As a diesel technician, you are entering a career path that can take you anywhere! You will train to properly and efficiently repair diesel agricultural and off-highway equipment in one of the finest facilities in the region: the Crete Carrier Diesel Technology & Welding Center.

Southeast Community College uses a bumper-to-bumper approach, ensuring that graduates are knowledgeable about each major system, including engines, hydraulics, HVAC, electrical and drivetrains.

Diesel technicians rely heavily on technology and tools to inspect, diagnose and repair all aspects of off-highway equipment, including agricultural and construction equipment.

In the summer, you will be placed into an approved industry site to take a 5-credit hour Cooperative Experience course. You will receive valuable experience on customer projects and work directly with a mentor technician. You will receive a wage for the minimum 300 on-the-job work hours and many students work at their job site throughout the summer.

**SCC is the Right Choice**

- Students spend approximately 75% of their time in the lab and 25% in a classroom setting.
- Students who make a commitment to master fundamental technical skills, interpersonal relationships and a solid work ethic have tremendous opportunities in the agriculture diesel service and repair industry.
- Our graduates also find employment in construction equipment service, power generation, railways, aerospace, and manufacturing.

**New! State-of-the-art facilities include:**

- Contamination control measures for machinery and technicians, including a large wash bay, floor scrubber and used fluid/filter recycling
- New hydraulic and engine oil dispensed through a closed system
- Combined classroom/lab spaces for component studies
- Large-screen interactive media stations displayed in lab spaces for in-house or worldwide connectivity with training resources
- State-of-the-art welding center

**Career Options**

- Ag Equipment Technician
- Construction Equipment Technician

Recent Graduates

report a yearly average starting salary of $39,728

The Diesel-Ag Equipment Service Tech program utilizes industry-sponsored equipment, tools and resources that are typically in modern dealerships.

You can choose to specialize in electrical/electronic systems, precision farming, HVAC, harvesting, planting, hydraulics, power trains or engine/fuel systems. Many students choose to be masters of all agricultural equipment systems to personally handle any customer concern.

**Credit hours required for graduation:**

- Diesel-Ag Equipment Service Tech
  - Associate of Applied Science
  - Lift Truck Operator certification (optional)
  - A/C Refrigerant Handling certification (required)

**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, 351 S. 88th 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.

2021-2022 estimated expenses to graduate with an award of 70 credit hours.

**Resident**

- Tuition/fee rate per credit hour: $114
- Resident tuition/fees: $7,980
- Books: $2,245
- Supplies: $407
- Special fees: $33
- Tools: $8,500
- Uniform: $750
- Total: $19,317

**Non-Resident**

- Tuition/fee rate per credit hour: $135
- Non-resident tuition/fees: $9,450

For more information contact:

Karl Eickhoff, Program Director
402-761-8309
KEickhoff@southeast.edu

or the Admissions Office at
402-437-2600
admissions@southeast.edu

SCC receives requests for skilled diesel technicians almost daily!
# Diesel-Ag Equipment Service Technology Program - Required Basic Tool List

Students are required to use safety-toe boots or shoes during all lab activities and while participating in Cooperative Education/Internship.

## PPE (PERSONAL PROTECTIVE EQUIPMENT)
- **1** Safety Eyewear (Z-87 Approved)
- **1** Hearing Protection (Ear muffs of ear canal plugs)
- **1** Pair Safety Toe Boots or Shoes

## SUPPLIES:
- *Calculator (4-function), Padlock for tool box, Arc Welding Gloves, and Electrical Test Kit (#80265115) in the Campus Store.

## WELDING SUPPLIES
- (needed the first week of first semester.)
- [Burn Jacket or Welding Leathers](mailto:burnjacket@milfordcampus.com)
- Safety Glasses with side shields
- Gauntlet-style welding gloves
- Auto darkening welding helmet with either "Grind Mode" or a BS shade for Oxy Acetylene work as well as a #10 shade for SMAW and GMAW welding
- Welpers or Mig welding pliers (must be able to cut .035" welding wire)
- Ear Plugs (3 Pair)
- Welding Beanie (optional but beneficial)
- Chipping Hammer and Wire Brush (only required for WELD 1191 Not WELD 1190)
- [Leather Boots](mailto:leatherboots@milfordcampus.com)
- [Denim Jeans or Overalls (No holes or tears in them)](mailto:denimjeans@milfordcampus.com)

## TOOL CART
- 1 Tool Cart - lockable (max. size: 30” wide x 18” deep x 40” tall)

## ELECTRICAL TOOLS
- *1 Fluke Model 87 Digital Multimeter (NO SUBSTITUTE)
- 1 Electrical Pliers, Wire Crimper/Cutter/Stripper
- 1 Wire Type Spark Plug Gage –Standard Ignition
- 1 Wire Type Spark Plug Gage –Electronic Ignition
- 1 Electrical Test Lead Kit
- 1 Jumper Kit #80265115
- 1 Penlight

## HAMMERS
- 1 Short Handle Machine Hammer – 4 or 5 lb.
- 1 lb. Ball Peen Hammer
- Compothane “Dead Blow” Hammer, 2 or 3 lb.

