ELECTRONICS ENGINEERING TECHNOLOGY, AAS

Program Code: AAS.ELECTRONENGTECH

Program course work focuses on a traditional electronics foundation, including a basic electronics series, digital logic series, a troubleshooting series, a physics series and a semiconductor linear circuit series. The degree focuses on electronics and engineering design principles and electronics systems and is taught in a team environment whenever possible.

Specific skill areas for the Electronics Engineering Technology degree include test equipment use, computer use, problem-solving, teamwork, understanding math and electronics fundamentals and writing and oral communication.

Oregon Tech Transfer Courses

The Industrial Technology Department, in partnership with Oregon Tech, offers a number of transferable classes into Oregon Tech's Electronics Engineering Technology degree program. Students planning to continue their studies at a four-year college should consult an advisor to obtain the most recent transfer information.

For information contact the Industrial Technology Department, 503-594-3318.

Outcomes

Related Instruction Outcomes

Computation

- 1 course - MTH-111Z Precalculus I: Functions
- Use appropriate mathematics to solve problems.

Communication

- 1 course - WR-121Z Composition I
- Read actively, think critically, and write purposefully and capably for professional audiences.

Human Relations

- 3 credits - Recommended: PSY-101 Human Relations
- Engage in ethical communication processes that accomplish goals.

Physical Education/Health/Safety/First Aid

- 1 course - MFG-107 Industrial Safety & First Aid
- Use effective life skills to improve and maintain mental and physical well-being.

Program Outcomes

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

- communicate critical information about electronic systems using verbal, written, or graphical means;
- troubleshoot electrical and electronic systems;
- analyze electronic systems;
- install or build electronic and electromechanical systems;
- use proper electrical test equipment to test and maintain electronic and electrical components and equipment;
- demonstrate safe work habits around electricity and electronic equipment.

Requirements

First Year

First Term		**Credits**
EET-112	Electronic Equipment and Assembly I	1
EET-137	Electrical Fundamentals I	4
EET-139	Principles of Troubleshooting I	2
EET-157	Digital Logic I	3
SM-150	Semiconductor Processing I	2
WR-121Z	Composition I	4
	Credits	**16**
Second Term		
EET-113	Electronic Equipment and Assembly II	1
EET-141	Electrical Fundamentals II	4
EET-257	Digital Logic II	3
IMT-120	Industrial Machinery I	3
MTH-111Z	Precalculus I: Functions	4
	Credits	**15**
Third Term		
EET-114	Electronic Equipment and Assembly III	1
EET-142	Electrical Fundamentals III	4
EET-254	Introduction to Microcontrollers	3
IMT-223	Instrumentation & Controls	3
MTH-112Z	Precalculus Ii: Trigonometry	4
	Credits	**15**
Second Year		
Fourth Term		
EET-127	Semiconductor Circuits I	2
EET-215	Technical Mechanics	3
EET-239	Principles of Troubleshooting II	2
MFG-107	Industrial Safety & First Aid	3
HD-209	Job Search Skills	1
Electives (p. 2)		3-5
	Credits	**14-16**
Fifth Term		
Select one of the following:		3
CDT-103	Computer-Aided Drafting I	
CDT-108A	Introduction to SolidWorks	
CDT-223	Inventor Fundamentals	
EET-225	Mechatronics I	2
EET-227	Semiconductor Circuits II	3
EET-233	Programmable Logic Controllers I	3
MFG-209	Programming & Automation for Manufacturing	3
Electives (p. 2)		3-5
	Credits	**17-19**
Sixth Term		
EET-234	Programmable Logic Controllers II	3

EET-235	Mechatronics II	2
EET-250	Linear Circuits	3
SM-280	Electronics & Microelectronics/CWE	4
Human Relations requirement		3
PSY-101	Human Relations (Recommended)	
Electives (p. 2)		3-5
	Credits	**18-20**
	Total Credits	**95-101**

Electives

Any CDT, EET, MFG, MET, RET, SM, or WLD course not included in the program.

Recommended Electives

Code	Title	Credits
CS-140	Introduction to Operating Systems	4
CS-161	Computer Science I	4
MFG-140	Principles of Fluid Power	3
MFG-219	Robotics	3
MTH-251	Calculus I [1]	5
PH-211	General Physics With Calculus [1]	5
PH-212	General Physics With Calculus [1]	5
PH-213	General Physics With Calculus [1]	5
WR-227Z	Technical Writing	4

[1] Recommended for students who plan to transfer to Oregon Tech. Oregon Tech will also accept PH-201 General Physics, PH-202 General Physics, and PH-203 General Physics. Students should contact Oregon Tech about transferability of these classes.

Careers

Career opportunities include:

- engineering technician
- manufacturing equipment technician
- field services technician
- operators and processors with large and small employers in high-tech industries