



Pittsburg State University

Department of

AUTOMOTIVE TECHNOLOGY

Degree: **Associate of Applied Science**

(0-2 degree)

Major: **Automotive Service Technology**

As of Fall 2019

First Year

First Semester

AST 101: Engine Repair	3
AST 102: Brakes	3
AST 122: Auto Mechanics General Laboratory I	5
ENGL 101: English Composition	3

Second Semester

AST 150: Engine Performance I	3
AST 151: Electrical Systems I	3
AST 152: Auto Mechanics General Laboratory II	5
COMM 207: Speech Communication	3

Summer Session

AST 160: Automatic Transmissions	3
AST 163: Manual Drive Train and Transaxle	3
AST 164: Current Topics in Automatic Transmissions	1

Second Year

First Semester

AST 251: Electrical Systems II	3
AST 252: Auto Mechanics General Laboratory III	5
AST 260: Engine Performance II	3
Elective Course	2-4

Second Semester

AST 255: Automotive Heating and Air Conditioning	3
AST 256: Suspension and Steering	3
AST 257: Auto Mechanics General Laboratory IV	5
or AST 299: Automotive Service Coop Internship	6
PSYCH 155: General Psychology	3
or POLS 101: U.S. Politics	3
or PHIL 208: Logic	3
Elective course	2-4

Technical Courses

AST 101: Engine Repair	3
AST 102: Brakes	3
AST 122: Auto Mechanics General Laboratory I	5
AST 150: Engine Performance I	3
AST 151: Electrical Systems I	3
AST 152: Auto Mechanics General Laboratory II	5
AST 160: Automatic Transmissions	3
AST 163: Manual Drive Train and Transaxle	3
AST 164: Current Topics in Automatic Transmissions	1
AST 251: Electrical Systems II	3
AST 252: Auto Mechanics General Laboratory III	5
AST 255: Automotive Heating and Air Conditioning	3
AST 256: Suspension and Steering	3
AST 257: Auto Mechanics General Laboratory IV	5
or AST 299: Automotive Service Coop Internship	6
AST 260: Engine Performance II	3

Pitt Pathways Requirements

Basic Skills	9-12
COMM 207: Speech Communication	3
ENGL 101: English Composition	3
Elective Courses	
PHIL 208: Logic	3
or POLS 101: U.S. Politics	3
or PSYCH 155: General Psychology	3

(Choose two from different departments)

ACCTG 201: Financial Accounting	3
CIS 130: Computer Information Systems	3
ECON 191: Issues in Today's Economy	3
GT 190: Introduction to Technological Systems	2
MATH 110: College Algebra with Review	5
MATH 113: College Algebra	3
MATH 133: Quantitative Reasoning	3
MATH 143: Elementary Statistics	3
MGT 101: Introduction to Business	3
MGT 105: Introduction to Entrepreneurship	3
PHYS 171/172: Physical Science and Laboratory	4

*Only three hours of MATH 110 count toward degree

Total hours required 60-64

NOTE: The information contained herein is intended to be used for the planning of a student's academic program and does not constitute a contract. While this guide was prepared with the latest information, courses, graduation requirements, and curricula are subject to change.

When a student attains 85 semester hours of credit (including current enrollment) the student must apply for a degree check in the Office of the Registrar (Degree Checking Section), Room 102 Russ Hall.

MINIMUM GENERAL REQUIREMENTS: Total Hours for Associate of Applied Science Degree with a Major in Automotive Service Technology (60-64 hours). Minimum GPA for non-education degree is 2.0 overall [2.0 in major], secondary education degree is 2.5 overall [2.75 in major], and early/late childhood/unified degree is 2.80 overall [3.0 in major]. A minimum GPA of 2.0 in any major and in residence coursework is required. General Education and all degree requirements are provided in the online catalog. Refer to individual departments for specific requirements.

