



Wayne
County
Community
College
District

Facility Maintenance: Building Engineer

PAY

The median annual wage for stationary engineers and boiler operators was \$62,150 in May 2019.

JOB OUTLOOK

Employment of stationary engineers and boiler operators is projected to grow 3 percent from 2018 to 2028, slower than average for all occupations. Those with apprenticeship training should have the best job opportunities.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, April 2020, Stationary Engineers and Boiler Operators, on the Internet at <https://www.bls.gov/ooh/production/stationary-engineers-and-boiler-operators.htm>

ABOUT THE PROGRAM

The Building Engineering Certificate is designed to prepare students for career opportunities in general building maintenance and repair, maintain machines, mechanical equipment for commercial and residential buildings. Students will be prepared to complete general repairs, work on plumbing, electrical, and air-conditioning and heating systems, among other tasks.



WHAT DO BUILDING ENGINEERS DO?

Stationary engineers and boiler operators typically do the following:

- Operate engines, boilers, and auxiliary equipment
- Read gauges, meters, and charts to track boiler operations
- Monitor boiler water, chemical, and fuel levels
- Activate valves to change the amount of water, air, and fuel in boilers
- Fire coal furnaces or feed boilers, using gas feeds or oil pumps
- Inspect equipment to ensure that it is operating efficiently
- Check safety devices routinely
- Record data and keep logs of operation, maintenance, and safety activity

WHERE DO THEY WORK?

In a large building or industrial plant, a senior stationary engineer or boiler operator may be in charge of all mechanical systems in the building and may supervise a team of assistant stationary engineers, assistant boiler tenders, and other operators or mechanics.

In small buildings, there may be only one stationary engineer or boiler operator who operates and maintains all of the systems.

Wayne County Community College District...
Jobs for Today, Jobs for the Future!

**FOR MORE INFORMATION, CALL 313-496-2600
OR VISIT OUR WEBSITE AT WWW.WCCCD.EDU**



Recommended Sequence of Courses

Facility Maintenance: Building Engineer College Certificate

CR. No.	COURSE TITLE	CREDITS
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SEMESTER 1

DRT 101	Blueprint Reading	3
HVA 100	Introduction to HVAC and Hermetic Systems	5
HVA 106	Basic Heating and Heating Controls	5

SEMESTER TOTAL13

SEMESTER 2

HVA 103	Commercial Refrigeration	4
HVA 108	Refrigeration Controls	4

SEMESTER TOTAL8

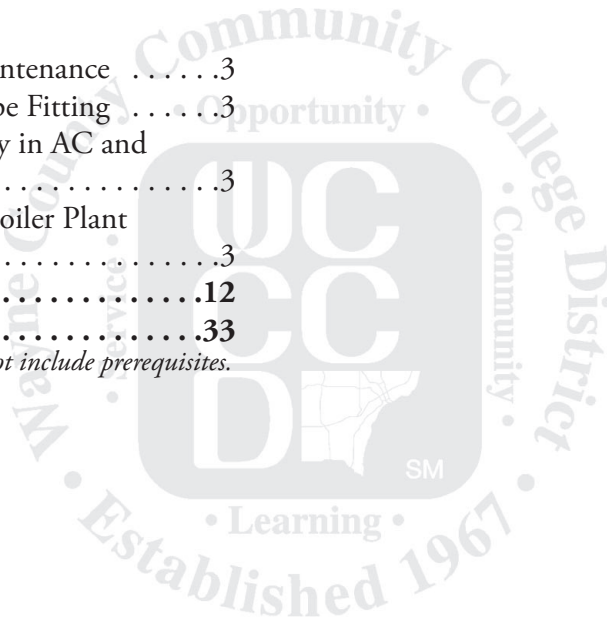
SEMESTER 3

FM 101	Basic Facility Maintenance	3
FM 102	Plumbing and Pipe Fitting	3
HVA 111	Applied Electricity in AC and Heating	3
HVA 200	Introduction to Boiler Plant Maintenance	3

SEMESTER TOTAL12

CERTIFICATE TOTAL33

Note: Certificate total hours may not include prerequisites.



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