

Clackamas Community College
Associate of Applied Science Computer Aided Manufacturing
to
Oregon Institute of Technology
Bachelor of Applied Science in Technology and Management

Articulation Agreement
2016 - 2017 Catalog

It is agreed that students transferring with Clackamas Community College's (Clackamas) Associate of Applied Science (AAS) Computer Aided Manufacturing program to Oregon Institute of Technology's (Oregon Tech) Bachelor of Applied Science (BAS) in Technology and Management program 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 September 14, 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.

Admission to Oregon Tech is not guaranteed. Students must apply for admission to Oregon Tech in accordance with the then-existing rules, policies and procedures of Oregon Tech. 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 Community College during the above catalog year. Students must enroll at Oregon Tech within three years of this approval.

Clackamas Degree Courses & Oregon Tech Equivalent Credits

Clackamas Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
MTH 111 College Algebra ¹	5	MATH 111 College Algebra Math/Science elective (up to 4 credits) ²	4 1
General electives (courses in next table) ³	12/15	General elective (recommend MTH 111 College Algebra and courses in next table) ³	--
WR 121 English Composition (recommended) ¹	4	WRI 121 English Composition	3
Associate of Applied Science AND			
CDT 102 Sketching and Problem Solving	3	Career Technical Education Credits	60
CDT 108A Introduction to Solid/Works	3		
CDT 223 Inventor Fundamentals	3		
CDT 225 Advanced SolidWorks	3		
MET 170 Introduction to Manufacturing Process.	3		
MFG 105 Dimensional Inspection	3		
MFG 106 Applied Geometric Dimen/Toler/MFG	3		
MFG 107 Industrial Safety & First Aid	3		
MFG 109 Computer Literacy for Technicians	3		
MFG 111 Machine Tool Fundamentals I	6		
MFG 112 Machine Tool Fundamentals II	6		
MFG 113 Machine Tool Fundamentals III	6		
MFG 130 Basic Electricity I	3		
MFG 201 CNC I:Set-up & Operation	4		
MFG 202 CNC II: Programming & Operations	4		
MFG 203 CNC III: Applied Programming & Oper	3		
MFG 204 Computer-Aided Manufacturing I	4		
MFG 205 Computer-Aided Manufacturing II	4		
MFG 206 Computer-Aided Manufacturing III	3		
MFG 209 Programming/Automation for MFG	3		
MFG 219 Robotics	3		
MFG 221 Materials Science	3		
MFG 280 Manufacturing Technology/CWE	4		
TOTAL CLACKAMAS DEGREE CREDITS³	104- 107	TOTAL OREGON TECH DEGREE CREDITS³	68

Courses not required for Clackamas's Associate of Applied Science CAD/CAM 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.

Clackamas Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
BA 206 Management Fundamentals	4	BUS 215 Principles of Management	3
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
BA 223 Principles of Marketing	4	BUS 223 Marketing I	3
BA 226 Business Law I	4	BUS 226 Business Law I	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 OR CS 275 Database Design	3	MIS 113 Introduction to Database Systems OR 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 ⁴	6	Humanities elective (up to 6 credits) ⁴	6
Lab Science elective: any biology, chemistry, or physical science courses with lab. ⁵	4	Lab Science elective ⁵	4
Math/Science elective ²	3	Math/Science elective (up to 3 credits) ²	3
WR 122 English Composition	4	WRI 122 Argumentative Writing	3
WR 227 Technical Report Writing	4	WRI 227 Technical Report Writing	3
Additional Clackamas credits³	60	Additional Oregon Tech Degree credits	52
TOTAL CLACKAMAS CREDITS³	163-166	TOTAL OREGON TECH DEGREE CREDITS	117

In addition to the above courses, the courses listed below are also required for the Bachelor of Applied Science in Technology and Management and should be completed at Oregon Tech. All classes below are available online.

Oregon Institute of Technology Course Number & Title	Qtr. Units
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
MIS 206 Introduction to Management Information Systems	3
PHIL 331 Ethics in the Professions OR PHIL 342 Business Ethics	3
PSY 347 Organizational Behavior	3
SPE 321 Small Group and Team Communication	3
Technical electives (upper-division)	3
WRI 327 Advanced Technical Writing	3
Additional Oregon Tech Credits ⁶	63
Total Oregon Tech Degree Credits ⁷	180

1. To maximize useable credits toward the BAS degree, the listed course is recommended.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. Oregon Tech's Bachelor of Applied Science in Technology and Management requires 180 credits.