PSU Automotive Service Technology Required Tool List

Air Blow Gun (meeting OSHA requirements)
Allen (Wrench or Socket) Set Standard (.050" - 3/8")
Allen (Wrench or Socket) Set Metric (2mm-7mm, 10mm, 12mm)
Battery Post Cleaner
Battery Terminal Pliers
Battery Terminal Puller

Chisels:
Cape 5/16"
Cold 3/8", 3/4"
Chisel Holder
Claw Type Pickup Tool

Combination Wrenches:
Standard (1/4" - 1 1/4")
Metric (7mm-24mm)
Crowfoot Wrench Set (Metric)
Crowfoot Wrench Set (Standard)
Ear Protection
Feeler Gauge
(Blade Type):
.002"-.040"
.006mm-.070mm

Files:
Coarse 6" and 12"
Fine 6" and 12"
Half Round 6" and 12"
Round 6" and 12"
Flare Nut (tubing) Wrenches:
3/8"-3/4"
10mm-17mm
Flashlight
Fuse Puller
Fused Jumper Wire Set (with various adapters)
Hack Saw

Hammers:
16 oz. Ball Peen
Brass Dead Blow Plastic Mallet
Plastic Tip Rubber Mallet
Inspection Mirror Magnetic Pickup Tool

Pliers:
Combination 6"
Hose Clamp
Locking Jaw
Needle Nose 6"
Side Cutting
Slip Joint (Water Pump)

Pry Bars:
Rolling Head
Straight

Punches:
Center
Brass Drift
Pin 1/8", 3/16", 1/4", 5/16"
Taper 3/8", 1/2", 5/8"
Safety Glasses (meeting OSHA requirements)
Scraper:
Carbon 1"
Gasket 1"

Screwdriver - Blade Type:
Stubby
6", 9", 12"
Offset

Screwdriver - Phillips:
Stubby
#1, #2
6" #1, #2
12" #3
Offset #2
Screwdriver - Impact Driver Set

Screw Starter:
Phillips
Standard

Bolt/Screw Extractor Kit

Socket Set - 1/4" Drive:
1/4" - 1/2" Standard Depth
1/4" - 1/2" - Deep
6mm-12mm Standard Depth
6mm-12mm Deep
Flex/Universal Type
3", 6" Extensions
Ratchet

Socket Set - 3/8" Drive:
5/16" 3/8" Standard Depth (6 point)
3/8" - 3/4" Deep (6 point)
10mm-19mm Standard Depth
3", 5", 10" Extensions
Flexhead Ratchet
Ratchet
Spark Plug Sockets 3/8", 13/16"
Speed Handle
Universal Joint
Flexible Socket Set 3/8" - 3/4"
Flexible Socket Set 10mm-19mm
Socket Set - 1/2" Drive:
7/16" - 1 1/8" Standard Depth
7/16" - 1 1/8" Deep
10mm-24mm Standard Depth
10mm-24mm Deep
3", 6", 12" Extensions
Flex Handle (Breaker Bar)
Ratchet Spark Plug (Gap Tool)

Tape Measure - Standard and Metric
Test Light (12V)
Tire Pressure Gauge

Torque Wrench:
3/8" Drive (10-250 lb. in.)
3/8" Drive (5-75 lb. ft.)
1/2" Drive (50-250 lb. ft.)
Torx Set (screwdrivers and/or sockets):
T-8 to T-60

Snap On meter required for meter certification
Dial Indicator w/ Vice Grip
Tool Chest (Must be able to roll and lock)

Suggested but not required on the first day of school:

Logic Probe
Compression Gauge
Vacuum Gauge
Hand Vacuum Pump
Fuel Pressure Gauge
Dial Calipers
1/2 Electric Drill w/ Drill Index
1/2 Air Impact
3/8 Air Impact
3/8 Air Ratchet
Remote hose clamp pliers
Air operated die grinder with 3m pad attachments
Coolant Pressure Tester
Air Operated Chisel w/ tie rod attachment
Magnetic Tool Tray
DVOM Inductive Clamp