

# Diesel Technology

Holland code family: Doers

## About the Program

The Diesel Technology Associate of Applied Science degree program is designed for students seeking a career in today's diesel repair industry. The program builds rapidly from fundamentals and theory into diagnosis and repair of today's modern equipment based upon Automotive Service Excellence (ASE) and industrial standards.

The design of the program places heavy emphasis upon actual hands-on work in diesel labs. Approximately two-thirds of the time spent in the program is in a lab (shop) environment where the student applies theory to diagnosis and repair of a wide variety of equipment. As students' skill levels develop, so does the difficulty of repairs performed.

If students intend to transfer to either SOU's ([www.sou.edu/degreecompletion](http://www.sou.edu/degreecompletion)) or Oregon Tech's (<http://www.oit.edu/academics/academic-agreements/articulations>) Bachelor of Applied Science degree program, transfer courses should be chosen from the list of electives where possible. See an advisor for more information, or visit [www.sou.edu/degreecompletion](http://www.sou.edu/degreecompletion).

## Program Learning Outcomes

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. Program learning outcomes for diesel technology programs are:

Work within OSHA, RCC, and current industry safety guidelines and standards to promote a safe working environment.

Read wiring diagrams and schematics, measure voltage, amperage and resistance with common industry equipment, evaluate and troubleshoot wiring, charging and starting problems.

Evaluate, troubleshoot and repair diesel engines, heavy-duty brakes, suspension and steering, power train assemblies, air conditioning and basic hydraulics.

Evaluate and troubleshoot computerized systems on the chassis, engine, brakes and suspension, evaluate fault codes, and make repairs as needed.

Work in a cohesive group on a collective project from beginning to end, producing high quality work while adhering to safety and lab procedures.

## Entry Requirements

Students are required to complete the Placement Process to determine skill level and readiness in math, reading, and writing. As part of their training program, students must begin with the courses within their skill level as determined through the Placement Process. In addition, students may also be required to enroll in classes that would increase their employability and success.

## Advanced Standing

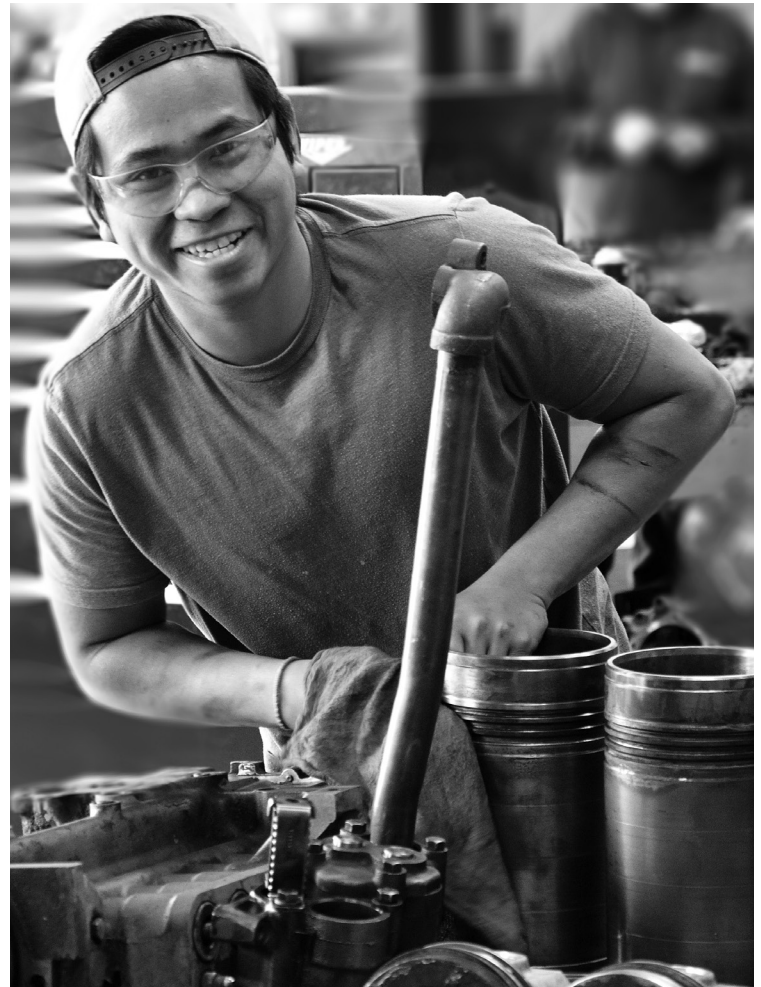
Coursework from accredited colleges and universities will be accepted in accordance with college policies. In order to ensure that coursework is current, program courses over five years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. College Now credit will be accepted in accordance with current agreement. Verified Automotive Service Excellence (ASE) certification or industry experience may be substituted for some coursework in accordance with college policy and the department chair's approval.

