

The Associate of Applied Science Degree in Automotive Service Technology and related certificate programs are ASE Student Foundation certified and taught by ASE certified Instructors.

The two-year Automotive A.A.S. and certificate programs train students for employment in the automotive service industry as professional technicians and prepare students for the ASE (Automotive Service Excellence) certification examinations. This program includes ASE certification or manufacturer-specific training. Each class in the program requires 5-45 additional hours of hands-on and/or web based training (under supervision of the instructor) in addition to scheduled class hours.

Students wishing to pursue the two-year degree or the certificate programs must be signed into courses by the program director at the beginning of each semester to ensure that they are on track academically to graduate in the prescribed two-year period. Classes for the corporate tracks will be filled with dealer sponsored students first. General program students may be allowed to fill any remaining seats. All students, regardless of their chosen track, should be aware of automotive repair industry expectations, specifically that technicians must drive customers' vehicles as part of the repair process; thus, the technician and the student must have a clean motor vehicle record and valid driver's license. The hiring process at reputable repair shops and dealerships will include a drug screen and a thorough background investigation.

Required Courses	Credits	Pre or Co Reqs Rqd	Course Availability		
			Fall	Spr	Sum
General Education Courses					
• COM 115 - Public Speaking* OR COM 125 - Interpersonal Communication (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• ELT 146 - Digital Devices in Computers (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1*	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• MAT 108 - Technical Mathematics or Higher* (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
• PHY 105 - Conceptual Physics with Lab: GT-SC1* (4 Cr.)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Major Courses					
• ASE 101 - Auto Shop Orientation (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• ASE 103 - Auto Maintenance I (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• ASE 110 - Automotive Brake Service I (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 111 - Automotive Brake Service II (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 120 - Basic Automotive Electricity (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• ASE 122 - Automotive Electrical Safety Systems (1 Cr.)	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 123 - Starting and Charging System (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 130 - General Engine Diagnosis (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 134 - Automotive Fuel and Emissions Systems I (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 140 - Suspension and Steering I (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 141 - Suspension and Steering II (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 150 - Manual Drive Train and Axle Maintenance (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 151 - Automotive Manual Transmission/Transaxles & Clutches (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Academic Plan
Associate of Applied Science
Automotive Service Technology

89 Credits

Catalog Year: 2021/2022

• ASE 152 - Manual Transmission, Transaxles and Clutches II (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 153 - Automotive Drive Axle Overhaul (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 154 - Manual Transmission/Transaxle Diagnosis and Repair (1 Cr.)	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 160 - Automotive Engine Repair (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 161 - Engine Repair & Rebuild (3 Cr.)	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 162 - Automotive Engine Repair (2 Cr.)	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 170 - Laboratory Experience I (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 171 - Laboratory Experience II (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 172 - Laboratory Experience III (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 210 - Automotive Power and ABS Brake Systems (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 221 - Automotive and Diesel Body Electrical (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 231 - Automotive Computers and Ignition Systems (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 233 - Auto Fuel Injection and Emissions Systems II (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 235 - Driveability & Diagnosis (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 240 - Suspension and Steering III (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 250 - Automatic Transmission/Transaxle Service (1 Cr.)	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• ASE 251 - Automotive Transmission and Transaxle Repair (3 Cr.)	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 252 - Advanced Automatic Transmissions/Transaxles (2 Cr.)	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 264 - Introduction Automotive Heating and Air Conditioning (1 Cr.)	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• ASE 265 - Heating and Air Conditioning Systems (4 Cr.)	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Pre-Requisites, Co-Requisites, and Recommendations (grade C or better required)

Where requirements are listed as course categories (e.g. Electives, Arts/Humanities) rather than as specific courses, please note that depending upon course choice, pre-requisites may be required.

ASE 111 - Automotive Brake Service II (2 Cr.)

- Pre-Requisite: ASE 110 - Brakes I

ASE 123 - Starting and Charging System (2 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity

ASE 134 - Automotive Fuel and Emissions Systems I (2 Cr.)

- Pre-Requisite: ASE 231 - Automotive Computers and Ignition Systems

ASE 141 - Suspension and Steering II (2 Cr.)

- Pre-Requisite: ASE 140 - Suspension and Steering I

ASE 170 - Laboratory Experience I (2 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity

ASE 171 - Laboratory Experience II (4 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity

ASE 172 - Laboratory Experience III (2 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity

ASE 210 - Automotive Power and ABS Brake Systems (2 Cr.)

- Pre-Requisite: ASE 110 - Brakes I
- Pre-Requisite: ASE 111 - Automotive Brake Service II

ASE 221 - Automotive and Diesel Body Electrical (4 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity

ASE 231 - Automotive Computers and Ignition Systems (2 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity
- Pre-Requisite: ASE 170 - Laboratory Experience I

ASE 233 - Auto Fuel Injection and Emissions Systems II (4 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity
- Pre-Requisite: ASE 134 - Automotive Fuel and Emissions Systems I
- Pre-Requisite: ASE 231 - Automotive Computers and Ignition Systems

ASE 235 - Driveability & Diagnosis (2 Cr.)

