COMPUTER ENGINEERING EMPHASIS, AS - WITH PORTLAND STATE UNIVERSITY

Program Code: AS.PSUCOMPENGR

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
CS-161	Computer Science I	4
ENGR-111	Introduction to Engineering	3
MTH-251	Calculus I	5
	Credits	**17**

Winter Term

CS-162	Computer Science II	4
ENGR-112	Engineering Programming	3
ENGR-171	Digital Logic	4
MTH-252	Calculus II	5
	Credits	**16**

Spring Term

COMM-111Z	Public Speaking	4
ENGR-271	Digital Systems	4
MTH-261	Linear Algebra	4
WR-121Z	Composition I	4
	Credits	**16**

Summer Term

WR-122Z or WR-227Z	Composition II or Technical Writing	4
	Credits	**4**

Second Year

Fall Term

ENGR-221	Electrical Circuit Analysis I	4
PH-211	General Physics With Calculus	5
Arts & Letters Electives (p. 1)		4
	Credits	**13**

Winter Term

ENGR-222	Electrical Circuit Analysis II	4
MTH-256	Differential Equations	4
PH-212	General Physics With Calculus	5
Social Science Electives (p. 1)		4
	Credits	**17**

Spring Term

ENGR-223	Electrical Circuit Analysis III	4
MTH-253	Calculus III	5
PH-213	General Physics With Calculus	5
Select one of the following:		3-4
Arts & Letters Electives (p. 1)		
Social Science Electives (p. 1)		
	Credits	**17-18**
	Total Credits	**100-101**

Arts & Letters Electives

All courses in ASL, COMM, ENG, FR, GER, HUM, PHL, SPN, WR. Note that native speakers should only take advanced (300 level or above) world language courses.

Non-performance based courses in art, journalism, music, and theater also meet this requirement:

Code	Title	Credits
ART-101	Art Appreciation	3
ART-205	History of Art/Romanesque Through Baroque	4
ART-206	History of Art/Enlightenment Through Contemporary	4
J-211	Mass Media & Society	4
MUS-105	Music Appreciation	3
MUS-141	Introduction to the Music Business	3
MUS-205	Music Literature: History of Jazz	4
MUS-206	Music Literature: History of Rock	4
MUS-230	Music and Media: Sex, Drugs, Rock & Roll	4
TA-101	Appreciation of Theatre	4
TA-102	Appreciation of Theatre	4

Social Science Electives

All courses in ANT, EC, GEO, HST, PS, PSY, SOC, SSC, and WS