

Energy Systems Technology

at Walla Walla Community College



www.wwcc.edu/energy

Graduates of the Energy Systems Technology degree program are in high demand by public works, power generation (utilities), food & beverage processing, pulp & paper milling, manufacturing, agriculture, irrigation, and renewable energy operations!

To complete the AAS degree in Energy Systems Technology, students first complete a one-year electrical core course sequence, and then specialize in one or more of five (5) concentrations that provide opportunities to gain the knowledge and skills needed to:

- Calculate, measure, and process a variety of materials to generate high value products, including electricity!
- Monitor, adjust, and control equipment to ensure optimal performance, including: turbines, pumps, valves, gates, fans, controllers, filters, conveyors, emitters, drones, robots, and instruments; and
- Troubleshoot, diagnose, and repair/replace wiring and mechanical equipment safely.

Start building your skills TODAY for jobs with a starting wage of \$20/hour (average): Electrician, Millwright, Industrial Mechanic, Refrigeration Technician, Cellar Master, Plant Operator, Renewable Energy Technician, Precision Ag. Technician, Irrigation Technician, and more.

Energy Systems Technology Guided Pathways



For More Information

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

Energy Systems Technology

AAS Degree with sample concentration

Required Coursework for: Electrical Systems Technology Core

Sample Concentration Requirements: Check out wwcc.edu/energy for more information!

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

Winter Quarter

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

Spring Quarter

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

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 (for all EST concentrations)

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, creed, national origin, sex, sexual orientation, including gender expression/identity, genetic information, marital status, age, the presence of any sensory, mental, or physical disability; the use of a trained guide dog or service animal by a person with a disability; or, status as a Vietnam and/or disabled veteran, National Guard member or reservist. 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.

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

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

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