

# STUDENT HANDBOOK

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*Southeastern Illinois College*

# **Diesel/PowerSports Technology**

Southeastern Illinois College

# Diesel/Powersports Technology

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## CODE OF ETHICS

THESE ARE DERIVED FROM STS, SERVICE  
TECHNICIANS SOCIETY, STANDARDS

### **I will**

Work to advance my skills and education in order to provide the highest quality service.

Service the public need for environmentally responsible, safe, and efficient mobility systems.

Foster communication and cooperation among service technicians and professionals.

Demonstrate professionalism and excellence in everything I do.

Be truthful in all communication.

Continually deliver high levels of customer service.

Treat all people with respect and dignity.

Encourage high ethics and performance in my industry.

Support the mission of sts.

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# *Diesel/Powersports Technology*

## **PROGRAM OBJECTIVES:**

To train individuals to have the technical knowledge, mechanical skills, and proper attitudes required to service, repair, and test various types of machinery, depending on the students' particular employment goals.

## **PROGRAM DESCRIPTION:**

Both theory and hands on applications are included in the curriculum. In addition to the mechanical phases of instruction, the program provides background and related courses designed to help the student learn their craft, get a job, and progress in their field.

Major aspects of mechanical work studied include engine repair, air and hydraulic brakes, transmissions, clutches, drive lines, differentials, axles, fuel and electrical systems, fuel injection, computerized engine controls, tune-up work, charging and starting systems, suspension systems, steering, and hydraulics.

Required general education courses for AAS degree are mathematics, rhetoric and composition, human relations/psychology, employability skills, customer service, science/health, business and professional communications.

The Diesel and Powersports Program are conducted as close as possible to a shop situation which includes the student's ability to deal with job/trade requirements and the ability to work well with other employees and customers.

## **PROGRAM GOALS:**

The goal of the Diesel/Powersports Technology program is to prepare individuals for careers as Diesel/Powersports and Heavy Equipment mechanics and occupations related to the field. Upon satisfactory completion, the student will meet the entry-level performance requirements including:

1. Demonstrate an understanding of the construction, function, and demonstrate general service of major vehicle and equipment components.
2. Diagnose mechanical malfunctions and performance problems. Demonstrate repair step scenarios.
3. Make good decisions as to disposition of worn parts (i.e., "usable as is", "should be reconditioned or replaced", etc.).
4. Operate precision diagnostic tools and demonstrate use and repair on vehicles and equipment.
5. Demonstrate the use of repair manuals, Read and interpret both electronic and paper form.
6. Demonstrate the importance of good public relations with customers, employer, and fellow employees.
7. Understand and demonstrate basic shop operations.
8. Demonstrate knowledge of overhead and labor cost in relationship to profit, including shop cost saving ideas.
9. Display professionalism on the job.
10. Demonstrate the use of web base job search engines and other methods of seeking employment.

## **TUITION:**

For current tuition and other registration fees refer to the current college catalog or visit the college web site at [www.sic.edu](http://www.sic.edu)

## **PROGRAM REQUIREMENTS:**

### **Length of program:**

The Diesel Technology Program consists of four semesters, running fall and spring for two years. On the job work experience/internship during the summer between first and second year.

The Powersports program consist of two semesters with practicum in second semester.

### **Class hours:**

Class hours vary by academic semester. Check the current schedule or ask the instructor.

### **Attendance:**

See attendance policy on page 14 of student handbook.

**TIME CLOCK SYSTEM:**

Students are responsible for recording hours using the time clock system. Students are required to clock in for class each day and clock out after their last class of each day.

**GRADING:**

Student grades will be computed at the completion of each semester. The six areas listed below are evaluated for developing your grade for each class. Regular attendance, overall class behavior, attitude, attentiveness, class participation and discussion are an integral part of acceptable achievement and performance.

The instructor reserves the right to modify the course requirements, assignments, grading procedures, and other related policies as deemed necessary and appropriate by the instructor.

**DIESEL/POWERSPORTS CLASS ROOM THEORY:**

Unit test scores  
Class room participation  
Notebook

**QUALITY OF WORK LAB AND THEORY:**

Accuracy                      Job completeness  
Efficiency                     Mechanical ability  
Comprehension              Customer acceptability

**WORK HABITS LABS:**

Planning                      Interest  
Organization                Ambition  
Routine Initiative  
Promptness                 Housekeeping  
Improved Speed             Neatness

**CARE OF TOOLS LABS:**

Completeness of basic tool set  
Orderliness of toolbox  
Willingness to maintain tools  
Use of protective equipment/safety glasses/safety rules

**\*ATTITUDE\***

Student's priority level of Eagerness/  
Desire/ Interest to learn and achieve.  
Appearance                Personality  
Language                    Behavior  
Willingness to work with others.

