

DIESEL TECHNOLOGY, A.O.S.

Major Code: 1604

This A.O.S. program consists of courses in vehicular and industrial mechanics. The curriculum is best suited for those students who wish to find immediate employment working on diesel and all aspects of industrial and agricultural equipment. The student is allowed to take a variety of courses to gain a broad background in state-of-the-art technology.

Student Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop a comprehensive understanding of the mechanical function of the compression-ignition engines
- Develop a comprehensive understanding of electrical systems and electronic controls used for diesel-powered equipment
- Develop a comprehensive understanding of hydraulic systems, components and control systems used for transmitting hydraulic power in diesel-powered equipment
- Develop the ability to accurately and efficiently diagnose and repair failures in mechanical, electrical and hydraulic systems in diesel-powered equipment

Curriculum Requirements

A minimum of 60 credits is required for degree completion.

Code	Title	Credits
Requirements		
DTEC 105	Diesel Powertrains I	4
DTEC 110	Diesel Powertrains II	4
DTEC 125	Diesel Electrical Systems	4
DTEC 150	Diesel Systems	3
DTEC 225	Diesel Electronics	4
AGEN 131	Fundamentals of Hydraulics	3
DTEC 350	Advanced Diesel Fuel Systems	3
AGEN 161	Basic Hydraulics	3
AUTO 102	Metals	3
AGEN 261	Advanced Hydraulics	4
AGEN 270	Tractor Overhaul and Repair	4-5
or DTEC 300	Diesel Equip Tech Internship 2	
AUTO 260	Auto Air Cond & Refrg Recovery	1
OFFT 110	Introduction to MS Excel	1
RENG 102	Renewable Energy Resources	3
AGEN 100	Equipment Care & Maintenance	3

General Elective Course Selection

Select 12 Credits from the courses below:	12
DTEC 151	Seminar Caterpillar Power Syst
DTEC 290	Diesel Equip Tech Internship 1
DTEC 295	Diesel Equip Tech Internship 3
DTEC 300	Diesel Equip Tech Internship 2
AGEN 120	Water Supply & Sanitation
AGEN 210	Advanced Small Power Equipment
AUTO 109	Chassis Analysis I
AUTO 202	Autobody Fundamentals

AUTO 259	Non-Structural Repair Refinish
DTEC 325	Electrical Power Generation
Total Credits	59-60

Suggested Course Sequence

Course	Title	Credits
Year 1		
Fall		
AGEN 100	Equipment Care & Maintenance	3
AGEN 131	Fundamentals of Hydraulics	3
DTEC 125	Diesel Electrical Systems	4
RENG 102	Renewable Energy Resources	3
OFFT 110	Introduction to MS Excel	1
Elective as Advised (MAGN if needed)		3
Credits		17
Spring		
AGEN 161	Basic Hydraulics	3
DTEC 105	Diesel Powertrains I	4
DTEC 225	Diesel Electronics	4
AUTO 102	Metals	3
Credits		14
Year 2		
Fall		
AGEN 261	Advanced Hydraulics	4
DTEC 150	Diesel Systems	3
DTEC 110	Diesel Powertrains II	4
Major Electives as Advised		4
AUTO 260	Auto Air Cond & Refrg Recovery	1
Credits		16
Spring		
AGEN 270	Tractor Overhaul and Repair	4-5
or DTEC 300	or Diesel Equip Tech Internship 2	
Major electives as Advised		8
Credits		12-13
Total Credits		59-60