



AUTOMOTIVE TECHNOLOGY

Associate of
Applied Science
Degree

www.southeast.edu/Automotive

LINCOLN AND MILFORD CAMPUSES



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	5.0
AUTT1107	HVAC I	4.0
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	3.0
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	2.5
AUTT1408	Advanced Engine Performance	7.0
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, ASE, ASE, & CAP Welding (M)	1.5
	or	
AUTT1712	Introduction to Hybrid Veh. (L)	1.5
WELD1176	Automotive & Motorcycle Welding (L)	2.5
		96.5-98.0 hours

Optional:

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

General Education Requirements:

(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 from the program chair. Students also are required to wear program shirts while in class or laboratory settings. Shirts are available for purchase through the SCC Campus Store.

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
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Milford 402-761-8243, 800-933-7223 ext. 8243

Graduate Earnings

Recent graduates report an average starting wage of \$14.40 per hour.

Equal Opportunity/NonDiscrimination Policy - It is the policy of Southeast Community College to provide equal opportunity and nondiscrimination in all admission, attendance, and employment matters to all persons without regard to race, color, religion, sex, age, marital status, national origin, ethnicity, veteran status, sexual orientation, disability, or other factors prohibited by law or College policy. Inquiries concerning the application of Southeast Community College's policies on equal opportunity and nondiscrimination should be directed to the Vice President for Access/Equity/Diversity, SCC Area Office, 301 S. 68th Street Place, Lincoln, NE 68510, 402-323-3412, FAX 402-323-3420, or jsoto@southeast.edu. This publication should not be considered a contract between SCC and any prospective student. SCC's Board of Governors reserves the right to make changes in this publication during the life of the publication and without notice. A0706 - AUTO (04/17)

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 125-128 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	\$1,440
Books	210
Tools*	975
Supplies**	50
Average Cost per Quarter	\$2,675
Total Estimate For Program	\$16,050

* 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 \$65.50 per credit hour. Out-of-state tuition rate is \$79.50 per credit hour.

Student fee is \$2 per credit hour. Graduation fee is \$25.

Housing is available at Beatrice and Milford campuses only.

AUTOMOTIVE APPROVED TOOL LIST

The following tool list includes the basic tools a student will be required to have to successfully complete the Automotive Technology program. The student should discuss with their advisor the timeline for purchasing specific tools and suggested optional tools.

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 their career.

TOOL STORAGE

- 42" Roll-Away (maximum size)
- *Hand carry tool box w/padlock (max 9"W x 12"H x 20"L)

WRENCHES

- ¼"- 1 ¼" standard combination 12 pt.
- 6mm - 19mm standard combination 12 pt.
- Adjustable wrench - 12"
- Flare Wrench Set 3/8-11/16 & 9mm - 18mm

1/4 DRIVE

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

3/8 DRIVE

- 5/16- 13/16 standard 6 pt. and deep 6 pt.
- 6-19mm standard 6 pt. and deep 6pt.
- Spark plug 5/8 and 13/16
- Extensions (4) 1"-12"
- Torx T10-T60
- Flex head ratchet
- 3/8" Air ratchet
- 3/8"- ¾" flex impact
- 10mm -19mm flex impact
- Universal joint
- 3/8" drive extension - 36"
- 3/8 Torque wrench 15-100 ft/lb or equivalent

1/2 DRIVE

- 3/8' - 1 ¼" standard 12 pt.
- 10mm -24mm standard 12 pt.
- 7/16"- 1 ¼" deep impact 6 pt.
- 10 mm-24mm deep impact 6 pt.
- Ratchet (15" Long)
- Breaker bar 15" - 24"min
- Extensions (3) 3", 5", 10" or equiv
- ½" Air impact
- ½" Torque wrench 40 - 250 ft/lb
- **30, 32, 34 & 36mm deep impact sockets

SCREWDRIVERS

- Standard (5) 1/8", 3/16", ¼", 5/16", 3/8"
- Phillips (3) 1, 2, 3
- Pocket screwdriver
- 1 set Torx Screwdrivers (TX10-TX30)

PLIERS

- Combination 6" slip-joint combination
- Diagonal cut 7"
- Needle nose 6"
- Wire crimper/cutter/stripper
- Vise-Grip (3) 5" curved, 10" curved, 6" long nose
- Battery pliers
- Fixed tip Snap ring convertible pliers 6"& 8" straight tip (.038", .045" & .070"
- Lock ring pliers
- Spark plug boot
- Adjustable Joint 10" (min.)

HAMMERS

- Ball peen (2) 16oz, 32oz
- Dead Blow (24oz. to 26oz.)

PUNCHES/CHISELS/FILES/SAW

- 12" Hacksaw w/blades
- Punches & Chisels set (minimum 12 piece - including center punch)
- Brass drift 6" minimum
- Half round nose cape chisel
- Files (3) 10" flat, 8"round, 6"Tri
- File card
- File handles

ELECTRICAL

- Fluke 87 or 88 Multi-meter (NO EXCEPTIONS)
- 12v Test light
- Battery Terminal cleaner
- Adjustable Spark Tester
- Wire Terminal Tool - (for Computer Control Terminal)
- Test lead project kit (Available at SCC Parts Department)

BRAKES

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

MEASURING INSTRUMENTS

- Feeler gauges (2) Straight and angled .0015-.025 w/metric equivalent
- *Dial indicator w/clamp on base, 1" travel
- 6" steel ruler w/ std. and metric
- Thread pitch gauge std. & metric
- 0-6" caliper

MISCELLANEOUS

- Safety glasses (min. Z87 rated)
- Program Uniforms shirts (3-5 min.) Available at SCC Bookstore
- Ear protection
- Calculator
- Fender covers (1set)
- Adapters (4) ¼-3/8, 3/8-1/4, 3/8-1/2, ½-3/8
- Stethoscope
- 12' Tape measure
- 16" Rolling head bar
- Pry bar set (12" & 24" min)
- Gasket scraper
- Pick set (4 piece)
- Magnetic pick up tool (telescoping)
- Inspection mirror
- Wire brush - 10" minimum
- Pen/Mini-Mag light w/batteries
- Oil filter Pliers (Slip Joint)
- Air chuck
- Tire gauge
- **Antifreeze Tester
- Spark plug gapper .040-.080" -wire type
- Valve core tool
- Rubber tip air nozzle
- A/C Thermometer
- Vacuum plug set
- ** Lip seal installer
- Pair welding gloves
- Hand held vacuum pump
- Basic A/C & Fuel line disconnect tools
- Allen wrenches (2sets) .050" -3/8" & 4mm -12mm
- *A/C manifold gauge set R134a
- *Freon Can tap

*Required on Milford Campus only

** Required on Lincoln Campus only

