



Lane Community College
Associate of Applied Science in Manufacturing Technology
to
Oregon Institute of Technology
Bachelor of Science in Manufacturing Engineering Technology

Articulation Agreement
2019 - 2020 Catalog

It is agreed that students transferring with Lane Community College's (LCC) Associate of Applied Science in Manufacturing Technology to Oregon Institute of Technology's (Oregon Tech) Bachelor of Science in Manufacturing Engineering Technology (BMAN) 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 LCC and Oregon Tech, and is subject to a yearly reevaluation by both schools for continuance. This agreement is dated May 8, 2020.

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. In order to utilize this agreement students must be attending LCC during the above catalog year. Students must enroll at Oregon Tech within three years of this approval.

Lane Community College

 06/10/2020

Grant Matthews, Associate Vice President
CTE and Workforce Development


 06/11/2020

Paul Jarrell
Provost and Executive Vice President

Oregon Institute of Technology

 05/15/2020


Carleen Drago Starr, Director
Educational Outreach and Partnerships

 05/17/2020

Brian Moravec, Department Chair
Manufacturing and Mechanical Engineering and Technology

 05/17/2020

Tom Keyser, Dean
College of Engineering, Technology, and Management

 05/20/2020

Wendy Ivie
University Registrar

Lane Community College Degree Courses & Oregon Tech Equivalent Credits

Lane Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
CNC 102 - CNC Setup and Operations CNC 103 - CNC Programming	6	MFG 341 - Numerical Control Programming ¹	3
COMM 219 - Small Group Communication	4	SPE 321 - Small Group and Team Communication ¹	3
DRF 160 - Computer-Aided Drafting and Design ²	4	MET 242 - CAD for Mechanical Design II	2
Health/PE/Dance	3	Elective ³	--
Humanities (Arts and Letters) ⁴	4	Humanities Elective ⁴	3
MFG 153 - Manufacturing III	5	MFG 120 - Introductory Machining Processes	4
MTH 111 - College Algebra ²	5	MATH 111 - College Algebra	4
MTH 112 - Trigonometry ²	5	MATH 112 - Trigonometry	4
Program Core Courses			
CNC 101 - CNC Concepts	3	Electives ³	--
CNC 108 - CNC Projects	3		
ENGR 280M - Co-op Ed: Manufacturing Technology	3		
MFG 101 - Safety and Basic Shop Practice	3		
MFG 102 - Shop Measurement and Coordinate System	3		
MFG 103 - Metal Cutting Basics	3		
MFG 151 - Manufacturing I	6		
MFG 152 - Manufacturing II	4		
MFG 209 - Advanced Manufacturing Processes	6		
MFG 241 - Solid Modeling I	3		
MFG 242 - Solid Modeling II	3		
MFG 254 - Manufacturing IV	12		
MFG 255 - Manufacturing V	6		
WR 121 - Academic Composition ²	4		
Total LCC Degree Credits ³	98	Total Oregon Tech Degree Credits	26

Courses not required for Lane Community College's AAS in Manufacturing Technology but are required for Oregon Tech's BS in Manufacturing Engineering Technology and can be taken at LCC or Oregon Tech.

Lane Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
CH 221 - General Chemistry I	6	CHE 201 - General Chemistry I CHE 204 - General Chemistry I Laboratory	4
COMM 111 - Fundamentals of Public Speaking	4	SPE 111 - Public Speaking	3
ENGR 101 - Engineering Orientation	3	ENGR 111 - MMET Orientation	2
ENGR 102 - Engineering Orientation II	4	ENGR 266 - Engineering Computation	3

ENGR 115 - Engineering Graphics Must be AutoCAD based	3	MET 241 - CAD for Mechanical Design I	2
ENGR 211 - Statics	4	ENGR 211 - Engineering Mechanics: Statics	4
ENGR 213 - Strength of Materials	4	ENGR 213 - Engineering Mechanics: Strength of Materials	4
ENGR 221 - Electrical Fundamentals I	4	ENGR 236 - Fundamentals of Electrical Circuits	3
Humanities Electives ⁴	6	Humanities Electives ⁴	6
MTH 251 - Calculus I (Differential Calculus)	5	MATH 251 - Differential Calculus	4
MTH 252 - Calculus II (Integral Calculus)	5	MATH 252 - Integral Calculus	4
PH 211 - General Physics with Calculus	5	PHY 221 - General Physics with Calculus	4
PH 212 - General Physics with Calculus PH 213 - General Physics with Calculus	10	PHY 222 - General Physics with Calculus	4
Social Science Electives ⁵	9	Social Science Electives ⁵	9
WR 122 - Argument, Research, and Multimodal Composition	4	WRI 122 - Argumentative Writing	3
WR 227 - Technical Writing	4	WRI 227 - Technical Report Writing	3
Additional LCC Degree Credits ³	80	Additional Oregon Tech Degree Credits	62
Total LCC Degree Credits ³	178	Total Oregon Tech Degree Credits	88

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

Oregon Institute of Technology Course Number & Title	Qtr. Units
ANTH 452 - Globalization	3
Engineering Science Elective - choose one: ENGR 212 - Engineering Mechanics: Dynamics ENGR 355 - Thermodynamics MECH 318 - Fluid Mechanics I	3-4
ENGR 326 - Electric Power Systems	3
ENGR 415 - Occupational Safety	3
ENGR 491 - MMET Senior Projects I	3
ENGR 492 - MMET Senior Projects II	3
ENGR 493 - MMET Senior Projects III	3
MATH 361 - Statistical Methods I	4
MATH 362 - Statistical Methods II	4
MECH 260 - Engineering Materials I	3
MECH 315 - Machine Design I	3

MECH 316 - Machine Design II	3
MECH 360 - Engineering Materials II	3
MECH 363 - Engineering Instrumentation	3
MECH 426 - Fluid Power Systems	3
MET 375 - Solid Modeling	3
MFG Electives	9
MFG 103 - Introductory Welding Processes	3
MFG 112 - Introduction to Manufacturing Processes	3
MFG 313 - Manufacturing Analysis and Planning	3
MFG 314 - Geometric Dimensioning and Tolerancing	3
MFG 331 - Industrial Controls	3
MFG 333 - Statistical Methods for Quality Improvement	3
MFG 342 - Computer Aided Machining	3
MFG 343 - Manufacturing Tool Design	3
MFG 344 - Design of Manufacturing Tooling	3
MFG 447 - Lean Manufacturing	3
MFG 453 - Automation and Robotics in Manufacturing	3
MFG 454 - Thermal Systems for Manufacturing	3
Project Management Requirement	3
MGT 345 - Engineering Economy	3
WRI 327 - Advanced Technical Writing	3
Additional Oregon Tech Credits ⁶	104
Total Oregon Tech Degree Credits ⁷	192

1. Does not count toward the 60 upper-division credit requirement.
2. To maximize useable credits toward the BMAN, the listed course is recommended.
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 BMAN.
4. Students can transfer up to nine (9) credit hours of Humanities electives into the BMAN; these courses should be designated as Humanities electives by Oregon Tech. However, only three (3) humanities credits can be studio/performance based. Choose from the following LCC prefixes: ART, ENG, HUM, MUP, MUS, PHL, TA, or Languages (second year/200-level only).

5. Students can transfer up to nine (9) credit hours of Social Science electives into the BMAN; these courses should be designated as Social Science elective by Oregon Tech. Choose from the following LCC prefixes: ANTH, ECON, GEOG, HST, PS, PSY, or SOC.
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 BMAN requires 192 credits.