- Pre-Requisite: ASE 120 - Basic Automotive Electricity

ASE 240 - Suspension and Steering III (2 Cr.)

- Pre-Requisite: ASE 140 - Suspension and Steering I
- Pre-Requisite: ASE 141 - Suspension and Steering II

ASE 251 - Automotive Transmission and Transaxle Repair (3 Cr.)

- Pre-Requisite: ASE 250 - Automatic Transmission/Transaxle Service

ASE 252 - Advanced Automatic Transmissions/Transaxles (2 Cr.)

- Pre-Requisite: ASE 250 - Automatic Transmission/Transaxle Service (1 Cr.)
- Pre-Requisite: ASE 251 - Automotive Transmission and Transaxle Repair

ASE 265 - Heating and Air Conditioning Systems (4 Cr.)

- Pre-Requisite: ASE 264 - Introduction Automotive Heating and Air Conditioning

ELT 146 - Digital Devices in Computers (3 Cr.)

- Pre-Requisite: ASE 221 - Automotive and Diesel Body Electrical
- Pre-Requisite: ELT 106 - Fundamentals of DC/AC OR ASE 120 - Basic Automotive Electricity OR ASE 123 - Starting and Charging System OR ASE 170 - Laboratory Experience I OR ASE 171 - Laboratory Experience II, OR ASE 172 - Laboratory Experience III

ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1*

- Co-Requisite: CCR 094 - Studio 121

MAT 108 - Technical Mathematics or Higher* (4 Cr.)

- Co-Requisite: MAT 091 - Applied Quantitative Lab
- Pre-Requisite: MAT 050 - Quantitative Literacy (4 Cr.) OR MAT 055 - Algebraic Literacy (4 Cr.) OR appropriate score

Program Outcomes

- Acquire baseline expertise in the following Automotive Service areas: Engine Repair, Automatic Transmission and Transaxle, Manual Drive Train and Axles, Suspension and Steering Systems, Brakes, Electrical/Electronic Systems, Heating, Cooling and Air Conditioning, and Engine Performance.
- Demonstrate reliable, responsible dependability in the workplace.

Notes

- *This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.
- AAA 101 – College 101: Student Experience is required for all new college students seeking degrees or transfer.
- Course availability is subject to change.
- Recommended courses are listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) or the Automotive Department for additional elective recommendations.
- Refer to 21/22 catalog for specific requirements and important information about this degree.

Graduation Requirements

- To graduate, students must apply for graduation (form available at www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

Year 1: Summer	Credits	Course
	2	ASE 101 - Auto Shop Orientation (2 Cr.)
	2	ASE 103 - Auto Maintenance I (2 Cr.)
	2	ASE 120 - Basic Automotive Electricity (2 Cr.)
	1	ASE 250 - Automatic Transmission/Transaxle Service (1 Cr.)
Year 1: Fall	Credits	Course
	1	ASE 122 - Automotive Electrical Safety Systems (1 Cr.)
	2	ASE 123 - Starting and Charging System (2 Cr.)
	2	ASE 170 - Laboratory Experience I (2 Cr.)
	4	ASE 171 - Laboratory Experience II (4 Cr.)
	2	ASE 172 - Laboratory Experience III (2 Cr.)
	4	ASE 221 - Automotive and Diesel Body Electrical (4 Cr.)
	1	ASE 264 - Introduction Automotive Heating and Air Conditioning (1 Cr.)
	4	MAT 108 - Technical Mathematics or Higher* (4 Cr.)
Year 1: Spring	Credits	Course
	2	ASE 110 - Automotive Brake Service I (2 Cr.)
	2	ASE 111 - Automotive Brake Service II (2 Cr.)
	2	ASE 140 - Suspension and Steering I (2 Cr.)
	2	ASE 150 - Manual Drive Train and Axle Maintenance (2 Cr.)
	2	ASE 153 - Automotive Drive Axle Overhaul (2 Cr.)
	2	ASE 160 - Automotive Engine Repair (2 Cr.)
	3	ASE 161 - Engine Repair & Rebuild (3 Cr.)
	2	ASE 162 - Automotive Engine Repair (2 Cr.)
	3	ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1
		~Recommended Course(s)~
		ENG 131 - Technical Writing I: GT-CO1* (3 Cr.)
Year 2: Spring	Credits	Course
	4	PHY 105 - Conceptual Physics with Lab: GT-SC1 (4 Cr.)
Year 2: Summer	Credits	Course
	3	COM 115 - Public Speaking OR COM 125 - Interpersonal Communication (3 Cr.)
		~Recommended Communication Course(s)~
		COM 125 - Interpersonal Communication (3 Cr.)
Year 2: Fall	Credits	Course
	2	ASE 130 - General Engine Diagnosis (2 Cr.)
	2	ASE 134 - Automotive Fuel and Emissions Systems I (2 Cr.)
	2	ASE 231 - Automotive Computers and Ignition System (2 Cr.)
	4	ASE 233 - Auto Fuel Injection and Emissions Systems II (4 Cr.)
	2	ASE 235 - Driveability & Diagnosis (2 Cr.)
	4	ASE 265 - Heating and Air Conditioning Systems (4 Cr.)
	3	ELT 146 - Digital Devices in Computers (3 Cr.)

