



**Klamath Community College**  
**Associate of Applied Science in Advanced Manufacturing Engineering Technology**  
**to**  
**Oregon Institute of Technology**  
**Bachelor of Science in Manufacturing Engineering Technology**

**Articulation Agreement**  
**2020 - 2021 Catalog**

It is agreed that students transferring with Klamath Community College's (KCC) Associate of Applied Science in Advanced Manufacturing Engineering Technology to Oregon Institute of Technology's (Oregon Tech) Bachelor of Science in Manufacturing Engineering Technology (BMAN) 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 KCC and Oregon Tech, and is subject to a yearly reevaluation by both schools for continuance. This agreement is dated July 16, 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. Dual Enrollment is possible according to an existing Memorandum of Understanding. 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 KCC during the above catalog year. Students must enroll at Oregon Tech within three years of this approval.

Klamath Community College

 08/11/2020

Jeanne LaHaie, Dean  
Instruction


 08/11/2020

Jamie Jennings, CAO/Vice President  
Academic Affairs

Oregon Institute of Technology

 08/04/2020


Carleen Drago Starr, Director  
Educational Outreach and Partnerships

 08/06/2020

Brian Moravec, Department Chair  
Manufacturing and Mechanical Engineering Technology

 08/06/2020

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

 08/06/2020

Wendy Ivie  
University Registrar

### Klamath Community College Degree Courses & Oregon Tech Equivalent Credits

Klamath Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
CAS 133 - Introduction to Computing Skills CAS 133L - Introduction to Computing Skills Lab	4	MIS 101 - Word Processing Software Lab <sup>1</sup> MIS 102 - Spreadsheet Lab <sup>1</sup> MIS 103 - Presentation Graphics Software Lab <sup>1</sup>	--
CGS 100 - College Survival and Success	3	Elective <sup>1</sup>	--
CHE 221 - General Chemistry I (Preprofessional) <sup>2</sup> CHE 221L - General Chemistry I Lab <sup>2</sup>	5	CHE 221 - General Chemistry	4
<b>Electives <sup>2</sup></b>			
MTH 112 - Elementary Functions	4	MATH 112 - Trigonometry	4
MTH 251 - Calculus I	4	MATH 251 - Differential Calculus	4
MTH 252 - Calculus II	4	MATH 252 - Integral Calculus	4
PHY 212 - General Physics II (Calculus-based)	4	PHY 222 - General Physics with Calculus	4
PHY 212L - General Physics II Lab	1		
WRI 227 - Technical Communication	4	WRI 227 - Technical Report Writing	3
Humanities (Arts and Letters) Electives <sup>3</sup>	6	Humanities Elective <sup>3</sup>	6
MET 102 - Basic Engineering Materials	3	Elective <sup>1</sup>	--
MTH 111 - College Algebra <sup>2</sup>	5	MATH 111 - College Algebra	4
MET 241 - CAD for Mechanical Design I MET 241L - CAD for Mechanical Design I Lab	3	MET 241 - CAD for Mechanical Design I	2
MET 242 - CAD for Mechanical Design II MET 242L - CAD for Mechanical Design II Lab	3	MET 242 - CAD for Mechanical Design II	2
MET 243 - CAD for Mechanical Design III MET 243L - CAD for Mechanical Design III Lab	3	MET 375 - Solid Modeling <sup>4</sup>	3
MFG 120 - Manufacturing Process I MFG 120L - Manufacturing Process I Lab	4	MFG 120 - Introductory Machining Processes	4
MFG 121 - Manufacturing Process II MFG 121L - Manufacturing Process II Lab and MFG 122 - Manufacturing Process III MFG 122L - Manufacturing Process III Lab	8	MFG 341 - Numerical Control Programming <sup>4</sup>	3
MFG 280 - Cooperative Work Experience	2	Elective <sup>1</sup>	--
PHY 211 - General Physics I (Calculus- based) <sup>2</sup> PHY 211L - General Physics I Lab <sup>2</sup>	5	PHY 221 - General Physics with Calculus	4
Social Science Elective <sup>5</sup>	3	Social Science Elective <sup>5</sup>	3
SPE 111 - Fundamentals of Public Speaking	3	SPE 111 - Public Speaking	3
TEX 280 - Coop Work Exp: Seminar	1	Elective <sup>1</sup>	--
WRI 121 - English Composition I	4	WRI 121 - English Composition	3
WRI 122 - English Composition II	4	WRI 122 - Argumentative Writing	3
<b>Total KCC Degree Credits <sup>1</sup></b>	<b>90</b>	<b>Total Oregon Tech Degree Credits</b>	<b>63</b>

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

<b>Klamath Community College Course Number &amp; Title</b>	<b>Qtr. Units</b>	<b>Oregon Institute of Technology Course Number &amp; Title</b>	<b>Qtr. Units</b>
Humanities Elective <sup>3</sup>	3	Humanities Elective <sup>3</sup>	3
MTH 243 - Statistics I MTH 244 - Statistics II	8	MATH 361 - Statistical Methods <sup>4</sup>	4
Social Science Elective <sup>5</sup>	6	Social Science Elective <sup>5</sup>	6
SPE 215 - Small Group Communication: Process and Theory	3	SPE 321 - Small Group and Team Communication <sup>4</sup>	3
WLD 101 - Welding Processes & Applications	3	MFG 103 - Introductory Welding Processes	3
<b>Additional KCC Degree Credits <sup>1</sup></b>	<b>23</b>	<b>Additional Oregon Tech Degree Credits</b>	<b>19</b>
<b>Total KCC Degree Credits <sup>1</sup></b>	<b>113</b>	<b>Total Oregon Tech Degree Credits</b>	<b>82</b>

**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.**

<b>Oregon Institute of Technology Course Number &amp; Title</b>	<b>Qtr. Units</b>
ANTH 452 - Globalization	3
Engineering Science Elective	3
ENGR 111 - MMET Orientation	2
ENGR 211 - Engineering Mechanics: Statics	4
ENGR 213 - Engineering Mechanics: Strength of Materials	4
ENGR 236 - Fundamentals of Electric Circuits	3
ENGR 266 - Computer Programming for Engineers	3
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
Manufacturing Electives	9
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
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 342 - Computer Aided Machining	3
MFG 333 - Statistical Methods for Quality Improvement	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
MGT 345 - Engineering Economy	3
Project Management Requirement: ENGR 445 - Engineering Project Management or MGT 335 - Project Management	3
WRI 327 - Advanced Technical Writing	3
<b>Additional Oregon Tech Credits <sup>6</sup></b>	<b>110</b>
<b>Total Oregon Tech Degree Credits <sup>7</sup></b>	<b>192</b>

1. 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.
2. To maximize useable credits toward the BMAN, the listed course is recommended.
3. 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 KCC prefixes: ART, ENG, MUS, PHL, THR, or Languages (second year/200-level only).
4. Does not count toward the 60 upper-division credit requirement.

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 KCC prefixes: ATH, ECO, GEO, HST, POL, 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.