## PRYING TOOLS
- 1 Combination Pliers
- 1 6” Needle Nose Pliers
- 1 7” Diagonal Pliers
- 1 Water Pump or Channel Lock Pliers (12” minimum)
- 1 4” Vise Grip Pliers w/Cutter
- 1 6” Vise Grip Longnose Pliers
- 1 10” Vise Grip Pliers w/cutter
- Flat-Nose Snap Ring Pliers - narrow tip
- Flat-Nose Snap Ring Pliers - wide tip

## PUNCHES / CHISELS
- 1 1/2” Flat Tip Screwdriver
- 1 2 7/8” Flat Tip Screwdriver
- 1 4” Flat Tip Screwdriver
- 1 6” Flat Tip Screwdriver
- 1 No. 1 Phillips Screwdriver
- 1 No. 2 Phillips Screwdriver
- 1 No. 3 Phillips Screwdriver
- 1 No. 4 Phillips Screwdriver
- Screwdriver, Flat Tip, Pocket, .025” tip, 3/4” Long (Snap-On® SD2240 or equivalent)

## SOCKET WRENCHES
- 1 1/4” Drive Socket Wrench Set (1/4” to 1/2”) – 6 Point, including Ratchet, Short Extension & Drive Handle & Universal Joint
- 1 3/8” Drive Socket Set (3/8” to 7/8”) – 12 POINT, INCLUDES Ratchet, 3” & 5” Extensions, Flex Handle, Speed Handle and Universal Joint
- 1 3/8” to 1/4” Adapter
- 1 1/4” to 3/8” Adapter
- 1 3/8” to 1/2” Adapter
- 1/2” to 3/8” Adapter
- 1/2” Drive Socket Set (3/8” to 1 1/4” - 12 point, including Ratchet, 3” & 6” Extensions, Flex Handle, Speed Handle and Universal Joint
- 1 1/2” Drive Deep Well Sockets, 3/8” to 7/8”, 12 point
- 1 3/8” Drive Universal Socket Set, Shallow 6-point, 1/4” to 3/4”
- 1 3/8” Drive Socket Set, Deep, 6-point, 1/4” to 7/8”
- 1 1/4” Drive Metric 6-point Socket Set (12mm)

## MEASURING
- 1 0 to 1” Micrometer (Non-Digital)
- 1 .0005” - .030” Feeler Gauge Set
- 1 Dial Indicator w/Magnetic Base (1” Travel Indicator)
- 1 English Thread Pitch Gauge
- 1 Metric Thread Pitch Gauge
- 1 200-200 In. Lbs. 1/4” Drive Torque Wrench
- 1 6” Steel Rule
- 1 Scribe
- 1 - Screw Sizer
- 1 1/2” Drive Impact Swivel Wrench (100psi capacity)

## SCREWDRIVER
- 1 2 7/8” Flat Tip Screwdriver
- 1 3/8” Drive Torque Wrench (Ft.lbs. to 150 lbs.)
- 1 1/2” Torque Wrench (150 ft. lb. minimum)
- 1 3/8” Drive 3/4” Flux Nut Socket – Snap-On®
- Snap-On® FXXM241
- 1 3/8” Drive 17mm Flux Nut Socket – Snap-On® FXXM17
- 1 3/8” Drive Metric Socket Set (8mm to 19mm)
- 1 1/2” Drive Metric Socket Set (10mm to 27mm) + 30mm & 32mm
- 1 1/4” & 3/8” Drive Torx Drivers (T-8 to T-55)
- (Snap-On® 212EFTXY or equivalent)
- 1 1/2” Drive 19mm Deep Socket-12 point
- 1 Allen Head Socket Set (English) (3/8” Drive)
- 1 Allen Head Socket Set (Metric) (3/8” Drive)
- 1 3/8” Drive Metric Deep Socket Set (10mm to 20mm)
- Cotter Pin/Seal Puller (Snap-On® #55904B or equivalent)
- Cotter Pin/Seal Puller (Snap-On® #55904B or equivalent)
- 1 1/2” Drive Impact Swivel Wrench (100psi capacity)
- 1 Bushing Driver Set (Snap-On® #A157C or equivalent)
- 1 Slide Hammer (Snap-On® #A1C250 or equivalent)
- 1 Air-Conditioning R-134A Gauge/Manifold/Hose set
- 1 Creeper
- 1 3/8” Drive Impact Swivel Wrench (3/8” to 9/16”)

