis and Major Service         Automotive HVAC Systems         Automotive Drivetrain 1         Automotive Drivetrain 2         College Composition^         Technical Report Writing         Industrial Math^         or	2 4 2 3 3 3 3 3 0 r	AUT121 AUT121 AUT121 AUT121 Co-ENG024 or Co-ENG011 or Proficiency	
SSC101           AUT121           AUT123           AUT126           AUT225           AUT226           ENG124           ENG221           MTH107           or           MTH125	Automotive Technical Skills         Engine Diagnosis and Major Service         Automotive HVAC Systems         Automotive Drivetrain 1         Automotive Drivetrain 2         College Composition^         Technical Report Writing         Industrial Math^         or         College AlgebraΩ	2 4 2 3 3 3 3 3 0 r 4	AUT121 AUT121 AUT121 AUT121 Co-ENG024 or Co-ENG011 or Proficiency ENG124	
SSC101           AUT121           AUT123           AUT126           AUT225           AUT226           ENG124           ENG221           MTH107           or           MTH125           PHL122	Automotive Technical Skills         Engine Diagnosis and Major Service         Automotive HVAC Systems         Automotive Drivetrain 1         Automotive Drivetrain 2         College Composition^         Technical Report Writing         Industrial Math^         or         College AlgebraΩ         Ethics	2 4 2 3 3 3 3 3 0 r 4 3	AUT121 AUT121 AUT121 AUT121 Co-ENG024 or Co-ENG011 or Proficiency ENG124 Check for prerequisites	
SSC101           AUT121           AUT123           AUT126           AUT225           AUT226           ENG124           ENG221           MTH107           or           MTH125	Automotive Technical Skills         Engine Diagnosis and Major Service         Automotive HVAC Systems         Automotive Drivetrain 1         Automotive Drivetrain 2         College Composition^         Technical Report Writing         Industrial Math^         or         College AlgebraΩ	2 4 2 3 3 3 3 3 0 r 4	AUT121 AUT121 AUT121 AUT121 Co-ENG024 or Co-ENG011 or Proficiency ENG124	

^Based upon SSC placement score

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

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

\*\*See Technical Elective list page.

## **AUTOMOTIVE TECHNOLOGY**

## 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.

First Semester		Credit Hours	Pre- and Co-requisites
SSC101	Student Success Seminar^^	1	Take first semester
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	Check for prerequisites
MTH125	College AlgebraΩ	4	
		14-15	
Second Semester			
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	Tionelency
Third Semester			
AUT222	Engine Systems Performance Diagnosis	3	AUT125
AUT223	Advanced Automotive Electronics	3	AUT125
AUT225	Automotive Drivetrain 1	<u>3</u>	AUT121
		9	
Fourth Semester			
AUT221	Fuel and Emissions Management Systems	3	AUT125
AUT226	Automotive Drivetrain 2	3	AUT121
AUT227	Computerized Vehicle Control	<u>3</u>	AUT125
		9	
Fifth Semester			
PHL122	Ethics	3	
		3	
Sixth Semester			
BUS122	Basic Economics^	3	IDS102 or Proficiency
ENG221	Technical Report Writing	<u>3</u>	ENG124
		6	
Seventh Semester			
AUT233	Automotive Diagnostics Applications	<u>2</u>	AUT223
	8 11	2	
Eighth Semester		_	
AUT234	Alternative Fuels and Advanced Automotive Systems	2	AUT223
-	See Technical Elective list page**	<u>2-5</u>	<i>Check for prerequisites</i>
		<u>4-7</u>	encenje. prerequisites
	TOTAL CREDITS	60-64	
		00 01	

^Based upon SSC placement score

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

 $\Omega$  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						
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 AUT171	Computerized Engine Control Systems	2				
AUT172	Introduction to Honda PACT Honda Engine Mechanical	2				
	Honda Engine Mechanical Honda Steering and Suspension	1	AUT124	-		
AUT173 AUT174	Honda Steering and Suspension Honda Braking Systems	1	AUT124 AUT124	+		
AUT174 AUT175	Honda Electrical Systems	2	AUT124 AUT125			
AUT175	Honda HVAC Systems	1	AUT125			
AUT277	Honda Computerized Engine	2	AUT223			
AUT271	Honda Fuel and Emissions System	1	AUT223			
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	ALT: 101			
AUT 224	Automotive Diesel Systems	2	AUT 121			
AUT228 AUT230	Auto Service Management Technical Project	2 2		+		
				-		
TOY101 TOY102	Introduction to Toyota T-TEN Toyota Electrical Systems I	3 5	TOY101			
TOY102	Toyota Electrical Systems 1 Toyota Steering, Suspension, and Handling	5	TOY101 TOY102			
TOY103	Toyota Engine Diagnosis and Repair	5	TOY102			
TOY104	Toyota Engine Controls I	5	TOY104			
TOY106	Toyota Manual Transmissions and Drivetrains	5	TOY104	1		
TOY201	Toyota Electrical Systems II	5	TOY102	1		
TOY202	Toyota Automotive Braking Systems	5	TOY201	1		
TOY203	Toyota HVAC Systems	5	TOY201	1		
TOY204	Toyota Engine Controls II	5	TOY105			
TOY205	Toyota Automatic Transmissions	5	TOY204	1		