

# DIESEL EQUIPMENT TECHNOLOGY, A.A.S.

**Major Code:** 2391

The A.A.S. curriculum was patterned after an industrial training curriculum. This curriculum offers courses in agricultural, industrial and vehicular mechanics. The program provides the courses necessary to move from the technician level to management within a business. It is designed for students who may be considering additional course work after completing their two-year degree. Career Opportunities include diesel technician - truck, construction, electric power generation, agricultural, service writer, vocational teacher (with additional education), parts technician and factory representative.

## 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 62 credits is required for degree completion.

Code	Title	Credits
AGEN 161	Basic Hydraulics	3
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
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
AGEN 100	Equipment Care & Maintenance	3
SUNY General Education Communication Written and Oral as advised		3-6
SUNY General Education Natural Sciences as advised		3
MATH 102	Intermediate Algebra w Trig	3
Additional SUNY General Education Credits as advised		4-7
<b>Total Credits</b>		<b>57-64</b>

## Suggested Course Sequence

Course	Title	Credits
<b>Year 1</b>		
<b>Fall</b>		
AGEN 100	Equipment Care & Maintenance	3
AGEN 131	Fundamentals of Hydraulics	3
DTEC 125	Diesel Electrical Systems	4
MATH 102	Intermediate Algebra w Trig	3
OFFT 110	Introduction to MS Excel	1
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
AGEN 161	Basic Hydraulics	3
DTEC 105	Diesel Powertrains I	4
DTEC 225	Diesel Electronics	4
AUTO 102	Metals	3
Social Science as advised		3
AUTO 260	Auto Air Cond & Refrg Recovery	1
<b>Credits</b>		<b>18</b>
<b>Year 2</b>		
<b>Fall</b>		
AGEN 261	Advanced Hydraulics	4
DTEC 150	Diesel Systems	3
SUNY General Education Communication Written and Oral as advised		3
SUNY General Education Natural Sciences as advised		3-4
<b>Credits</b>		<b>13-14</b>
<b>Spring</b>		
AGEN 270	Tractor Overhaul and Repair	4-5
or DTEC 300	or Diesel Equip Tech Internship 2	
Social Science Elective as advised		3
DTEC 350	Advanced Diesel Fuel Systems	3
SUNY General Education as advised		3
<b>Credits</b>		<b>13-14</b>
<b>Total Credits</b>		<b>58-60</b>