**ATTENDANCE:**

See policy

**TESTING:**

Unit tests will be given on reading assignments and lectures. All students must be present on the day the test is given. *No makeup tests will be allowed; a student missing the test will receive no credit. As a result the overall grade will be affected.* Students will be advised of areas where improvements are needed throughout the quarter. All written work will be graded on a percentage of correct answers as follows:

	<b>OUTSTANDING ACHIEVEMENT:</b>	
A	100-93	4.0
A-	92-90	3.7
	<b>HIGH ACHIEVEMENT:</b>	
B+	89-88	3.3
B	87-84	3.0
B-	83-80	2.7
	<b>AVERAGE ACHIEVEMENT:</b>	
C+	79-77	2.3
C	76-73	2.0
	<b>BELOW 2.0 GPA</b>	
C-	72-70	1.7
D+	69-67	1.3
D	66-60	1.0
F	<60	0.0

**NATEF COMPETENCY EVALUATION:**

Each unit is designed with the intent that the student will master specific tasks which will be required to perform on the job. These are designated as unit performance objective(s). Each performance objective is broken down into the steps that enable the student to perform the task. The student will self-grade each competency scale located in the NATEF competency book based on the appropriate criteria, using the following scale:

- “0” – No Exposure; no information or practice    “1” – Exposure Only; general information    “2” – Limited Practice; has practiced job  
 “3” – Moderately Skilled; has performed job    “4” – Skilled; can perform job

At the end of the unit, rating scores will be averaged together to for one score for the unit between 0 and 4. Each unit score is worth a percentage of the final grade.

**COMPENTENCY BOOK/PORTFOLIO**

You will be required to maintain a competency-tracking book throughout the two-year program. The book will be a record of competency mastery as practiced in the lab. All vehicles that you work on will require a record of tasks completed and annotated in your competency book and a work order prepared for documentation of training received. The student will be allowed to insert anything to document training and material used as an employer portfolio tool in your book. This includes things such as resumes, pictures of the student working in the lab, research papers, reports, and other documents that would be of interest by an employer when making a decision to employ one of our graduates. When you graduate, a copy of tasks completed will be kept by the Diesel/Powersports Technology department. You will be given your original copy to take with you as an employment tool so it is in your best interest to maintain a neat professional appearing book.

**METHODS OF INSTRUCTION:**

The Diesel/Powersports Technology Program’s utilizes two basic types of instruction:

**Lecture/Lab:** Lectures, demonstrations, films, and other training aids are used in the classroom phases of instruction. Labs are designed to provide experience in areas that are required competencies for the course.

**Live Shop Work:** Shop work is performed on lab training units or customer vehicles that are brought into the shop for repairs. The student will use accumulated skills to complete these projects.

### **TEXT BOOKS AND NOTES/HANDOUTS:**

The college bookstore has the complete list of the required textbooks pertaining to all the classes in which the student is currently enrolled. *These text books are required and the instructor will check to make sure all students have them. Students are required to purchase their own textbooks. Students will also need to purchase the "Notes/Handout" packet from the Bookstore for appropriate classes. Instructors have the option to change or adopt new textbooks as they see needed.*

### **STUDENT HAND TOOLS**

The student must furnish his/her own basic hand tools. A locking toolbox and an adequate set of tools will cost approximately **\$2500. These can be purchased in the SIC bookstore.** We feel having a complete set of tools upon graduation will assist you in being prepared as an entry-level technician when you seek employment. To assist you in the purchase of your tools, tool vendors like Snap-On industrial offer our students up to 49% discounts while attending our programs.

### **FACILITIES AND EQUIPMENT:**

Testing equipment, specialized tools and power tools are provided by the school. Students must furnish his or her basic hand tools.

### **REQUIREMENTS FOR ADMISSION:**

Students enrolling in the Diesel/Powersports Technology program must have a High School diploma or the equivalent.

Each applicant, is required to take a placement and mechanical aptitude test and have a personal interview with the instructor to determine motivation and general fitness for the program.

