



The Energy Management - Renewable Energy Option is a rigorous two-year Associate of Applied Science degree. First year core courses are shared with Energy Management and Building Controls option students.

The program prepares students for employment designing and installing solar electric and domestic hot water systems. If planning to become an installer in Oregon, state law requires all renewable energy installers to be licensed, and this usually requires participation in a State recognized apprenticeship program. Hours put into obtaining the AAS degree can be directly applied to the apprenticeship educational requirements.

Earn \$25,000-35,000 annually while helping to create a positive change within our built environment

Renewable students take a first-year curriculum in commercial energy efficiency giving them a solid background that includes residential energy efficiency, HVAC systems, lighting, and the usual requirement of physics and math.

The renewable energy option is accredited by the Interstate Renewable Energy Council to ensure that our graduates achieve the necessary industry approved knowledge and skills to perform successfully on the job.



HANDS ON & BUILT FROM SCRATCH

Over a period of two years, students construct several different types of photovoltaic and domestic hot water systems.



Application or Additional Information

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Lane Community College
Downtown Campus | 101 West 10th Ave
Eugene, Oregon 97401



NWEEI provides professional development opportunities throughout the Northwest, Nationally and Internationally.

This information is available in alternate formats upon request by contacting Disability Services at (541) 463-5150 (voice), (541) 463-3079 (TTY), or disability.services@lanecc.edu (email).

Lane Community College is an equal opportunity/affirmative action institution.

www.nweei.org

ENERGY MANAGEMENT Renewable Energy *Option*

**Two Year Associate of
Applied Science Degree**



We provide a comprehensive technical education that prepares graduates to design and install limited renewable generation systems including solar photovoltaic and solar thermal.



Graduates Of The Program Are Able To



- » Evaluate the energy use patterns for residential and commercial buildings.
- » Recommend energy efficiency and alternative energy solutions for high energy consuming buildings.
- » Appropriately size and recommend renewable energy system types for particular situations.
- » Understand and put into practice the installation protocol for Photovoltaic (PV) and Solar Domestic Hot Water (thermal) systems.
- » Determine appropriate site solar systems using contemporary siting technology.
- » Understand local, state, and federal jurisdiction codes related to solar PV and Thermal installation.
- » Become familiar with the tools, technology, and software used in the design and installation of solar PV and Solar thermal systems.

Our Goal is Your Success!
After completing the program, your goal will be employment and we take that very seriously. We continually seek out and participate in local, regional, and national networking opportunities for one simple reason - to promote our students directly to those who have the ability to provide jobs.

By providing you with a quality education built around an industry approved job task analysis we are extremely confident that you will be successful.

Even though the Renewable Energy program is centered on DHW and PV systems, a focus on energy efficiency makes our graduates competitive to a broader job market. They work for installation contractors, to be sure, but they also have the background to seek employment in other demand-side energy markets.

Some relevant job titles are:

- Solar Photovoltaic**
Installation, Technician, Installation Manager, Project Coordinator
- Solar Thermal**
Installation, Technician, Installation Manager, Project Coordinator
- Solar Sales Representatives and Assessors**

“The use of solar energy offers huge potential for natural resource and climate protection, and for the expansion of renewable energies on the road to a future-oriented energy supply.”

(Margareta Wolf, speech 2004)



Students install a 3kW pole mounted PV system located on the Lane Community College main campus.

Note: Required Cooperative Education internships may also be taken during the summer (a maximum of 18 co-op credits).

Prerequisites are required for some courses. Up to date course descriptions are located in the Lane Community College Annual College Class Catalog.

- 1. Must be completed during first year.
- 2. Physical Education Activity/Health requirement: 3 credits total.
- 3. Human Relations/Social Science requirement: 3 credits total.
- 4. Directed electives to be arranged with program advisor.

Degree Overview

The classes listed below are subject to change. For the most current information, see AAS degree requirements within Lane Community College’s annual catalog.

YEAR 1 CLASSES

FALL TERM	CREDITS
Microsoft Excel for Business	4
Blueprint Reading: Residential & Commercial	3
College Algebra (MTH 111) ¹	5
Introduction to Energy Management	3
Sustainability in the Built Environment	3
Fundamentals of Physics (PH 101)	4
Total	22

WINTER TERM	CREDITS
Residential/Light Commercial Energy Analysis	3
Alternative Energy Technologies	3
Co-op Ed: Energy Conservation Seminar	1
Fundamentals of Physics (PH 102)	4
Introduction to Academic Writing	4
Human Relations at Work ³	3
Total	18

SPRING TERM	CREDITS
Air Conditioning Systems Analysis (NRG 121)	3
Energy Efficient Methods	4
Lighting Fundamentals	3
Technical Writing	4
Total	14

YEAR 2 CLASSES

FALL TERM	CREDITS
Electrical Theory 1	4
Energy Investment Analysis	3
Photovoltaic Design and Installation 1	4
Renewable Energy Systems	3
Directed Electives ⁴	3
Total	17

WINTER TERM	CREDITS
Electrical Theory 2	4
Photovoltaic Design and Installation 2	4
Solar Thermal Design and Installation 1	4
Co-op Ed: Energy Management Seminar 2	1
Physical Education/Health Requirements ²	1-3
Directed Electives ⁴	3
Total	17-19

SPRING TERM	CREDITS
Solar Thermal Design and Installation 2	4
Solar Photovoltaics Systems Design and Installation	4
Co-op Ed: Energy Management	6
Total	14

Sign Up For The Program. It’s Easy!

Fill out a simplified one page application. A high school diploma (or equivalent) and Math 70 (Basic Algebra) is all that is required for entry.

Additional details online at:
<http://www.nweei.org>