## 1st Semester

### HAND WRENCHES
- 1 Allen Wrench Set-English
- 1 Metric Allen Wrench Set
- 1 Ignition Wrench Set (3/8” - 3/8” range)
- 1 Combination Wrenches (3/8” to 1 1/4”)

### SOCKET WRENCHES
- 1 1/4” Drive Socket Wrench Set (1/4” to 1/2”)
- 1 3/8” Drive Socket Wrench Set (1/4” to 1/2”) – 12 POINT, INCLUDES Ratchet, 3” & 5” Extensions, Flex Handle, Speed Handle and Universal Joint
- 1 3/8” to 1/4” Adapter
- 1 1/4” to 3/8” Adapter
- 1 3/8” to 1/2” Adapter
- 1/2” to 3/8” Adapter
- 1/2” Drive Socket Set (3/8” to 1 1/4” - 12 point, including Ratchet, 3” & 6” Extensions, Flex Handle, Speed Handle and Universal Joint
- 1 1/2” Drive Deep Well Sockets, 3/8” to 7/8”, 12 point
- 1 3/8” Drive Universal Socket Set, Shallow 6-point, 1/4” to 3/4”
- 1 3/8” Drive Socket Set, Deep, 6-point, 1/4” to 7/8”
- 1 1/4” Drive Metric 6-point Socket Set (12mm)

## 2nd Semester

### TOOL BOX
- 1 Roll-A-Way Tool Box (Top Chest Optional)
- **Maximum 55” long -- 55” includes hang/add on boxes**
- 1 Dial Indicator w/Magnetic Base (1” Travel Indicator)
- 1 English Thread Pitch Gauge
- 1 Metric Thread Pitch Gauge
- 1 1/2” Drive Deep Well Sockets, 3/8” to 7/8”, 12 point
- 1 3/8” Drive Universal Socket Set, Shallow 6-point, 1/4” to 3/4”
- 1 3/8” Drive Socket Set, Deep, 6-point, 1/4” to 7/8”
- 1 1/4” Drive Metric 6-point Socket Set (12mm)

### PUNCHES/CHISELS/PRYBARS
- 1 6 Point Flare Nut Wrench (1/4” to 9/16”)
- 1 6 Point Flare Nut Wrench (3/8” to 7/16”)
- 1 6 Point Flare Nut Wrench (1/2” to 9/16”)
- 1 6 Point Flare Nut Wrench 5/8” - 3/4”
- 1 Metric Combination Wrench Set (8mm to 32mm)

### PLIERS
- 1 Set of 4 Internal/External Snap Ring Pliers. Tip Diameters: .038, .047, .070, .090

### MEASURING
- 1 Internal Micrometer (Non-Digital)

### TOOL REQUIREMENTS FOR 3RD & 4TH SEMESTERS ARE THE SAME AS THOSE REQUIRED FOR 1ST & 2ND SEMESTERS. THE FOLLOWING TOOLS ARE OPTIONAL:
- 1 3/8” Air Ratchet
- 1 3/8” Air Impact Wrench
- 1 3/8” Impact Socket Set (3/8” to 7/8”)
- 1 1/2” Air Impact Wrench
- 1 1/2” Impact Deep Socket Set (1/2” to 1 1/2”)
- 1 1/2” Impact Deep Socket Set (3/8” to 1 1/4”)
- 1 Angle Head Open End Wrench Set (3/8” to 1 1/4”)
- 1 Metric Angle Head Open End Wrench Set (10mm to 19mm)
- 1 3/8” Drive Crowdfoot Open End Wrench Set (3/8” to 1 1/2”)
- 1 3/8” Drive Metric Deep Socket Set (6mm to 19mm)
- 1 1/2” Drive Metric Deep Socket Set (10mm to 20mm)
- 1 Air Hammer Set, Medium Duty (Snap-On® #PHG2045CH4 or equivalent)

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* May be purchased at the SCC Milford Campus Store. ** May be purchased at the Milford Campus Parts Store. *** Must be purchased off campus.