### **CLASSAND SHOP POLICIES:**

1. Fall/ spring classes are generally Monday through Friday. Please follow your personal schedule and be on time.

**Students that are late or unable to attend class MUST call or notify the instructor. We are counting on you being in class every day!**

1. Lunch and break times during the instructional day will be determined by the instructor. Students may leave the shop and class area during the lunch period. **NO FOOD OR BEVERAGE ALLOWED IN SHOP OR COMPUTER LABS.**

2. **All personal appointments, (doctor, dentist, etc.,) must be made outside of class hours, except for an emergency.**

3. Anyone with personal business, such as telephone calls or business, will not use the school phone or school time to resolve it. If needed, the instructor will dismiss you so that you can take care of the problem.

4. Southeastern Illinois College is a tobacco/marijuana free campus. **NO SMOKING OR CHEWING OF TOBACCO PRODUCTS on school property. Students may smoke or chew tobacco in their personal vehicle.**

5. No smoking in college or customer owned vehicles.

6. Use of profanity, lewd language or conduct unprofessional in nature will result in dismissal from the class.
7. During lecture, avoid being rude and disruptive to the learning process by engaging in side conversations, arriving late for class, or rattling papers, excessive leaving of classroom for bathroom breaks etc.
8. Instructor reserves the right to excuse any student from class that is disruptive to the educational process.
9. Do not bring children or pets to class.
10. Students will wear leather boots and clean uniform shirt in the class/shop area at all times. No open-toed, canvas, or unsafe shoes will be allowed. Note: Wearing uniform shirt unbuttoned will not be permitted at any time. Students will be required to buy five uniform shirts at the beginning of the fall semester.
11. Students will have the option to obtain a locker for personal items and must provide a lock with two keys. Instructors will maintain second key for student access.
12. Students must furnish all their own hand tools. Students are required to have the complete tool list upon graduation. Students who fail to have all necessary tools in a timely fashion will be dropped from the diesel/power sports program. Instructors will inspect tool boxes each semester.
13. Students are required to maintain any and all books. Before leaving the lab area, all tools, air hoses, equipment and other items will be put away and work benches must be cleaned. Oil and water drain pans must be emptied and cleaned. Areas around and under the vehicle being worked on must be swept and cleaned daily.
14. Students with long hair that can fall over their eyes, or get caught in machinery, **MUST** keep their hair covered or tied up. Note: Warnings will be given resulting in student not being allowed in shop until hair is secured.
15. **STUDENTS MUST WEAR SAFETY GLASSES AT ALL TIMES IN THE SHOP AREA.** Note: No dark or Shaded lenses allowed in shop area. Prescription glasses will be of safety type and structure.
16. One student will be assigned to the tool room each day. All major tools and equipment and any items checked out of the tool room will be checked back in daily, cleaned and ready for the next user. The only person allowed in the tool room will be the student in charge or an instructor. Tool attendant will insure all tools are put away properly and neatly!
17. All work projects and purchasing will be done through the instructor.
18. First quarter enrolled students will not be allowed to bring their own vehicles in as a class project for the first ten (10) Weeks. NOTE: An exception to this rule would be a small emergency repair, then with instructor permission only.
19. No student at any time will be allowed to bring his or her vehicle or any other vehicle or project into the class area without first obtaining permission from an instructor. No exceptions.
20. No student will operate, or try to use any shop equipment unless he/she has been instructed in its use by the instructor.
21. Class projects are to be worked on in the shop area only.
22. Each student is required to read and sign a list of computer lab rules prior to using the computer lab. Violation of any one of these rules can result in the student losing computer lab use privileges.
23. **Student must have a current driver's license and proof of insurance to drive or move any vehicle associated with our program.** Students must show driver's license and proof of insurance to an instructor.

24. Each student is responsible for his/her own education. Instructors will guide students in the direction of their chosen field.

25. **No cell phones allowed in class or the shop.** Cell phones will be kept in the student's vehicle, locker or tool box when in the Diesel/Powersports Technology building. If you need to be notified in an emergency, have them call 618-252-5400 EXT 3000 (not your cell phone).

26. No personal radios allowed in shop or classroom.

27. Any student who does not follow class/shop lab policies may be dropped from class for his/her safety and the safety of fellow students.

**SHOP POLICY REGARDING VEHICLES ACCEPTED FOR STUDENT WORK EXPERIENCES IN THE DIESEL/POWERSPORTS TECHNOLOGY PROGRAM:**

1. The Instructor reserves the right to select repair jobs based upon their training value and sequence.
2. The customer will assume all responsibility, by signing a release at the time the project is delivered to the Diesel/Powersports lab areas of the college.

