



Automotive Technician Program Description

Industry Description

The ability to make a quick and accurate diagnosis is one of the technician's most valuable skills. It requires good reasoning ability, as well as a thorough knowledge of automobiles. The technician may be required to determine serviceability, find specifications and service procedures in manuals and technical literature, repair or replace parts, give estimates of repair, and communicate with customers and trade personnel. Most technicians perform a variety of repairs; however, some will specialize. Areas of specialization may include chassis service, drive train service, engine overhaul, fuel delivery and electrical system service, and air conditioning service. Other related areas may include merchandising, service/sales, and manufacturing representatives.

Wages/Outlook/Advancement

Wage information is available from the Minnesota Department of Education and the [Minnesota Department of Employment and Economic Development](#)

Beginners who learn on the job usually start as trainees or mechanics' helpers. Within a few months, they perform many routine service tasks and make simple repairs. It usually takes two to five years of on-the-job training to become a journey-level mechanic. This means that a mechanic is skilled enough to perform difficult repairs. However, graduates of college training programs are often able to advance to the journey level after only a few months on the job.

With an additional year of training, journey-level mechanics can specialize in a difficult area, such as transmission repair. However, they can specialize in areas that do not require all-around knowledge of auto repair in less time.

Experienced mechanics with leadership ability sometimes advance to shop supervisor or service manager. Those who work well with customers may become service estimators. Some open their own repair shops.

Program Description

The Automotive Technician Associate of Applied Science Degree (AAS) degree program includes technical and general education components. This degree provides the skills for trade entry plus the possibility to pursue a Bachelor of Arts (BA) degree with cooperating colleges and universities.

Students must be 18 years old for the automotive program due to the internship requirements, so that the automotive shop sites can insure you. Students must also possess a current driver's license.

IMPORTANT ACCUPLACER Test Requirement: ACCUPLACER testing in math, reading and writing. Any needed developmental courses must be completed before receiving a diploma or an A.A.S. award.

Length of Program

Automotive Brake & Suspension	Certificate	27 credits
Automotive Technician	AAS	71 credits

Start Dates

Fall Semester: August

Program Contact

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For information on how to apply or to schedule a campus tour please contact the

Admissions Office

Phone (763) 576-4850

E-mail info@anokatech.edu

Automotive Brake & Suspension Certificate

27 Credits

NOTE: AUTO 1000 level courses do not require a prerequisite. AUTO 2000 level courses require AUTO 1010 and AUTO 1166, or instructor approval as a prerequisite, or taken concurrently with other courses.

Technical Education		27 Credits
AUTO1010	General Automotive Service	2
AUTO1166	Vehicle Electronics	3
AUTO2005	Supervised Internship I	2
AUTO2145	Suspension & Steering Service	4
AUTO2155	Brake Systems & Service	5
AUTO2164	Chassis Electrical Systems	3
AUTO2166	Starting & Charging	2
AUTO2183	Fuel & Ignition Management	6

Automotive Technician

Associate of Applied Science Degree 71 Credits

General Education		18 Credits
ENGL1105	Composition I	4
MATH1500	Mathematical Ideas	3
PSYC1505	General Psychology	4
SOSC2000	Sociology of Work	4
SPCH1200	Interpersonal Communications	3

Technical Education		53 Credits
AUTO1010	General Automotive Service	2
AUTO1166	Vehicle Electronics	3
AUTO2005	Supervised Internship I	2
AUTO2006	Supervised Internship II	2
AUTO2007	Supervised Internship III	2
AUTO2113	Engine Repair and Service	5
AUTO2123	Automatic Transmission Condition	5
AUTO2135	Manual Drive Train System and Service	4
AUTO2145	Suspension and Steering System Service	4
AUTO2155	Brake System and Service	5
AUTO2164	Chassis Electrical Systems	3
AUTO2166	Starting and Charging Systems	2
AUTO2175	Automotive Climate Control	4
AUTO2183	Fuel and Ignition Management Systems	6
AUTO2187	Automotive Computer Systems and Drive-ability	4

AUTO1000 level courses do not require a prerequisite. AUTO2000 level courses require AUTO1010 and AUTO1166 or instructor approval as prerequisites or taken concurrently with other courses.

