RENEWABLE ENERGY ENGINEERING EMPHASIS, AS - WITH OREGON INSTITUTE OF TECHNOLOGY (OREGON TECH)

Program Code: AS.OITRNWNRGENGR

The Associate of Science with an emphasis in Engineering is for students interested in transferring a bachelor's degree to Portland State University, Oregon State University, or Oregon Tech (Oregon Institute of Technology).

For information contact Eric Lee, 503-594-6163 or elee@clackamas.edu

Outcomes

Program Outcomes

Upon successful completion of this program, students should be able to:

- apply the fundamental elements of engineering design;
- employ mathematics, science, and computing techniques in a systematic and rigorous manner to support the study and solution of engineering problems;
- conduct and document laboratory experiments in the sciences and engineering, effectively communicating determined quantitative relationships using both graphs and equations;
- exhibit good teamwork skills and serve as effective members of laboratory and project teams;
- articulate and justify technical solutions to an audience through oral, written, and graphical communication.

Requirements

First Year		
Fall Term		**Credits**
CH-221	General Chemistry	5.00
ENGR-111	Introduction to Engineering	3.00
MTH-251	Calculus I	5.00
WR-121Z	Composition I	4.00
	Credits	**17**
Winter Term		
CH-222	General Chemistry	5.00
COMM-111Z	Public Speaking	4.00
MTH-252	Calculus II	5.00
Humanities Elective (p. 1)		3.00-4.00
	Credits	**17-18**
Spring Term		
EC-201 or EC-202	Principles of Economics: Micro or Principles of Economics: Macro	4.00
MTH-254	Vector Calculus	5.00
WR-227Z	Technical Writing	4.00
Humanities Elective (p. 1)		3.00-4.00
	Credits	**16-17**
Second Year		
Fall Term		
ENGR-211	Statics	4.00
ENGR-221	Electrical Circuit Analysis I	4.00
PH-211	General Physics With Calculus	5.00
	Credits	**13**
Winter Term		
ENGR-222	Electrical Circuit Analysis II	4.00
MTH-256	Differential Equations	4.00
PH-212	General Physics With Calculus	5.00
Social Science Electives (p. 1)		4.00
	Credits	**17**
Spring Term		
ENGR-223	Electrical Circuit Analysis III	4.00
MTH-261	Linear Algebra	4.00
PH-213	General Physics With Calculus	5.00
Social Science Elective (p. 1)		3.00-4.00
	Credits	**16-17**
	Total Credits	**96-99**

Humanities Electives

Choose courses from the following subjects: ART, ASL (200-level), ENG, FR (200-level), GER (200-level), HUM, MUS, PHL, R, SPN (200-level), TA

SOCIAL SCIENCE ELECTIVES

Choose courses from the following subjects: ANT, EC, GEO, HST, PS, PSY, SOC, SSC, WS

Optional

While not required for the AS degree, students may complete additional coursework at CCC that will meet requirements for the Bachelor of Science degree at Institute of Technology and is listed below.

- COMM-219 Small Group Discussion
- Up to 3 additional Social Science Elective credits from the list above
- Up to 6 additional Humanities Elective credits from the list above