## ***SERVICES FOR STUDENTS WITH DISABILITIES***

### **Our Commitment**

Southeastern Illinois College has support services for students with disabilities to ensure that our programs and facilities are accessible

### **What are your Responsibilities?**

- You are responsible for your own success in higher education.
- You are expected to meet the academic standards required of all students.
- Identify yourself as a student with a qualified disability to the Coordinator of Disability Support Services.
- Provide documentation regarding your disability.
- Ask for reasonable accommodation at the College.
- Request services early. We recommend at least six weeks prior to entering the college.

### **What are your Rights?**

You have the right to services and reasonable accommodations based on your documentation.

### **What Services May be provided?**

Services and reasonable accommodations are available on an individually determined basis based on your documentation and individual needs.

Examples of services are:

- Accessible facilities
- Alternate educational materials, such as braille, enlarged print, books in audio format
- Testing and classroom accommodations
- Sign language interpreters
- Mobility training
- Priority registration
- Adaptive furniture
- Specialized equipment and software

### **Confidentiality**

Information regarding a student's disability is considered confidential. Information will not be released without the expressed written permission of the student.

### **Dispute Resolution**

Students are encouraged to resolve concerns by first contacting the ADA advisor in student affairs. It is in Everyone's best interest that disputes over reasonable accommodations for students with disabilities be settled as quickly and informally as possible. Southeastern Illinois College also offers a formal procedure for students who have a complaint or grievance with the institution. See grievance procedure located in 2019/2020 SIC Student planner.

# Shop Safety

## ***SAFETY STATEMENT***

*For every task in the Diesel/Powersports Technology environment a set of safety procedures is taught and strictly enforced. Students receive instruction encompassing personal and environmental safety practices associated with all aspects of the work environment, i.e. clothing, eye protection, hand protection, power equipment, hand tools, ventilation, handling- storage-disposal of hazardous materials as required in Hazard Communication Title 29, Code of Federal Regulation Part 1910.1200, „Right to Know Law“, and as prescribed in state and local regulations.*

*It is understood that in all areas of instruction appropriate safety, theory, and support procedures will be required for the performance of each task.*

*Instruction includes the identification and use of appropriate tools, as well as testing and measurement equipment required. All tools and equipment provided for instruction comply with applicable federal, state and local regulations.*

*Students have ready-access to the latest, current reference and training materials from accepted industry publications, as well as current*

*Manufacturers” recommended repair procedures. All diagnostic and repair services outlined in this document are completed in accordance with manufacturer ”s recommended procedures/specifications as published. Where manufacturers” recommended guidelines are not available, published industry guidelines are used.*

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## ***RULES***

1. APPROPRIATE clothing should always be worn:
  - A. Uniform shirt clean and buttoned.
  - B. Leather work boots - no tennis shoes.
  - C. Wear safety glasses at all times while in the shop area.
  - D. Clean long jeans/pants free of holes or rips. (NO SHORTS)
2. Long hair that could fall over eyes, or get caught in something, must be kept covered or tied back.
3. It is recommended that individuals not wear rings or wrist watches in the lab/shop environment. These items pose a hazard and may catch resulting in injury.
4. Approved eye protection (goggles, face shields, or safety glasses) must always be worn in the lab/shop environment to avoid hazard when grinding, hammering, using chisels and punches, charging air conditioning systems, drilling, using a blow gun, and many other tasks in which dirt or foreign material may cause injury to the student’s face or eyes.
5. The student must follow proper procedures when charging and maintaining batteries. Always disconnect batteries when working on a vehicle.
6. The student should use caution when removing a radiator cap from hot pressurized cooling systems. Always follow designated procedures.
7. Know where the eye flushing stations are and the proper method to flush out the eyes.
8. When jacking up a vehicle, make sure the jack is placed on a proper lift point. Always use jack stands under equipment or vehicles when raised.
9. No horseplay will be tolerated in the shop or classroom at any time.
10. Keep air hoses and electrical cords picked up when not in use to prevent someone from tripping on them.
11. When using electrical tools, make sure the grounding lug on the cord is in place before using.

