

**Columbia Gorge Community College
Electro-Mechanical Technology
to
Oregon Institute of Technology
Electronics Engineering Technology
Articulation Agreement
2018 - 2019 Catalog**

It is agreed that students transferring from Columbia Gorge Community College's Associate of Applied Science (AAS) in Electro-Mechanical Technology (EM-Tech) program to Oregon Institute of Technology's (Oregon Tech) Bachelor of Science in Electronics Engineering Technology (EET) will be given full credit for all courses listed below. In addition to the AAS-EM-Tech degree requirements, it is recommended that students have completed Calculus II (MTH252) since Integral Calculus is a prerequisite for most upper-division EET courses. This agreement is based on the evaluation of the rigor and content of the general education and technical courses at both CGCC and Oregon Tech and is subject to a yearly reevaluation by both schools for continuance. This agreement is dated December 3, 2018.

Baccalaureate students at Oregon Tech 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. Baccalaureate students at Oregon Tech must complete 45 credits from Oregon Tech before a degree will be awarded.

Students are responsible for notifying the Oregon Tech Admissions and Registrar's Office when operating under an articulation agreement to ensure their credits transfer as outlined in this agreement. In order to utilize this agreement students must be attending Columbia Gorge Community College during the above catalog year. Students must enroll at Oregon Tech within three years of this approval.

CGCC Degree Courses & Oregon Tech Equivalent Credits

Columbia Gorge Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
EET 111 DC Circuits	5	EE 121 Electric Circuits I	4
EET 112 AC Circuits	5	EE 123 Electric Circuits II	4
EET 113 AC Power	5		
EET 251 Digital Electronics 1: PLDs	5	EE 131 Digital Electronics I	4
EET 252 Digital Electronics 2: PLDs	5	EE 133 Digital Electronics II	4
EET 221 Semiconductor Devices and Circuits	5	EE 219 Semiconductor Devices and Amplifiers	4
EET 222 Operational Amplifier Circuits	5	200-Level Technical electives	16
EET 242 Microcontroller Systems	5		
EET 273 Electronic Control Systems	3		
RET 141 Electrical Motors/Generator Controls	5		
RET 219 Programmable Logic Controllers	3		
RET 223 Power Generation	5		
SAF 188 Industrial Safety and OSHA 10	2	General elective	2
RET Elective: MTH College Algebra	5	MATH 111 College Algebra	4
General Education: Arts & Humanities ²	4	Humanities elective ¹	3
General Education: Social Science	8	Social Science elective	8
PSY 101 Psychology and Human Relations	4	Social Science elective ²	4
WR 121 English Composition	4	WRI 121 English Composition	3
Total CGCC Degree Credits ³	83	Total Oregon Tech Degree Credits	60

**CGCC courses required for Electro-Mechanical Technology AAS degree but NOT
required for Oregon Tech's Bachelor of Science in Electronics Engineering Technology**

Columbia Gorge Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
CG 209 Job Finding Skills	3	General elective (Does not count toward EET degree) ¹	--
MEC 120 Hydraulics	1		
MEC 123 Industrial Mechanical Systems	5		
PE 182H Adult Fitness	1		
RET 101 Intro to Wind Turbine Operations	2		
Additional CGCC Credits ³	12	Additional Oregon Tech Degree Credits	--
Total CGCC Credits ³	95	Total Oregon Tech Degree Credits	60

**Courses not required for CGCC's Associate of Applied Science in Electro-Mechanical
Technology but are required for Oregon Tech's Bachelor of Science in Electronics Engineering
Technology and can be taken at CGCC or Oregon Tech.**

Columbia Gorge Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
COMM 111 Public Speaking	4	SPE 111 Public Speaking	3
COMM 215 Small Group Communication: Process and Theory ⁴	4	SPE 321 Small Group and Team Communication ⁴	3
MTH 112 Elementary Functions	5	MATH 112 Trigonometry	4
MTH 251 Calculus I	4	MATH 251 Differential Calculus	4
MTH 252 Calculus II	5	MATH 252 Integral Calculus	4
WR 122 English Composition	4	WRI 122 Argumentative Writing	3
WR 227 Technical & Professional Writing I	4	WRI 227 Technical Report Writing	3
Humanities elective (Arts & Letters) ²	6	Humanities elective ²	6
Additional CGCC Credits	36	Additional Oregon Tech Credits	30
Total CGCC Credits ¹	141	Total Oregon Tech Degree Credits	90

In addition to the above courses, the courses listed below are also required for the Bachelor of Science in Electronics Engineering Technology and should be completed at Oregon Tech.

Oregon Institute of Technology Course Number & Title	Qtr. Units
CST 116 C++ Programming I	4
EE 320 Advanced Circuit and Systems Analysis	5
EE 321 Electronics I	5
EE 323 Electronics II	5
EE 325 Electronics III	5
EE 331 Digital System Design with HDL	4
EE 333 Microcontroller Engineering	4
EE 335 Advanced Microcontroller Engineering	4
EE 401 Communication Systems	5
EE 430 Linear Systems and Digital Signal Processing	5
EE 432 Advanced Digital System Design with HDL	4
ENGR 267 Engineering Programming	3
ENGR 465 Capstone Project	6
MATH 254 Vector Calculus I	4
MATH 321 Applied Differential Equations I	4
Statistics elective: MATH 243 Introductory Statistics MATH 361 Statistical Methods I MATH 465 Mathematical Statistics	4
MGT 345 Engineering Economy	3
PHY 221 General Physics with Calculus	4
PHY 222 General Physics with Calculus	4

PHY 223 General Physics with Calculus	4
Engineering elective (advisor approved upper division)	9
Writing Elective, choose from: WRI 327 Advanced Technical Writing WRI 350 Documentation Development WRI 410 Proposal and Grant Writing	3
Additional Oregon Tech Credits ⁵	98
Total Accumulated Oregon Tech Degree Credits ⁶	188

1. Students can transfer up to 9 credit hours of Humanities electives into the EET program. **No more than 3 credits of activity or performance based humanities courses are accepted.** These courses should be designated as Humanities electives by the Oregon Tech Registrar's Office. Choose from the following CGCC prefixes: ART, ENG, HUM, MUS, PHL, Second-Year Foreign Languages or TA.
2. Students can transfer up to 12 credit hours of Social Science electives into the EET program. These courses should be designated as Social Science electives by the Oregon Tech Registrar's Office. Choose from the following CGCC prefixes: ATH, EC, HST, PS, PSY, SOC, or WS.
3. Excess credits will transfer to Oregon Tech as general elective credit; these credits will **not** be used toward the Bachelor of Science in Electronics Engineering Technology.
4. Does not count toward upper-division requirement.
5. Baccalaureate students must complete a minimum of 60 upper-division credits before a degree will be awarded. Upper-division is defined as 300- and 400- level classes at a bachelor's degree granting institution. A minimum of 45 credits must be from Oregon Tech.
6. Oregon Tech's Bachelor of Science in Electronics Engineering Technology requires 188 total credits.