## Graduation Requirements

Students must complete all courses in this program with a grade of "C" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C" or better grade.

## Prerequisites

Course No.	Course Title	Credits
CS/CIS120	Approved 3-4 credit Computer Science or Computer Information Science class, CS120/CIS120 or above, or documented computer proficiency within the past ten years. <sup>1</sup>	0-4
MTH20	Pre-algebra or designated placement test score	0-4
RD90/WR90	College Reading/Fundamentals of Composition or WR91 Fundamentals of Academic Literacy (WR91 substitutes for both RD90 and WR90) or designated placement test score	0-8
<b>Total Prerequisite Credits</b>		<b>0-16</b>



## First Year Required Courses

Course No.	Course Title	Credits
<b>First Term</b>		
BT113	Business English I or higher level composition <sup>2</sup>	4
DS111	Basic Electricity for Diesel Technicians I	7
DS120	Diesel Practices	5
LIB127	Introduction to Academic Research	1
		17
<b>Second Term</b>		
BT114	Business English II <sup>3</sup>	4
DS131	Diesel Engine Dynamics and Diagnosis	4
DS134	Basic Electricity for Diesel Technicians II	3
DS141	Heavy Equipment Power Trains	4
		15
<b>Third Term</b>		
DS113	Diesel Engine Overhaul	6
DS151	Heavy Equipment Brakes	5
DS190	Diesel Repair Lab I	3
MTH63	Applied Algebra I or MTH60 Fundamentals of Algebra I or higher level math <sup>4</sup>	4
		18

### Fourth Term (Summer)

BT101	Human Relations in Organizations or PSY101 Psychology of Human Relations <sup>5</sup>	3
DS270	Air Conditioning for Diesel Technicians	5
DS275	Preventative Maintenance Inspection	5

**Total First Year Credits** **63**

### Second Year Required Courses

Course No.	Course Title	Credits
<b>Fifth Term</b>		
DS160	Heavy Equipment Suspension and Steering Systems	5
WLD111D	Technology of Industrial Welding I (Diesel)	6
		11

### Sixth Term

DS233	Computerized Vehicle Management Systems	6
DS280S	Cooperative Work Experience Seminar/Diesel	1
—	Approved program elective(s)	4-6
		11-13

### Seventh Term

DS232	Heavy Equipment Fuel Systems	3
DS260	Hydraulic Systems	3
DS280	Cooperative Work Experience/Diesel 6 or DS290 Diesel Repair Lab II	3
HE112	Emergency First Aid or HE261 CPR/Basic Life Support Provider	1
		10

**Total Second Year Credits** **32-34**

**TOTAL PROGRAM CREDITS** **95-97**

### Approved Program Electives (4-6 credits required)

Course No.	Course Title	Credits
AM190	Automotive Repair Lab I	4
BA109	Ready, Set, Work: Techniques for Landing a Job	2
DS112	Gasoline Engines Rebuild	5
DS199	Selected Topic Workshop	1-6
DS280	Cooperative Work Experience/Diesel	variable
DS290	Diesel Repair Lab II (if not taken as required course)	3
EET101	Introduction to Electronics	3
EET112	Introduction to Mechatronics	5
GS104	Physical Science with lab (recommended for transfer)	4
MEC103	Industrial Safety	1
MEC124	Hoisting and Rigging	3
MFG121	Manufacturing Processes I	4
MTH65	Fundamentals of Algebra II or higher level math	4-5
WLD112	Technology of Industrial Welding II	6
WR122	English Composition II	4
WR227	Technical Writing	4
	Approved humanities elective (see catalog for approved list of electives)	3-4
	Approved social science elective (see catalog for approved list of electives)	3-4

<sup>1</sup> Required for graduation.

<sup>2</sup> WR115 or higher level composition may be substituted.

<sup>3</sup> WR121 recommended for transfer and may be substituted.

<sup>4</sup> MTH105 or higher recommended for transfer.

<sup>5</sup> PSY101 recommended for transfer.

<sup>6</sup> Can be taken anytime during the program with permission of advisor.

For more information contact the Diesel Technology Department:

Grants Pass or Medford. . . . . 541-245-7809  
 Toll free in Oregon . . . . . 800-411-6508, Ext. 7809  
 email . . . . . diesel@rogucecc.edu  
 Web address . . . . . www.rogucecc.edu/diesel  
 TTY . . . . . Oregon Telecom Relay Service, 711

This advising guide is for advising purposes only. Please see current college catalog for additional information on specific college policies and graduation requirements.

RCC is an open institution and does not discriminate. For RCC's non-discrimination policy and a full list of regulatory specific contact persons visit the following webpage: [www.rogucecc.edu/nondiscrimination](http://www.rogucecc.edu/nondiscrimination).

