

**Clackamas Community College
Engineering Transfer
to
Oregon Institute of Technology
Bachelor of Science in Electrical Engineering**

**Articulation Agreement
2016 - 2017 Catalog**

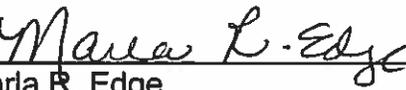
It is agreed that students transferring from Clackamas Community College (Clackamas) to Oregon Institute of Technology's (Oregon Tech) Bachelor of Science in Electrical Engineering (BSEE) will be given full credit for all selected courses listed below. This agreement is based on the evaluation of the rigor and content of the general education and technical courses at both Clackamas and Oregon Tech and is subject to a yearly reevaluation by both schools for continuance. This agreement is dated July 21, 2016.

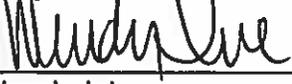
Baccalaureate students must complete a minimum of 60 credits of upper-division work before a degree will be awarded. Upper-division is defined as 300- and 400-level classes at a bachelor's degree granting institution. Baccalaureate students at Oregon Tech must complete 45 credits from Oregon Tech before a degree will be awarded.

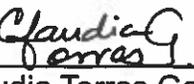
Students are responsible for notifying the Oregon Tech Admissions and Registrar's Office when operating under an articulation agreement to ensure their credits transfer as outlined in this agreement. Dual enrollment is possible according to an existing Memorandum of Understanding. In order to utilize this agreement, students must be attending Clackamas during the above catalog year. Students must enroll at Oregon Tech within three years of this approval.

By 
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Clackamas Courses & Oregon Tech Equivalent Credits

Clackamas Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
Arts & Letters elective ¹	9	Humanities elective ¹	9
CH-221 General Chemistry	5	CHE 201 General Chemistry CHE 204 General Chemistry Lab	3 1
CH-222 General Chemistry	5	CHE 202 General Chemistry CHE 205 General Chemistry Lab	3 1
CS-161 Computer Science I	4	CST 116 C++ Programming I	4
ENGR-221 Electrical Circuit Analysis	4	EE 221 Circuits I	4
ENGR-222 Electrical Circuit Analysis II	4	EE 223 Circuits II	4
ENGR-223 Electrical Circuit Analysis III	4	EE 225 Circuits III	4
ENGR-171 Digital Logic	4	EE 131 Digital Electronics I	4
ENGR-271 Digital Systems	4	EE 133 Digital Electronics II	4
MTH-251 Calculus I	5	MATH 251 Differential Calculus	4
MTH-252 Calculus II	5	MATH 252 Integral Calculus	4
MTH-253 Calculus III	5	MATH 253N Sequence and Series	4
MTH-254 Vector Calculus	5	MATH 254N Vector Calculus I	4
MTH-256 Differential Equations ²	4	MATH 321 Applied Differential Equations I ²	4
MTH-261 Linear Algebra ²	4	MATH 341 Linear Algebra ²	4
PH-211 General Physics with Calculus	5	PHY 221 General Physics with Calculus	4
PH-212 General Physics with Calculus	5	PHY 222 General Physics with Calculus	4
PH-213 General Physics with Calculus	5	PHY 223 General Physics with Calculus	4
Social Science elective ³	12	Social Science elective ³	12
COMM-111 Public Speaking	4	SPE 111 Public Speaking	3
COMM-219 Small Group Communication ²	4	SPE 321 Small Group & Team Communication ²	3
WR-121 English Composition	4	WRI 121 English Composition	3
WR-122 English Composition	4	WRI 122 Argumentative Writing	3
WR-227 Technical Report Writing	4	WRI 227 Technical Report Writing	3
Total Clackamas Credits ⁴	124	Total Oregon Tech Degree Credits ⁴	104

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

Oregon Institute of Technology Course Number & Title	Qtr. Units
EE 321 Electronics I	5
EE 323 Electronics II	5
EE 331 Digital Systems Design with HDL	4
EE 333 Microcontroller Engineering	4
EE 335 Advanced Microcontroller Engineering	4
EE 341 Electricity and Magnetism with Transmission Lines	4
EE 343 Solid-State Electronic Devices	3
EE 355 Control System Design	4
EE 401 Communication Systems	5
EE 430 Linear Systems and Digital Signal Processing	5
EE 432 Advanced Digital System Design with HDMI	4
ENGR 267 Engineering Programming	3
ENGR 465 Capstone Project	6
Engineering electives	14
MATH 465 Mathematical Statistics	4
MGT 345 Engineering Economy	3
Advanced Writing Elective	3
Additional Oregon Tech Credits ⁵	80
Total Oregon Tech Degree Credits ⁶	184

1. Students can transfer up to 9 credit hours of Humanities electives (Arts & Letters). **No more than 3 credits of activity or performing based humanities courses are accepted.** Choose from the following Clackamas course prefixes: ART, ENG, HUM, MUS, PHL, R, TA, Second-year Foreign Languages or other courses designated as Humanities electives by the Oregon Tech Registrar's Office.
2. Does not count toward 60 upper-division credit requirement.
3. Students can transfer up to 12 credit hours of Social Science electives. Choose from the following Clackamas course prefixes: ANT, EC, GEO, HST, PS, PSY, SOC, SSC, and WS or other courses designated as Social Science electives by the Oregon Tech Registrar's Office.
4. Excess credits will transfer to Oregon Tech as general elective credit; these credits will **not** be used toward the Bachelor of Science in Electrical Engineering Degree.

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5. Baccalaureate degree 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 Electrical Engineering requires 184 total credits.