



**Klamath Community College**  
**Associate of Applied Science in Computer Engineering Technology**  
**to**  
**Oregon Institute of Technology**  
**Bachelor of Science in Embedded Systems Engineering Technology**

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

It is agreed that students transferring with Klamath Community College's (KCC) Associate in Computer Engineering Technology to Oregon Institute of Technology's (Oregon Tech) Bachelor of Science in Embedded Systems Engineering Technology (BEMB) 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 21, 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

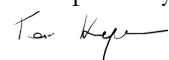
Oregon Institute of Technology

 08/04/2020


Carleen Drago Starr, Director  
Educational Outreach and Partnerships

 08/04/2020

Todd Breedlove, Department Chair  
Computer Systems Engineering Technology

 08/04/2020

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

 08/05/2020

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
CGS 100 - College Survival and Success	3	Elective <sup>1</sup>	--
CIS 116 - C++ Programming I CIS 116L - C++ Programming I Lab	4	CST 116 - C++ Programming I	4
CIS 120 - Embedded C CIS 120L - Embedded C Lab	4	CST 120 - Embedded C	4
CIS 126 - C++ Programming II CIS 126L - C++ Programming II Lab	4	CST 126 - C++ Programming II	4
CIS 130 - Computer Organization	3	CST 130 - Computer Organization	3
CIS 131 - Computer Architecture	3	CST 131 - Computer Architecture	3
CIS 145 - Hardware Installation Support CIS 145L - Hardware Installation Support Lab CIS 146 - Software Installation Support CIS 146L - Software Installation Support Lab	8	MIS 145 - Introduction to PC Hardware/Software <sup>1</sup>	--
CIS 151 - Network I CIS 151L - Network I Lab	4	Elective <sup>1</sup>	--
CIS 152 - Network II CIS 152L - Network II Lab	4	Elective <sup>1</sup>	--
CIS 162 - Digital Logic Design CIS 162L - Digital Logic Design Lab	4	CST 162 - Digital Logic I	4
CIS 279 - Network Operating Systems CIS 279L - Network Operating Systems Lab	4	MIS 273 - Systems Administration I <sup>1</sup>	--
CIS 280 - Coop Work Exp: Computer Technology Engineering	2	Elective <sup>1</sup>	--
Humanities (Arts and Letters) Elective <sup>2</sup>	3	Humanities (Arts and Letters) Elective <sup>2</sup>	3
MTH 111 - College Algebra	5	MATH 111 - College Algebra	4
MTH 112 - Elementary Functions	4	MATH 112 - Trigonometry	4
MTH 251 - Calculus I	4	MATH 251 - Differential Calculus	4
<b>Science/Math/Computer Science <sup>3</sup></b>			
MTH 252 - Calculus II	4	MATH 252 - Integral Calculus	4
PHY 211 - General Physics I (Calculus-based)	4	PHY 221 - General Physics with Calculus	4
PHY 211L - General Physics I Lab	1		
<b>Social Science Electives <sup>3,4</sup></b>			
PSY 201A - General Psychology I <sup>5</sup>	6	PSY 201 - Psychology <sup>5</sup>	3
PSY 202A - General Psychology II <sup>5</sup>		PSY 202 - Psychology (Satisfies Social Science Elective) <sup>5</sup>	3
SPE 111 - Fundamentals of Speech	3	SPE 111 - Public Speaking	3
WRI 121 - English Composition I	4	WRI 121 - English Composition	3
WRI 122 - English Composition II	4	WRI 122 - Argumentative Writing	3
WRI 227 - Technical Communication	4	WRI 227 - Technical Report Writing	3
<b>Total KCC Degree Credits <sup>1</sup></b>	<b>93</b>	<b>Total Oregon Tech Degree Credits</b>	<b>63</b>

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

Klamath Community College Course Number & Title	Qtr. Units	Oregon Institute of Technology Course Number & Title	Qtr. Units
Humanities Electives <sup>3</sup>	6	Humanities Electives <sup>3</sup>	6
Lab Science Elective <sup>6</sup>	4	Lab Science Elective <sup>6</sup>	4
MTH 254 - Vector Calculus	4	MATH 254 - Vector Calculus I	4
PHY 212 - General Physics II (Calculus-based) PHY 212L - General Physics II Lab	5	PHY 222 - General Physics with Calculus	4
Social Science Elective <sup>4</sup>	3	Social Science Elective <sup>4</sup>	3
SPE 215 - Small Group Communication: Process and Theory	3	SPE 321 - Small Group and Team Communication <sup>7</sup>	3
<b>Additional KCC Degree Credits <sup>1</sup></b>	<b>25</b>	<b>Additional Oregon Tech Degree Credits</b>	<b>24</b>
<b>Total KCC Degree Credits <sup>1</sup></b>	<b>118</b>	<b>Total Oregon Tech Degree Credits</b>	<b>87</b>

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

Oregon Institute of Technology Course Number & Title	Qtr. Units
ANTH 452 - Globalization	3
BUS 304 - Engineering Management	3
CST 133 - Digital Logic II	4
CST 134 - Instrumentation	1
CST 136 - Object-Oriented Programming with C++	4
CST 204 - Introduction to Microcontrollers	4
CST 211 - Data Structures	4
CST 231 - Digital Systems Design I	4
CST 240 - Linux Programming	4
CST 250 - Computer Assembly Language	4
CST 276 - Software Design Patterns	4
CST 315 - Embedded Sensor Interfacing and I/O	4
CST 337 - Embedded System Architecture	5
CST 347 - Real-Time Embedded Operating Systems	4

CST 371 - Embedded Systems Development I	4
CST 372 - Embedded Systems Development II	3
CST 373 - Embedded Systems Development III	2
CST 374 - Embedded Project Proposal	1
CST 417 - Embedded Networking	4
CST 455 - System on a Chip Design	4
CST 456 - Embedded System Testing	4
CST 466 - Embedded System Security	3
CST 471 - Embedded Senior Project	3
CST 472 - Embedded Senior Project	3
CST 473 - Embedded Senior Project	2
EE 221 - Circuits I	4
MATH 465 - Mathematical Statistics	4
MGT 345 - Engineering Economy	3
Technical Elective	3
WRI 350 - Documentation Development	3
<b>Additional Oregon Tech Credits <sup>8</sup></b>	<b>102</b>
<b>Total Oregon Tech Degree Credits <sup>9</sup></b>	<b>189</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 BEMB.
2. Students can transfer up to nine (9) credit hours of Humanities electives into the BEMB; 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).
3. To maximize useable credits toward the BEMB, the listed course is recommended.
4. Students can transfer up to six (6) credit hours of Social Science electives into the BEMB; 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.
5. Must take PSY 201A, 202A, and PSY 203A to receive credit for Oregon Tech's PSY 201, 202, 203 *or* PSY 201A and PSY 202A for Oregon Tech's PSY 201 and 202. PSY 203A will transfer to PSY 203.
6. Students can transfer up to one (1) biological or physical sciences with lab course into the BEMB. Choose from the following KCC prefixes: BIO, CHE, GSC, or PH. Currently, ENV does **not** count as Lab Science.

7. Does not count toward the 60 upper-division credit requirement.
8. 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.
9. Oregon Tech's BEMB requires 189 credits.