12. Know where fire extinguishers are stored and their proper operation.
13. Place all used/dirty paper towels in trash cans.
- 14. REPORT ANY AND ALL INJURIES TO THE INSTRUCTOR.**
15. Know where the first aid kits are located. Inform the instructor if you use any of the supplies.
16. Be aware and knowledgeable of the proper methods of hazardous material handling, storage and disposal.
17. Know building emergency evacuation routes and procedures.
18. Report immediately to the designated meeting area after evacuating the building. East parking area from Tech building.
- 19. Do not attempt to operate any piece of shop equipment without **obtaining complete instructions from your instructor.****
20. Assure that all safety guards are in place and secure prior to using shop equipment.
21. Smoking/chewing is allowed only in your personal vehicle.
- 22. Clean up all grease, oil, antifreeze, or any other liquid spills immediately.** Watch your step in the shop.
23. Do not run at any time in the shop.
24. Don't tamper with someone else's machine, project, or parts
25. Never run equipment in the shop without using the shop exhaust system.
26. Stand aside from the grinders when starting.
27. Always use proper cleaning fluids when cleaning parts and utilize parts washers located in shop/lab areas. Do not use flammable fluids to clean parts (example gasoline, diesel fuel or starting fluid).
28. Keep work area clean and neat.
29. Get help for heavy loads. Use proper lifting techniques.
30. Always have someone in the driver's seat when starting Vehicles and equipment.

**Statement:** I have read and understand the above rules and will comply with them.

Signature: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

## *Attendance Policy*

### **16 week duration classes:**

- Three (3) times tardy will equal one absence.
- Three (3) absences will lower final grade by ½ letter grade.
- Five (5) absences will lower final grade one letter grade.
- On the sixth absence in one quarter the student will be failed and the student may be dropped from the program at the instructor's discretion. The instructor has the option to forgive absences due to illness if a doctor's letter explaining the illness is provided.

### **8 week duration classes:**

- Two (2) absences will lower final grade by ½ letter grade.
- Three (3) absences will lower final grade by one letter grade.
- Four (4) absences will result in failure of the class.
- Two (2) times tardy will equal on absence.

A tardy is defined as arriving after class/lab has started and/or not being prepared for theory class or lab.

Being prepared for theory class is defined as being seated with proper books and supplies and ready for study.  
Being prepared for lab is defined as having boots and uniform on with toolbox available, opened and ready for work.

An absence is defined as missing five minutes or more of theory class or lab. I

have read and understand the above information:

SIGNATURE: \_\_\_\_\_ DATE: \_\_/\_\_/\_\_

## *Computer Use Policy*

- Students will not use the instructor's computer.
- During class time, computers will not be used for personal business, entertainment, or e-mail activity.
- No games will be played on the computers.
- All students have a SIC e-mail account. Students have access to their e-mail accounts on computers. Students cannot access their accounts during class or shop times.
- During shop or class times computers are for work only. No personal use during these times.
- No lewd or obscene materials may be viewed on the Diesel/PowerSports Technology program computers. This includes e- mail accounts.
- Students will not change settings or destroy files in the computer.
- Students will not enter adult sites, chat sites, or dating/mate finding sites.
- Students will complete their computer usage in a timely manner.
- 

**I have read and understand the above rules and will comply with them.**

**Signature:** \_\_\_\_\_ **Date:** \_\_ / \_\_ / \_\_

# DIESEL TECHNOLOGY



Medium/Heavy Duty Truck  
A.A.S. Degree



Minimum 70 hours

Career & Technical Education • Associate in Applied Science Degree • Minimum 2.0 OGPA • Major Code: DMHDT

## FIRST YEAR

Fall Semester		Credit Hrs
CÓM 146	Business & Professional Communication	3
DSL 130	Basic Mechanical Skills	3
DSL 131	Engine Electronics I	3
DSL 157	Basic Internal Combustion Engines	3
DSL 158	Hydraulics I	3
BUS 116	Customer Service	1
EMP 111	Employability Skills	1
Total Hours		17

Spring Semester		Credit Hrs
ENG 121	Rhetoric & Composition I	3
PSYC 131 or PSYC 121	Human Relations Intro Psychology	3
DSL 132	Engine Electronics II	3
DSL 235	Diesel Heating & Air Conditioning	4
DSL 275	Diesel Engines	4
Total Hours		17

Summer Semester		Credit Hrs
DSL 172	Occupational Experience	5

## SECOND YEAR

Fall Semester		Credit Hrs
DSL 230	Diesel Brakes	4
DSL 233	Electrical Diagnosis	5
DSL 234	Diesel Transmission & Drive Trains	4
DSL 276	Diesel Fuel Systems	3
Total Hours		16

Spring Semester		Credit Hrs
DSL 133	Preventative Maintenance	4
DSL 232	Diesel Suspension and Steering	4
MATH 151 or MATH 128	Occupational Math College Algebra*	4
Science/Health**		3
Total Hours		15

\*MATH 128 College Algebra recommended.

