



Mechanical Electrical Technology

at Walla Walla Community College

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

The Program

Employment of electricians and mechanical-electrical technicians is projected to grow 9 percent from 2016 to 2026. This concentration provides students opportunities to gain the knowledge and skills needed to: read blueprints or technical diagrams; install and inspect wiring, control, and lighting systems, including transformers and circuit breakers; and troubleshoot, diagnose, and repair or replace wiring and equipment safely to NEC standards using a variety of testing devices and power tools.

Career Opportunities

Median entry-level wage approximately \$53,000 annually

- Mechanical Electrical Technician or Apprentice
- Journeyman or Senior Mechanical Electrical Technician
- Mechanical Electrical Technician Supervisor

WWCC Degree Options

- **AAS degree in Energy Systems Technology (EST)** with concentration in Mechanical Electrical Technology.
- **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: Mechanical Electrical Technology

Required Coursework for: Electrical Systems Technology Core

The following courses are required for the concentration in Mechanical Electrical Technology

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 108	Materials, Fasteners, and Raceways.....	5
EST 240	Introduction to Basic Electronics.....	5
EST 235	Introduction to Solar PV and Applications	3
EST 159	Hydraulics and Pneumatics	3
Total Credits		16

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
EST 250	Programmable Logic Controllers.....	5
WELD 141	Welding Basics	4
EST 115	Industrial Mechanics.....	5
WTM 221	Pump Applications	3
Total Credits		17

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 106	Process Control Instrumentation and Troubleshooting	5
EST 203	Applied Controls and Operations	5
EST 175	Tower Rescue and Climbing Competency	1.2
EST 285	Advanced Instrumentation and PLCs.....	3
Total Credits (min.)		14.2
Total Degree Credits (min.)... 99.6		

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 Mechanical Electrical Technology 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.**

Walla Walla Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in programs and activities.

Walla Walla Community Colleges posts an Annual Security Report online. A paper copy of the report may also be obtained, free of charge, by visiting the Campus Security and Environmental Health and Safety office during normal business hours. The report contains policies and procedures related to campus safety and security, three years of crime statistics and other additional safety information.