



## HEAVY EQUIPMENT MAINTENANCE TECHNOLOGY

- Associate of Applied Science
- College Certificate

### About The Program

The Heavy Equipment Maintenance Technology program is for today's diesel industry. Trucking is one of the fastest growing industries in the U.S., and all areas of the diesel industry are experiencing shortages of qualified technicians.

Students learn to repair engines, transmissions and drivelines. Students will study electrical, electronic, hydraulic, fuel, brake, air conditioning, transport and refrigeration systems. The curriculum includes suspension adjustment, wheel alignments, the performance of maintenance and tune-ups.

### Career Potential

- Diesel and Heavy Equipment Technicians
- Fleet Maintenance Technicians
- Fuel Injection Technicians
- Alignment Specialists
- Engine Rebuild Specialists

### Admission Requirements

Students are required to complete the following:

- Fulfill all WCCCD admission requirements:
- Declare intent to enter the Heavy Equipment Maintenance program on the WCCCD Application for Admission or change the program intent at the Admissions Office.
- Fulfill course placement requirements based on the COMPASS test.
- Students must complete WCCCD Program Application during the semester they are enrolled in any of the HEM courses and submit the program admissions application to the Campus Academic Officer.
- Students must complete all core course work with a grade of "C" or better to meet graduation requirements

### Associate of Applied Science Requirement Suggested Sequence of Study

#### SEMESTER I

HEM 101 Diesel Engine I	5
HEM 121 Electrical/Electronic System I	5
ENG 119 English I	3
<b>TOTAL CREDITS</b>	<b>13</b>

#### SEMESTER II

HEM 110 Diesel Engine II	5
HEM 122 Electrical/Electronic System II	5
English Requirement	3
<b>TOTAL CREDITS</b>	<b>13</b>

#### SEMESTER III

HEM 200 Diesel Engine III	5
HEM 112 Brakes	7
American Government Requirement	3
<b>TOTAL CREDITS</b>	<b>15</b>

#### SEMESTER IV

HEM Career Course	7
HEM Career Course	5
HUM Requirement	3
<b>TOTAL CREDITS</b>	<b>15</b>

#### SEMESTER V

HEM Career Course (Fieldwork Experience)	2
HEM Career Course (Fieldwork Experience)	2
Natural Science Requirement	3-4
Social Science Requirement	3
<b>TOTAL CREDITS</b>	<b>10-11</b>

### PROGRAM TOTAL CREDITS 66-67

\* Program totals may not include prerequisite work.

### Associate of Applied Science Degree Requirements

#### GENERAL EDUCATION COURSES

American Government Requirement	3
ENG 119 English I	3
English Requirement	3
Humanities Requirement	3
Natural Science with Lab Requirement	3-4
Social Science Requirement	3

#### CAREER COURSES

HEM 101 Diesel Engine I	5
HEM 110 Diesel Engine II	5
HEM 112 Brakes	7
HEM 121 Electrical/Electronic System I	5
HEM 122 Electrical/Electronic System II	5
HEM 200 Diesel Engine III	5

#### CAREER COURSES

(ANY 15 CREDITS FROM THE FOLLOWING COURSES)

HEM 111 Suspension & Steering	6
HEM 123 Preventive Maintenance	7
HEM 124 Drive Train	7
HEM 125 Heating, Ventilation & A/C	6
HEM 202 Electrical/Electronic System III	5
HEM 210 Diesel Engine Fieldwork Experience	2
HEM 211 Suspension & Steering Fieldwork Experience	2
HEM 212 Brakes Fieldwork Experience	2
HEM 222 Electrical/Electronic System Fieldwork Experience	2
HEM 223 Preventive Maintenance Fieldwork Experience	2
HEM 224 Drive Train Fieldwork Experience	2
HEM 225 Heating, Ventilation & A/C Fieldwork Experience	2

### PROGRAM TOTAL CREDITS 65-66

\* Program totals may not include prerequisite work.

(over)

## District Office

801 West Fort Street  
Detroit, MI 48226

General Information Number:  
(313) 496-2600

Career Program Hotline:  
1-800-300-2118

Information Website:  
[www.wcccd.edu](http://www.wcccd.edu)

E-mail:  
[info@wcccd.edu](mailto:info@wcccd.edu)

## College Certificate Requirements

### CAREER COURSES

(ANY 30 CREDITS FROM THE  
FOLLOWING COURSES)

HEM 101	Diesel Engine I	5
HEM 110	Diesel Engine II	5
HEM 111	Suspension & Steering	6
HEM 112	Brakes	7
HEM 121	Electrical/Electronic System I	5
HEM 122	Electrical/Electronic System II	5
HEM 123	Preventive Maintenance	7
HEM 124	Drive Train	7
HEM 125	Heating, Ventilation & A/C	6
HEM 200	Diesel Engine III	5
HEM 202	Electrical/Electronic System III	5
HEM 210	Diesel Engine Fieldwork Experience	2
HEM 211	Suspension & Steering Fieldwork	2
HEM 212	Brakes Fieldwork Experience	2
HEM 222	Electrical/Electronic Systems Fieldwork Experience	2
HEM 223	Preventive Maintenance Fieldwork Experience	2

### CERTIFICATE

**TOTAL CREDITS 30**

\* Certificate totals may not include  
prerequisite work.

*It is the policy of WCCCD that no person, on the basis of race, color, religion, national origin, age, sex, height, weight, marital status, disability, or political affiliation or belief, shall be discriminated against, excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in employment or in any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education.*

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