## **Transfer Guide**

Clackamas Community College Electronics Engineering Technology to

Oregon Institute of Technology
Bachelor of Science in Electronics Engineering Technology

Courses Required for Clackamas CC's Electronics Engineering Technology for Oregon Tech's Electronics Engineering Technology Degree to be taken at Clackamas CC

Clackamas CC Course Number and Title	Qtr.	Oregon Tech Course Number and Title	Qtr.
	Units		Units
Human relations elective. PSY 101 or BA	3	Social Science Elective	3
285 recommended. See page 82 of catalog			
for list of approved related instruction			
courses.			
MTH 111 College Algebra	5	MATH 111 College Algebra	4
MTH 112 Trigonometry/Pre-Calculus	5	MATH 112 Trigonometry	4
WRI 121 English Composition	4	WRI 121 English Composition	3
EET 137 Electrical Fundamentals I	4	EE 121 Fund. of Electric Circuits I	4
EET 141 Electrical Fundamentals II	4	EE 123Fund. of Electric Circuits II	4
EET 142 Electrical Fundamentals III	4		
EET 157 (3) Digital Logic I	3	EE 131 Digital Electronics I	4
EET 257 (3) Digital Logic II	3	EE 133 Digital Electronics II	4
EET 127 – Semiconductor Circuits I	2	EE 219 Intro. to Semiconductor Devices	4
		and Amplifiers	
EET 227 – Semiconductor Circuits II	3	Elective	2
EET 250 Linear Circuits	3		
EET 254 Introduction to microcontrollers	3		
EET 112 Electronics Equipment and	1		
Assembly I			
EET 113 Electronics Equipment and	1		
Assembly II			
EET 114 Electronics Equipment and	1	Electronics 200-level Technical Electives	16
Assembly III			
EET 139 Principles of Troubleshooting I	2		
EET 239 Principles of Troubleshooting II	2		
EET 215 Technical Mechanics	3		
EET 225 Mechatronics I	2		
EET 235 Mechatronics II	2		
EET 233 PLCs I	3		
EET 234 PLC II	3		
SM 150 Semiconductor Processing I	2		
SM-280 Electronics/microelectronics	4		
corporate work experience			

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HD209 – Job skills	1		
MFG 107 Industrial Safety & First Aid	3		
MFG 209 Program. & Automation for MFG	3	General Elective (Does not count	
		towards BSEET degree)	
IMT 223 Instrumentations and Controls	3		
IMT 220 Industrial Machinery I	3		
CDT Computer aided drafting (Choose	3		
between CDT 103, CDT 108A, CDT 223)			
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Clackamas CC Elective: Students must	I		I.
also take three elective courses of at least			
three credits each. The following courses			
satisfy these elective requirements and			
are selected for best transferability.			
PHY 211 General Physics I w/Calculus	5	PHY 221 General Physics I w/Calculus	4
PHY 212 General Physics II w/Calculus	5	PHY 222 General Physics II w/Calculus	4
PHY 213 General Physics III w/Calculus	5	PHY 223 General Physics III w/Calculus	4
MATH 251 Calculus I	5	MATH 251 Differential Calculus	4
MATH 252 Calculus II	5	MATH 252 Integral Calculus	4
CS 161 Computer Science I	4	CST 116 C++ Programming I	4
WRI 227 Technical Writing	4	WRI 227 Technical Report Writing	3

Additional Courses required for Oregon Tech's Bachelor of Science in Electronics Engineering Technology and can be taken at either Clackamas or Oregon Tech.

Clackamas CC Course Number and Title	Qtr.	Oregon Tech Course Number and Title	Qtr.
	Units		Units
Arts & Letters/Humanities elective <sup>1</sup>	9	Humanities elective	9
Social Science elective <sup>2</sup>	9	Social Science elective	9
MTH 243 Statistics I	4	MATH 243 Introductory Statistics	4
MTH 254 Vector Calculus	5	MATH 254N Vector Calculus I	4
MTH 256 Differential Equations <sup>3</sup>	4	MATH 321 Applied Differential	4
With 250 Differential Equations	4	Equations I <sup>3</sup>	4
COMM 111 Public Speaking	4	SPE 111 Public Speaking	3
COMM 219 Small Group Communications <sup>3</sup>	4	SPE 321 Small Group and Team	2
COMMUNICATIONS 4	4	Communication <sup>3</sup>	3
WRI 122 English Composition	4	WRI 122 Argumentative Writing	3

In addition to the above courses, the courses listed below are also required for the Bachelor of Science in Electronics Engineering Technology and are offered only by Oregon Tech.

Oregon Institute of Technology Course Number & Title	
Engineering Technical Elective	
EE 320 Advanced Circuit and Systems Analysis	5

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EE 321 Electronics I	
EE 323 Electronics II	
EE 325 Electronics III	
EE 331 Digital System Design w/HDL	
EE 333 Microcontroller Engineering	
EE 335 Advanced Microcontroller Engineering	
EE 401 Communication Systems	
EE 430 Linear Systems and Digital Signal Processing	
EE 432 Advanced Digital System Design w/HDL	
ENGR 267 Engineering Programming	
ENGR 465 Capstone Project	
MGT 345 Engineering Economy	
Writing Elective, choose from: WRI 327 Advanced Technical Writing WRI 350 Documentation Development WRI 410 Proposal and Grant Writing	
Additional Oregon Tech Credits <sup>4</sup>	
Total Degree Credits <sup>5</sup>	

- 1. Students must take nine credits of Humanities Electives. However, only 3 humanities credits can be studio/performance based Choose from ART, ENG, FA, MUS, PHL, R, or Second Year Foreign Language, prefixes or other courses designated as Humanities Electives by the Oregon Tech Registrar's Office.
- 2. Twelve credits of lower division Social Science Electives are required. Choose from ANTH, ECON, HST, PS, PSY, and SOC prefixes or other courses designated as Social Science Electives by the Oregon Tech Registrar's Office.
- 3. Does not count toward 60 upper-division credit requirement.
- 4. Baccalaureate students must complete a minimum of 60 credits of upper-division work before a degree will be awarded. Upper-division is defined as 300- and 400-level classes at a bachelor's degree granting institution and 45 credits must be from Oregon Tech.
- 5. Oregon Tech's Bachelor of Science in Electronics Engineering Technology requires 188 total credits.

## For more information:

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