



# ARTICULATION AGREEMENT GUIDE

Catalog Year: 2018-2019

Department Name – Manufacturing 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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|--|---|
| <b>Clackamas Community College</b><br>Associate of Applied Science in Welding Technology | <b>Oregon Institute of Technology</b><br>Bachelor of Applied Science in Technology and Management |
|--|---|

**Program/Major Requirements:**

| CCC Courses  | Qtr. Credits | Oregon Institute of Technology Course Equivalents | Qtr. Credits |
|--|--------------|---|--------------|
| MTH 111 College Algebra  | 5            | MATH 111 College Algebra<br>Math/Science elective | 4<br>1       |
| General electives (recommend courses in next table)  |              | General elective(recommend courses in next table) | --           |
| WR 121 English Composition (recommended)   | 4            | WRI 121 English Composition                       | 3            |
| MFG 107 Industrial Safety & First Aid  | 3            | Career Technical Education Credits                | 60           |
| MFG 109 Computer Literacy for Technicians  | 3            |   |              |
| MFG 103 Machining for the Fabrication and Maintenance Trades   | 3            |   |              |
| MFG 221 Materials Science  | 3            |   |              |
| WLD 100 Welders' Print Reading   | 3            |   |              |
| WLD 110 Welder Certification   | 4            |   |              |
| WLD 111 Shielded Metal Arc Welding (Stick)<br><b>OR</b> WLD 111A and 111B Shielded Metal Arc Welding (Stick)               | 8            |   |              |
| WLD 113 GMAW/FCAW Welding (Wirefeed)<br><b>OR</b> WLD 113A and 113B Gas Metal Arc Welding/Flux-Core Arc Welding (Wirefeed) | 8            |   |              |
| WLD 115 Gas Tungsten Arc Welding (GTAW)<br><b>OR</b> WLD 115A and 115B Gas Tungsten Arc Welding (GTAW)                     | 8            |   |              |
| WLD 200 Welders' Print Reading II  | 3            |   |              |
| WLD 210 Pipe Welding   | 4            |   |              |
| WLD 211 Advanced SMAW Welding  | 4            |   |              |
| WLD 213 Advanced GMAW/FCAW Welding   | 4            |   |              |
| WLD 215 Advanced GTAW Welding  | 4            |   |              |
| WLD 250 Welding Fabrication I Beginning Project  | 4            |   |              |
| WLD 251 Welding Fabrication II Intermediate Project  | 4            |   |              |
| WLD 252 Welding Fabrication III Advanced Project   | 4            |   |              |

|                                       |           |   |           |
|---------------------------------------|-----------|---|-----------|
| WLD 280 Welding Technology/CWE        | 4         |   |           |
| Human Relations requirement           | 3         |   |           |
| Welding Technology program electives  | 7         |   |           |
| <b>TOTAL CLACKAMAS DEGREE CREDITS</b> | <b>97</b> | <b>TOTAL OREGON TECH DEGREE CREDITS</b> | <b>68</b> |

**Courses not required for Clackamas's Associate of Applied Science Welding Technology, but are required for Oregon Tech's Bachelor of Applied Science in Technology and Management and can be taken at Clackamas or Oregon Tech.**