Automotive Program REQUIRED Tool Set 2008 - 2009

- 1/4" Drive Socket Set w/ Ratchet & Extensions- 6 pt. 3/16" to 9/16" Std & Deep
 - 1/4" Drive Sockets- 6 pt. 5.5 to 13mm Std & Deep
 - 3/8" Drive Socket Set- w/ Ratchet & U-Joint- 6 pt. 3/8" to 13/16"
 - 3/8" Drive Extensions- 3", 6", 18", & 24" long
 - 3/8" Drive Sockets- 6 pt. 8 to 19mm
 - 3/8" Drive Deep Sockets- 6 pt. 3/8" to 13/16"
 - 3/8" Drive Deep Sockets- 6 pt. 8 to 19mm
 - 3/8" Drive 1/4" Hex Bit Driver
 - 3/8" Drive 5/16" Hex Bit Driver
 - 3/8" Drive 3/8" Hex Bit Driver
 - 3/8" Drive 8mm Hex Bit Driver
 - 3/8" Drive Internal Torx Driver Set (including T40, T45, T47, T50, T55, & T60)
 - 3/8" Drive External Torx Driver Set (E4 to E12)
 - 3/8" Drive Spark Plug Socket (13/16")
 - 3/8" Drive Spark Plug Socket (5/8")
 - 1/4" to 3/8" Drive Adapter
 - 3/8" to 1/4" Drive Adapter
 - 3/8" to 1/2" Drive Adapter
 - 1/2" to 3/8" Drive Adapter
 - 1/2" Drive Breaker Bar 18"
 - 1/2" Drive Extensions 3" & 6"
 - 1/2" Drive Ratcheting 250 ft. lb. Torque Wrench
 - Combination Wrench Set- 1/4" to 1"
 - Flare Nut Wrench Set- 3/8" to 13/16"
 - Combination Wrench Set- 6 to 19mm
 - Flare Nut Wrench Set- 9 to 21mm
 - Hex Wrench Set- Standard
 - Hex Wrench Set- Metric
 - Side Terminal Battery Wrench- Ratcheting
 - Feeler Gauge- Standard- .0015"-.025"
 - Feeler Gauge- Metric- .05 – 1.0mm
 - Sparkplug Gap Gauge (Wire **AND** Ramp styles)
 - Screwdriver Set (8 piece minimum) Standard & Phillips
 - Torx Screwdriver Set T10 to T30
 - 18-24" Angled Pry Bar with Handle
 - Fender Cover- 2
 - 16 oz. Plastic Tip Hammer
 - 24 oz. Ball Peen Hammer
 - Rubber Mallet
 - Pliers 7-8"
 - Side Cutter Pliers 7-8"
 - Adjustable Arc Joint Pliers 10"
 - Needle Nose Pliers 8"
 - Vise Grip Pliers 8-10"
 - Wire Stripper/Cutter/Crimping Pliers
 - Hacksaw
 - 10" Mill File & Handle
 - Punch and Chisel Set (Pin, Starting & Center)
 - Gasket Scraper
 - Tire Pressure Gauge
 - Tire Air Chuck
 - Torque Limiting Schrader Valve Core Tool
 - Antifreeze Tester
 - Fluorescent or LED Trouble Light
 - Penlight
 - Ignition Spark Tester (*KD2756 style or equivalent*)
 - 2" Inspection Mirror
 - HD Magnetic Pick-up Tool
 - Magnetic Parts Tray
 - 6" Pocket Rule
 - Scribe- Straight & 90°
 - Universal Door Panel Removal Tool
 - Oil Filter Wrench- Small
 - Oil Filter Wrench- Large
 - Brake Star Wheel Adjustment Tool
 - Brake Shoe Spring Tool (*KD280 or equivalent*)
 - Universal Brake Hold Down Spring Tool (*KD2774 or equivalent*)
 - 1/2" Drive Impact Wrench
 - 1/2" Drive 6 pt. Impact Socket Set 7/16" to 1"
 - 1/2" Drive 6 pt. Impact Socket Set 13 to 27mm
 - Blow Gun- OSHA Approved
 - 12 Volt Incandescent Test Light/Circuit Tester (**NO LED style**)
 - Digital Multimeter- Fluke 87 V **ONLY**
ABSOLUTELY NO SUBSTITUTIONS,
including Fluke 88
- Tool Storage Roller Cabinet (MAXIMUM 48" wide)