\*\*BIOL 141 Environmental Science or PHYS121 Introductory Physics is recommended. HYG 121 Personal Health may also be used.

**SPECIAL REQUIREMENTS:** Students are required to furnish their own tools. Tool list provided by instructors. Safety glasses are required when working in the shop areas.

**THE DIESEL LAB** is located in the Robert I. Gregg Technology Center. This well-equipped lab is updated and maintained for quality training and technical instruction.

**THIS DEGREE** is designed to provide the student with the knowledge and skills necessary for the repair, maintenance, and operation of diesel engines in medium to heavy-duty trucks, heavy equipment, agriculture equipment, or diesel passenger vehicles; to test and repair hydraulic systems; and; to overhaul diesel engines.

**THE DIESEL TECHNOLOGY PROGRAM** is certified by National Automotive Technicians Education Foundation (NATEF) and National Institute for Automotive Service Excellence (ASE). Students have the opportunity to earn Master Certification in the following areas: T1-Gasoline Engines, T2-Diesel Engines, T3-Drive Train, T4-Brake, T5-Suspension & Steering, T6-Electrical/Electronics Systems, T7-Heating, Ventilation and Air Conditioning, T8-Preventive Maintenance Inspection.

**Fabick/Caterpillar**, headquartered in Fenton, Missouri, has selected Southeastern Illinois College as a training partner to fill the company's growing need for diesel technicians.

Occupational information about this program is available at O\*NET online [www.onetonline.org](http://www.onetonline.org). Once at that website enter the SOC Code that is listed for this program.

O\*NET – SOC Code: 49-3031.00

**Career Opportunities:**

Service Manager, Parts Manager, Diesel Technician, Diesel Mechanic.

**Major Employers:**

Trucking Companies, Vehicle Service Centers, Wholesale Trade Firms, Construction Companies, Heavy and Farm Equipment Dealers, Auto Dealers, Independent Repair Shops, Farms, Equipment Leasing Companies, Public Transit Firms, Educational Institutions.

02/13

Southeastern Illinois College • 3575 College Road • Harrisburg, Illinois 62946 • 618-252-5400 • [www.sic.edu](http://www.sic.edu)

# DIESEL TECHNOLOGY MHDT



Certificate



Minimum 47 hours

Career & Technical Education • Certificate • Minimum 2.0 OGPA • Major Code: CMHDT

## FIRST YEAR

Fall Semester		Credit Hrs
DSL 130	Basic Mechanical Skills	3
DSL 131	Engine Electronics I	3
DSL 157	Basic Internal Combustion Engines	3
DSL 158	Hydraulics I	3
Total Hours		12

Spring Semester		Credit Hrs
DSL 132	Engine Electronics II	3
DSL 133	Preventative Maintenance	4
DSL 232	Suspension & Steering	4
DSL 235	Diesel Heating & Air Conditioning	4
DSL 275	Diesel Engines	4
Total Hours		19

## SECOND YEAR

Fall Semester		Credit Hrs
DSL 230	Diesel Brakes	4
DSL 233	Electrical Diagnosis	5
DSL 234	Diesel Transmissions & Drive Trains	4
DSL 276	Diesel Fuels Systems	3
Total Hours		16

**SPECIAL REQUIREMENTS:** Students are required to furnish their own basic set of tools. Tool list provided by instructors. Safety glasses are required when working in the shop area.

**THE DIESEL LAB** is located in the Robert I. Gregg Technology Center. This well-equipped lab is updated and maintained for quality training and technical instruction.

**THIS CERTIFICATE** is designed to provide the student with the knowledge and skills necessary for the repair, maintenance, and operation of diesel engines in heavy-duty trucks, heavy equipment, agriculture equipment, or diesel passenger vehicles; to test and repair hydraulic systems; and, to overhaul diesel engines.

**THE DIESEL TECHNOLOGY PROGRAM** is certified by National Automotive Technicians Education Foundation (NATEF) and National Institute for Automotive Service Excellence (ASE). Students have the opportunity to earn Master Certification in the following areas: T1-Gasoline Engines, T2-Diesel Engines, T3-Drive Train, T4-Brake, T5-Suspension and Steering, T6-Electrical and Electronic Systems, T7-Heating, Ventilation and Air Conditioning, T8-Preventive Maintenance Inspection.

