



ARTICULATION AGREEMENT GUIDE

Catalog Year: 2018-2019

Department Name – Engineering Technology

Transfer Guide with Oregon Institute of Technology

Purpose: Student transfer from Clackamas Community College to the Oregon Institute of Technology

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| Clackamas Community College Associate of Engineering Transfer | Oregon Institute of Technology Bachelor of Science in Electrical Engineering |
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Program/Major Requirements:

| Clackamas Community College Course Number & Title | Qtr. Units | Oregon Institute of Technology Course Number & Title | Qtr. Units |
|--|-----------------------|---|-----------------------|
| Humanities elective ¹ | 3 | Humanities elective ¹ | 3 |
| 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-111 Introduction to Engineering | 3 | ENGR 101 Introduction to Engineering I | 2 |
| ENGR-112 Engineering Programming | 3 | ENGR 102 Introduction to Engineering II | 2 |
| 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 253 Sequence and Series | 4 |
| MTH-254 Vector Calculus | 5 | MATH 254 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 | 3 | Social Science elective ³ | 3 |
| COMM-111 Public Speaking | 4 | SPE 111 Public Speaking | 3 |

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|---|------------|---|-----------|
| 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 | 109 | Total Oregon Tech Degree Credits | 93 |

Courses not required for Clackamas CC's Associate of Science - Engineering, but required for Oregon Tech's Bachelor of Science in Electrical Engineering.

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| Humanities Elective ¹ | 6 | Humanities Elective ¹ | 6 |
| Social Science Elective ² | 9 | Social Science Elective ² | 9 |
| Additional Clackamas CC Credits | 15 | Additional Oregon Tech Degree Credits | 15 |
| Total Clackamas CC Credits ⁴ | 124 | Total Oregon Tech Degree Credits | 108 |

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 401 Communication Systems | 5 |
| EE 430 Linear Systems and Digital Signal Processing | 5 |
| EE 432 Advanced Digital System Design with HDMI | 4 |
| EE 461 Control System Engineering | 4 |
| ENGR 267 Engineering Programming | 3 |
| ENGR 465 Capstone Project | 6 |
| Engineering electives | 14 |
| MATH 465 Mathematical Statistics | 4 |
| MGT 345 Engineering Economy | 3 |

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| Advanced 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 | 80 |
| Total Oregon Tech Degree Credits ⁶ | 188 |

In addition to the departmental requirements listed above, students must also complete coursework for university admission, general education requirements and BA/BS requirements. Meet with an Oregon Institute of Technology Academic & Career Coach to develop an effective transfer plan that will meet your individual needs.

General Education Requirements

- 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.
- Does not count toward 60 upper-division credit requirement.
- 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.
- 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.
- 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.
- Oregon Tech's Bachelor of Science in Electrical Engineering requires 184 total credits.