



AUTOMOTIVE TECHNOLOGY

Associate of
Applied Science
Degree

LINCOLN AND MILFORD CAMPUSES

www.southeast.edu/Automotive



Skilled auto technicians are in demand! Duties in this field include researching service information using manuals or computer-based programs, using an extensive array of hand tools and diagnostic equipment, writing, speaking, and math skills. Program graduates are employed in dealerships, independent shops, fleet service facilities, and owner/operator shops.

Special program requirements:

Course offerings and prerequisite sequencing will be determined by the program's campus of origination. A grade of C or higher in all AUTT courses is needed to progress through the program.

Automotive Courses:

Course #	Course title	Credit hrs
AUTT1007	Auto Shop Safety & Repair	4.5
AUTT1103	Drive Trains	3.5
AUTT1106	Electrical Concepts	6.0
AUTT1107	HVAC I	4.5
AUTT1108	Automotive Fuel and Control Systems	7.5
AUTT1202	Steering & Suspension Theory	4.0
AUTT1203	Manual Transmission/Transaxle Theory	4.0
AUTT1205	Brake Systems Theory	5.0
AUTT1206	Automotive Electricity	3.5
AUTT1207	HVAC II	2.0
AUTT1212	Steering & Suspension Lab	2.5
AUTT1215	Brake Systems Lab	2.5
AUTT1221	Engine Theory	5.0
AUTT1222	Engine II	10.0
AUTT1306	Automotive Ignition Systems	1.5
AUTT1406	Automotive Electronics I	3.5
AUTT1408	Advanced Engine Performance	9.0
AUTT1506	Automotive Electronics II	4.0
AUTT2102	Automatic Transmission/Transaxle	12.5
AUTT2303	Manual Transmission/Transaxle Lab	4.0
AUTT1200	Informational Systems (M)	1.0
WELD1181	Automotive, ASE, ASSET, & CAP Welding (M) or	1.5
AUTT1712	Introduction to Hybrid Vehicles (L)	1.5
WELD1176	Automotive & Motorcycle Welding (L)	2.5

101.5-103.0 hours

Optional:

TRUK1101	CDL-Class A Training	3.5
AUTT1011	Introduction to Automotive Technology	3.0

General Education Requirements:

Contact your program advisor to select general education courses from each category which will meet your program's graduation requirements. See the General Education pages online for a complete list. (One class from each area below).

Oral Communications	4.5
Written Communications	4.5
Science	
PHYS1150 Descriptive Physics	6.0
(Two classes from the four areas below; no two classes from the same area).	
Mathematics, Social Science, Humanities, and/or Computer Technology	9.0
	24.0 hours
Advisor Approved Elective	4.5
	28.5 hours

Students are required to provide or purchase a basic tool set during the first quarter. A required tool list and more information is available. Students also are required to wear program shirts while in class or laboratory settings. Shirts are available for purchase through the SCC Bookstore.

All instructors in this area are ASE certified in the areas they teach.



For more information contact:

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or the College Admissions Office
Lincoln 402-437-2600, 800-642-4075 ext. 2600
Milford 402-761-8243, 800-933-7223 ext. 8243

Graduate Earnings

Recent graduates report an average starting wage of \$14.50 per hour.

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PROGRAM MISSION STATEMENT: The mission of the Automotive Technology program is to prepare individuals for employment as high quality entry-level technicians in the automotive repair field.



Estimated Expenses

This program requires 130 –131.5 quarter credits to graduate. The program is delivered over six (6) quarters. Quarterly tuition, books, fees and tools will vary depending on the number of classes taken. The following is an overall estimate for the program.

Tuition And Fees	\$1,386
Books	210
Tools*	975
Supplies**	50
Average Cost per Quarter	\$2,621
Total Estimate For Program	\$15,726

* A tool set is required for successful completion of the program. Tools may be purchased from a vendor of the individual's choosing. Vendors are available on each campus and offer students a discount. The discounts are determined by each vendor. The college does not recommend nor endorse any specific brand of tools.

The student should give careful consideration when selecting tools he/she will use in his career. The cost of tools will vary depending on which vendor is selected.

As each quarter has different requirements for tools, some quarters will exceed the average listed above and some quarters will be below the listed average.

The maximum amount for tools should not exceed \$5,900.

** Supplies are determined by each term and are typically available through the campus bookstore or the parts store.

Students are required to wear program uniform shirts while in class or lab.

To determine exact quarterly costs, students should work with their respective advisor. They should also plan a budget that includes expenses required beyond the above listed school related expenses. For those students who are registering for classes on the Milford campus and request student housing, they should contact student services for prices and availability.

To determine overall costs, students should plan a budget that includes the above expenses as well as room, meals, clothing, laundry, medical care, recreation and entertainment, transportation, insurance, etc.

Nebraska Resident tuition rate is \$61.50 per credit hour. Out-of-state tuition rate is \$75.50 per credit hour.

Student fee is \$1.50 per credit hour. Graduation fee is \$25.

Housing is available at Beatrice and Milford campuses only.