Occupational information about this program is available at O\*NET online [www.onetonline.org](http://www.onetonline.org). Once at that website enter the SOC Code that is listed for this program.

O\*NET – SOC Code: 49-3031.00

This is a Gainful Employment Certificate Program that prepares the student for gainful employment in a recognized occupation. Information regarding program length, cost, average loan debt and completion rates for this program is available at [http://www.sic.edu/files/uploads/global/your\\_right\\_to\\_know/ge\\_diesel\\_technology\\_mhdt.pdf](http://www.sic.edu/files/uploads/global/your_right_to_know/ge_diesel_technology_mhdt.pdf). You may also access Gainful Employment information from the SIC home page by selecting "Your Right to Know" from the footer of the page, and then selecting the Gainful Employment Programs option.

### Career Opportunities:

Diesel Mechanic

### Major Employers:

Trucking Companies, Vehicle Service Centers, Wholesale Trade Firms, Construction Companies, Heavy and Farm Equipment Dealers, Auto Dealers, Independent Repair Shops, Farms, Equipment Leasing Companies, Public Transit Firms, Educational Institutions.

02/13

# DIESEL TECHNOLOGY MHDT



Certificate



Minimum 47 hours

Career & Technical Education • Certificate • Minimum 2.0 OGPA • Major Code: CMHDT

## FIRST YEAR

## SECOND YEAR

Fall Semester		Credit Hrs
DSL 130	Basic Mechanical Skills	3
DSL 131	Engine Electronics I	3
DSL 157	Basic Internal Combustion Engines	3
DSL 158	Hydraulics I	3
Total Hours		12

Fall Semester		Credit Hrs
DSL 230	Diesel Brakes	4
DSL 233	Electrical Diagnosis	5
DSL 234	Diesel Transmissions & Drive Trains	4
DSL 276	Diesel Fuels Systems	3
Total Hours		16

Spring Semester		Credit Hrs
DSL 132	Engine Electronics II	3
DSL 133	Preventative Maintenance	4
DSL 232	Suspension & Steering	4
DSL 235	Diesel Heating & Air Conditioning	4
DSL 275	Diesel Engines	4
Total Hours		19

**SPECIAL REQUIREMENTS:** Students are required to furnish their own basic set of tools. Tool list provided by instructors. Safety glasses are required when working in the shop area.

**THE DIESEL LAB** is located in the Robert I. Gregg Technology Center. This well-equipped lab is updated and maintained for quality training and technical instruction.

**THIS CERTIFICATE** is designed to provide the student with the knowledge and skills necessary for the repair, maintenance, and operation of diesel engines in heavy-duty trucks, heavy equipment, agriculture equipment, or diesel passenger vehicles; to test and repair hydraulic systems; and, to overhaul diesel engines.

**THE DIESEL TECHNOLOGY PROGRAM** is certified by National Automotive Technicians Education Foundation (NATEF) and National Institute for Automotive Service Excellence (ASE). Students have the opportunity to earn Master Certification in the following areas: T1-Gasoline Engines, T2-Diesel Engines, T3-Drive Train, T4-Brake, T5-Suspension and Steering, T6-Electrical and Electronic Systems, T7-Heating, Ventilation and Air Conditioning, T8-Preventive Maintenance Inspection.

Occupational information about this program is available at O\*NET online [www.onetonline.org](http://www.onetonline.org). Once at that website enter the SOC Code that is listed for this program.

O\*NET – SOC Code: 49-3031.00

This is a Gainful Employment Certificate Program that prepares the student for gainful employment in a recognized occupation. Information regarding program length, cost, average loan debt and completion rates for this program is available at [http://www.sic.edu/files/uploads/global/your right to know/ge diesel technology mhdtd.pdf](http://www.sic.edu/files/uploads/global/your%20right%20to%20know/ge%20diesel%20technology%20mhdtd.pdf). You may also access Gainful Employment information from the SIC home page by selecting "Your Right to Know" from the footer of the page, and then selecting the Gainful Employment Programs option.

### Career Opportunities:

Diesel Mechanic

### Major Employers:

Trucking Companies, Vehicle Service Centers, Wholesale Trade Firms, Construction Companies, Heavy and Farm Equipment Dealers, Auto Dealers, Independent Repair Shops, Farms, Equipment Leasing Companies, Public Transit Firms, Educational Institutions.