| <b>CCC Courses</b>  | <b>Qtr. Credits</b> | <b>Oregon Institute of Technology Course Equivalents</b>  | <b>Qtr. Credits</b> |
|---|---------------------|---|---------------------|
| BA 211 Financial Accounting I   | 4                   | ACC 201 Principles of Accounting I  | 4                   |
| BA 213 Decision Making with Accounting Information                                  | 4                   | ACC 203 Principles of Managerial Accounting   | 4                   |
| BUS 206 Management Fundamentals   | 4                   | BUS 215 Principles of Management  | 3                   |
| BA 223 Principles of Marketing  | 4                   | BUS 223 Marketing I   | 3                   |
| BA 226 Business Law I   | 4                   | BA 226 Business Law   | 3                   |
| COMM 111 Public Speaking  | 4                   | SPE 111 Public Speaking   | 3                   |
| CS 135S Microsoft Excel   | 3                   | MIS 102 Spreadsheet Software Laboratory   | 1                   |
| CS 135DB Microsoft Access<br><b>OR</b><br>CS 275 Database Design                    | 3                   | MIS 113 Introduction to Database Systems<br><b>OR</b><br>MIS 275 Introduction to Relational Databases | 3                   |
| EC 201 Principles of Economics: Micro   | 4                   | ECO 201 Principles of Economics, Microeconomics   | 3                   |
| EC 202 Principles of Economics: Macro   | 4                   | ECO 202 Principles of Economics, Macroeconomics   | 3                   |
| Humanities elective   | 6                   | Humanities elective (up to 6 credits)   | 6                   |
| Lab Science elective: any biology, chemistry, or physical science courses with lab. | 4                   | Lab Science elective  | 4                   |
| Math/Science elective   | 3                   | Math/Science elective (up to 3 credits)   | 3                   |
| WR 122 English Composition  | 4                   | WRI 122 Argumentative Writing   | 3                   |
| WR 227 Technical Report Writing   | 4                   | WRI 227 Technical Report Writing  | 3                   |
| <b>Additional Clackamas credits</b>   | <b>59</b>           | <b>Additional Oregon Tech Degree credits</b>  | <b>52</b>           |
| <b>TOTAL CLACKAMS DEGREE CREDITS</b>  | <b>156</b>          | <b>TOTAL OREGON TECH DEGREE CREDITS</b>   | <b>120</b>          |

**Additional Requirements for Program/Major:**

Oregon Institute of Technology courses

*All classes below are available online.*

| <b>Course Number</b>                                 | <b>Qtr.<br/>Credits</b> |
|--|-------------------------|
| ACC 325 Finance                                      | 4                       |
| ANTH 452 Globalization                               | 3                       |
| BUS 349 Human Resource Management I                  | 3                       |
| BUS 356 Business Presentations                       | 4                       |
| BUS 441 Leadership I                                 | 3                       |
| BUS 457 Business Research Methods II                 | 3                       |
| BUS 467 Service Management                           | 3                       |
| BUS 478 Cases in Strategy and Policy                 | 3                       |
| BUS 495 Senior Project Proposal                      | 1                       |
| BUS 496 Senior Project                               | 2                       |
| BUS 497 Senior Project                               | 3                       |
| MATH 361 Statistical Methods                         | 4                       |
| MGT 321 Operations Management I                      | 3                       |
| MGT 335 Project Management                           | 3                       |
| MGT 461 Lean/Six Sigma Management I                  | 3                       |
| PHIL 331 Ethics in the Professions                   | 3                       |
| <b>OR</b><br>PHIL 342 Business Ethics                |                         |
| PSY 347 Organizational Behavior                      | 3                       |
| SPE 321 Small Group and Team<br>Communication        | 3                       |
| Technical electives (upper-division)                 | 3                       |
| WRI 327 Advanced Technical Writing                   | 3                       |
| <b>Additional Oregon Tech Credits <sup>6</sup></b>   | <b>60</b>               |
| <b>Total Oregon Tech Degree Credits <sup>7</sup></b> | <b>180</b>              |

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**

- To maximize useable credits toward the BAS degree, the listed course is recommended.
- Students can transfer up to 4 credit hours of math/science electives into the BAS program; these courses should be designated as math/science electives by Oregon Tech. Choose from the following Clackamas prefixes: BI, BOT, CH, G, GS, MTH, PH, Z or other courses designated as math/science electives by the Oregon Tech Registrar's Office. Please note that Oregon Tech does not grant science credit for computer science courses.
- Excess credits will transfer to Oregon Tech as general elective credit with the exception of developmental course work; these credits will **not** be used toward the BAS degree.
- Students can transfer up to 6 credit hours of humanities electives into the BAS program; these courses should be designated as humanities electives by Oregon Tech. However, only 3 humanities credits can be studio/performance based. Choose from the following Clackamas prefixes: ART, ENG, HUM, MUS, PHL, R, TA, Second-year Foreign Languages or other courses designated as humanities electives but the Oregon Tech Registrar's Office.
- The BAS program requires one biological or physical science with lab. Choose from following Clackamas prefixes: BI, BOT, CH, G, GS, PH, Z or other courses designated as lab science electives by the Oregon Tech Registrar's Office.
- 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.
- Oregon Tech's Bachelor of Applied Science in Technology and Management requires 180 credits.