Basic Tools for Automotive Technology Program

Wrenches

- 1/4 - 1 ¼" standard combination 12 pt.
- 6- 19mm standard combination 12 pt.
- Adjustable- 12"
- Flare Set (7) 3/8-7/16, 1/2-9/16, 5/8-11/16, 9-11mm, 10-12mm, 13-14mm, 15-17mm
- 1/4 - 1 ¼ combination stubby set
- 6-19 combination stubby set

1/4 Drive

- 3/16- 9/16 standard 6pt. and deep 6pt.
- 5-14mm standard 6 pt. and deep 6 pt.
- Extensions (3) 2", 4", 6" or equiv
- Ratchet
- U-joint
- Drive handle
- 1/4 Breaker bar
- 3/16- 9/16 standard 12 pt
- 5-14mm standard 12 pt

3/8 Drive

- 5/16- 13/16 standard 6 pt. and deep 6 pt.
- 6-19mm standard 6 pt. and deep 6pt.
- 3/8-3/4 Deep impact
- 10-19mm Deep impact
- Spark plug 5/8 and 13/16
- 3/8-3/4 flex impact
- 10-19mm flex impact
- Extensions (4) 1"-12" (1) 24"
- Speed handle
- Allen socket sets (2) 1/4-3/8, 4-10mm
- Torx T10-T60
- Torx E6-E16
- Standard ratchet, Flex head ratchet
- 3/8 Air ratchet
- 3/8 Air impact
- U-joint
- Adapters (4) 1/4-3/8, 3/8-1/4, 3/8-1/2, 1/2-3/8

1/2 Drive

- 3/8- 1 ¼ standard 12 pt.
- 10mm-24mm standard 12 pt.
- 3/8- 1 ¼ deep impact 6 pt.
- 10mm-24mm deep impact 6 pt.
- 3/8- 1 ¼ 12 pt deep chrome
- 10-24mm 12 pt deep chrome
- Standard ratchet
- Breaker bar 15" min
- Extensions (3) 3", 5", 10" or equiv.
- 1/2" Air impact

Screwdrivers

- Standard (5) 1/8", 3/16", 1/4", 5/16", 3/8"
- Phillips (3) 1, 2, 3
- 1 set Torx Screwdrivers (TX10-TX30)

Pliers

- Combination 6" slip joint
- Diagonal cut 7"
- Needle nose 6"
- Wire crimper/cutter/stripper
- Vise-Grip (3) 5" curved, 10" curved, 6" long nose
- Battery
- Snap ring INT/EXT set .038-.070"
- Spark plug boot
- Slip Joint 10" min.
- Lock ring pliers
- Hose crimper pliers
- Needle nose long set (3)

Hammers

- Ball peen (2) 16oz., 32oz.
- Dead blow 20oz.
- Brass 16oz. min.
- Rubber mallet

Punches/Chisels/Files/Saw

- 12" Hacksaw w/blades
- Chisels (3) 3/8, 1/2, 5/8
- Punches (3) 3/32, 5/32, 1/4
- Center punch
- Brass drift 6" min.
- Half round nose cape chisel
- Files (3) 10" flat, 8" round, 6" Tri
- File card
- File handle

Electrical

- Fluke 88 Multi-meter
- 12v Test light
- **Lead sets
- Battery Terminal cleaner
- Spark Tester

Brakes

- Brake adjusting tool
- Hold-down Spring (2) large and small
- Brake spring tool

Measuring Instruments

- Feeler gauges (2) Straight and angled 15-.025 w/metric equiv
- Dial indicator w/clamp on base, 1" travel
- Spark plug gapper .040-.080" – wire type
- 6" steel ruler w/ std and metric
- Thread pitch gauge std & metric
- 3/8 Torque wrench 5-75 ft/lb or equiv.
- 1/2 Torque wrench 40-250 ft/lb or equiv.
- 0-6" caliper

Miscellaneous

- Allen wrenches (2sets) .050-3/8 & 4-12mm
- Stethoscope
- 12' Tape measure
- Roll bar 16" roll head
- Fender covers (1set)
- Safety glasses (min. Z87 rated)
- Ear protection
- Gasket scraper
- Pickset (4 piece)
- Magnetic pick up tool (telescoping)
- Inspection mirror
- Vacuum plug set
- Tire gauge
- Valve core tool
- Rubber tip air nozzle
- Air chuck
- A/C Thermometer
- Uniforms (3-5 min.)
- Hand held vacuum pump
- Wire brush
- Scribe
- Lip seal installer
- Pen/Mini-Mag light w/ batteries
- A/C manifold gauge set R134a
- Freon Can tap
- Nut driver sets (2) 5-13mm & 3/16-1/2
- Trim panel remover set
- Impact driver set
- Pair of welding gloves
- Helmet (Arc)
- Headgear (Jackson w/#5 green lens or equiv)
- Calculator
- Oil filter wrenches (2) large and small

Tool Storage

- 42" Roll-Away max.
- Hand carry tool box w/ padlock (max 9"W x12"H x 20"L)
- 42" Top Box"