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Student Name:

ID #:



### Diesel Technology - Heavy Equipment & Medium/Heavy Duty Truck

#### YEAR ONE

**Fall Semester**

DSL 130	3	Basic Mechanical Skills
DSL 131	3	Engine Electronics I
DSL 157	3	Basic Internal Combustion Engines
DSL 158	3	Hydraulics I
BUS 116	1	Customer Service
EMP 111	1	Employability Skills

Credits 14

**Spring Semester**

ENG 121	3	Rhetoric & Composition
DSL 132	3	Engine Electronics II
DSL 171	3	Hydraulics II
DSL 235	4	Diesel Heating & Air Cond
DSL 275	4	Diesel Engines

Credits 17

**Summer Semester**

DSL 172	5	Occupational Experience
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#### YEAR TWO

**Fall Semester**

COM 146	3	Business & Professional Communication
DSL 233	5	Electrical Diagnosis
DSL 276	3	Engine Fuel Systems
DSL 277	3	Power Train Fundamentals
DSL 133	4	Preventative Maintenance

Credits 18

**Spring Semester**

DSL 237	3	Engine Diagnosis & Performance
DSL 238	3	Final Drives, Tracks & Undercarriage
PSYC 131	3	Human Relations
HYG 121	3	*Science/Health Requirement
DSL 232	4	Diesel Suspension & Steering

Credits 16

#### YEAR THREE

**Fall Semester**

DSL 220	4	Diesel Brakes
DSL 234	4	Diesel Transmission & Drive Trains
MATH 151	4	Occupational Math

Credits 12

# POWERSPORTS TECHNOLOGY



Certificate

Minimum 28 hours

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Career & Technical Education • Certificate • Minimum 2.0 OGPA • Major Code: CPST

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Fall Semester		Credit Hrs
PST 140	Intro, Set-up, and Maintenance	3
DSL 130	Basic Mechanical Skills	3
DSL 131	Engine Electronics	3
DSL 157	Basic Internal Combustion Engines	3
Total Hours		12

Spring Semester		Credit Hrs
PST 132	MC/ATV/UTV Electronics	3
PST 232	Suspension, Brakes, and Wheels	4
PST 275	Engines	4
PST 270	Fuel Systems	3
PST 172	Practicum	2
Total Hours		16

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**Career Opportunities:**

**Major Employers:**

Auto Dealerships, Powersports Dealerships, Sporting Goods Stores

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# Diesel/Powersports Technology Student Tool/supply List

## Parent Item #BPSTARTSET

<b>Component</b>	<b>Description</b>	<b>QTY</b>
1658C	PINCH BAR	1
BDGPL800	8PC PLIER SET	1
BLPADJ404	4PV ADJ WRENCH S	1
BLPCWS711B	INCHES COMBO WRENCHES	1
BLPCWSM712B	12PC COMBWRENCHES	1
BLPGSSC155	155PC 3/8 AND 1/4" STANDARD & METRIC	1
BMPL1000	10PC MINI PLIERS	1
BP16B	HAMMER 16 OZ	1
BSGDMR6	RATCHTING SCRDRVR	1
BSGDY70	7PC SCREWDRIVER	1
BSGLP404	4PC SOFT GRIP LK	1
ECFB200BL	BLUE PT 3 WATT P	1
FB325A	FEELER GA	1
GA295	MIRROR	1
GLASS20BLA	BLUE SFTY GLS	1
LBUK1	UTILITY KNIFE	1
PGP120	PENCIL GAUGE 120 PSI	1
PK50A	SCRAPPER	1
PRH57A	8IN CONVERT SNP	1
PT5C	TEL 2LB PICK UP	1
PWC6	WIRE CRIMP	1
TPMA25	25FT STANDARD TA	1
KRBCIOTDPCM	4 DOOR CART	1
BLPGSS1233	33PC 1/2" DR SAE & MET	1
SPBS704A	4PC PRY BAR SET	1
EEDM503D	MULTI METER	1

Approx. Cost \$2200.00

## **DIESEL/ POWER SPORTS TECH SUPPLY LIST**

TOOL SET (264)	\$2200.00
TOOL BOX (INCLUDED)	
UNIFORM SHIRT	
5 @ 28.99 Short Sleeve	\$144.95
5 @ 32.99 Long Sleeve	\$164.95