



Facilities Energy Management

at Walla Walla Community College

<https://dept.wwcc.edu/energy>

The Program

Graduates of the Facilities Energy Management concentration will have the knowledge and skills to:

- Troubleshoot, repair, and maintain electrical-mechanical equipment, such as: pumps, compressors, motors, valves, gates, heaters, chillers, and fans
- Manage energy efficiency of heating, cooling, and electrical systems within buildings or campuses
- Repair or replace wiring, equipment, and instruments safely to NEC standards.

Career Opportunities

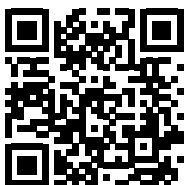
The Facilities Energy Management concentration is for students who want to operate, monitor, manage, and maintain building, industrial and public works facility, and campus-scale heating, cooling, ventilation, electrical, and related systems through use of programmable logic controllers and direct digital controls.

Career Path: Median starting wage: \$22.64 hourly, \$47,080 annual

- Mechanic and Installer or Plant Operator
- Lead Site/Service Technician
- Facility Energy Manager

WWCC Degree Options

- AAS degree in Energy Systems Technology (EST) with concentration in Facilities Energy Management.
- Certificate is available after successful completion of first three quarters of the EST degree.
- Completion of additional EST concentrations is an option.



For More Information

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Walla Walla Community College... **Shape Your Future!**

Energy Systems Technology

Concentration: Facilities Energy Management

Required Coursework for: Electrical Systems Technology Core

The following courses are required for the concentration in Facilities Energy Management

Fall Quarter		
Course #	Course Name	Credits
EST 145	Industrial Safety and Rigging	5
EST 131	Principles of Electricity Theory	4
WTM 215*	Fluid Dynamics (Applied Mathematics)	5
EST 260	Introduction to the National Electrical Code	2
AFYE 101	Applied First Year Experience I	1
Total Credits		17

Fall Quarter		
Course #	Course Name	Credits
EST 100	Refrigeration Basics	5
EST 115	Industrial Mechanics.....	5
EST 106	Process Control Instrumentation and Troubleshooting	5
Total Credits		15

Winter Quarter		
Course #	Course Name	Credits
EST 132	Principles of Electricity AC Application	4
AENG 100	Applied Writing (W + J)	5
CS 110	Intro. to Computers & Applications.....	5
ENT 112	Blueprint Reading	2
AFYE 102	Applied First Year Experience II	1
Total Credits		17

Winter Quarter		
Course #	Course Name	Credits
WTM 205	Wastewater Treatment Plant Operations	5
WTM 221	Pump Applications	3
EST 250	Programmable Logic Controllers.....	5
EST 110	Refrigeration Components.....	5
Min. Credits		18

Spring Quarter		
Course #	Course Name	Credits
EST 133	Introduction to Controls	4
EST 150	Electric Motors and Motor Maintenance.....	3
EST 252	Principles of Power Generation and Distribution...	5
ACOM 102	Applied Communications (O/R/L).....	5
IFA 022	AHA Heartsaver First Aid.....	0.4
AFYE 103	Applied First Year Experience III.....	1
Total Credits		18.4
Total Certificate Credits.....		52.4

Spring Quarter		
Course #	Course Name	Credits
EST 255	Direct Digital Controls	5
EST 263	Heating Systems.....	5
EST 265	Commercial Refrigeration.....	5
Total Credits (min.)		15
Total Degree Credits (min.)....		100.4

Certificate can be earned by completing first 3 quarters of program.

*Placement in WTM 215 requires a C or higher in AMATH 105 (or BUS 112) or placement into AMATH 106 or 107.

The following courses can be substituted for identified related instruction courses.

(W) Written Communication:	ENGL 097 or higher
(M) Computation / Mathematics:	MATH& 141 or higher
(O) Oral Communications:	Any O course
(R) Human Relations:	Any R course

CIP-47.0101 EPC 780A Energy Systems Technology Degree (with Facilities Energy Management concentration)

Updated 7/2019

**The actual order and specific coursework may vary depending on student placement, start date, and quarter.
Please check with your advisor prior to any substitutions.**

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