Year 2: Spring	Credits	Course
	2	ASE 141 - Suspension and Steering II (2 Cr.)
	2	ASE 151 - Automotive Manual Transmission/Transaxles & Clutches (2 Cr.)
	2	ASE 152 - Manual Transmission, Transaxles and Clutches II (2 Cr.)
	1	ASE 154 - Manual Transmission/Transaxle Diagnosis and Repair (1 Cr.)
	2	ASE 210 - Automotive Power and ABS Brake Systems (2 Cr.)
	2	ASE 240 - Suspension and Steering III (2 Cr.)
	3	ASE 251 - Automotive Transmission and Transaxle Repair (3 Cr.)
	2	ASE 252 - Advanced Automatic Transmissions/Transaxles (2 Cr.)

RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

Year 1: Spring	Credits	Course
	1	ASE 122 - Automotive Electrical Safety Systems (1 Cr.)
Year 1: Summer	Credits	Course
	2	ASE 101 - Auto Shop Orientation (2 Cr.)
	2	ASE 103 - Auto Maintenance I (2 Cr.)
	2	ASE 120 - Basic Automotive Electricity (2 Cr.)
	1	ASE 250 - Automatic Transmission/Transaxle Service (1 Cr.)
Year 1: Fall	Credits	Course
	2	ASE 110 - Automotive Brake Service I (2 Cr.)
	2	ASE 111 - Automotive Brake Service II (2 Cr.)
	2	ASE 140 - Suspension and Steering I (2 Cr.)
	2	ASE 150 - Manual Drive Train and Axle Maintenance (2 Cr.)
	2	ASE 153 - Automotive Drive Axle Overhaul (2 Cr.)
	2	ASE 160 - Automotive Engine Repair (2 Cr.)
	3	ASE 161 - Engine Repair & Rebuild (3 Cr.)
	2	ASE 162 - Automotive Engine Repair (2 Cr.)
	3	ENG 121 - English Composition GT-CO1 OR ENG 131 - Technical Writing GT-CO1
		~Recommended Course(s)~
		ENG 131 - Technical Writing I: GT-CO1* (3 Cr.)
Year 1: Spring	Credits	Course
	2	ASE 123 - Starting and Charging System (2 Cr.)
	2	ASE 170 - Laboratory Experience I (2 Cr.)
	4	ASE 171 - Laboratory Experience II (4 Cr.)
	2	ASE 172 - Laboratory Experience III (2 Cr.)
	4	ASE 221 - Automotive and Diesel Body Electrical (4 Cr.)
	4	MAT 108 - Technical Mathematics or Higher* (4 Cr.)
Year 2: Summer	Credits	Course
	3	COM 115 - Public Speaking OR COM 125 - Interpersonal Communication (3 Cr.)
		~Recommended Communication Course(s)~
		COM 125 - Interpersonal Communication (3 Cr.)
Year 2: Fall	Credits	Course
	2	ASE 141 - Suspension and Steering II (2 Cr.)
	2	ASE 151 - Automotive Manual Transmission/Transaxles & Clutches (2 Cr.)
	2	ASE 152 - Manual Transmission, Transaxles and Clutches II (2 Cr.)
	1	ASE 154 - Manual Transmission/Transaxle Diagnosis and Repair (1 Cr.)
	2	ASE 210 - Automotive Power and ABS Brake Systems (2 Cr.)
	2	ASE 240 - Suspension and Steering III (2 Cr.)
	3	ASE 251 - Automotive Transmission and Transaxle Repair (3 Cr.)
	2	ASE 252 - Advanced Automatic Transmissions/Transaxles (2 Cr.)
	4	PHY 105 - Conceptual Physics with Lab: GT-SC1 (4 Cr.)



Year 2: Spring	Credits	Course
	2	ASE 130 - General Engine Diagnosis (2 Cr.)
	2	ASE 134 - Automotive Fuel and Emissions Systems I (2 Cr.)
	2	ASE 231 - Automotive Computers and Ignition System (2 Cr.)
	4	ASE 233 - Auto Fuel Injection and Emissions Systems II (4 Cr.)
	2	ASE 235 - Driveability & Diagnosis (2 Cr.)
	4	ASE 265 - Heating and Air Conditioning Systems (4 Cr.)
	3	ELT 146 - Digital Devices in Computers (3 Cr.)