Individual Program Transfer Articulation Agreement

Between the Maine Community College System acting by and through

Southern Maine Community College

And the University of Maine System acting by and through

The University of Maine

For Transfer From

Associate in Applied Science in Pre-Engineering

To

Bachelor of Science in Mechanical Engineering Technology

This Transfer Articulation Agreement is governed by the general Transfer Articulation Agreement Memorandum of Understanding between Southern Maine Community College (SMCC) and the University of Maine (UMaine). Current students and graduates who have been enrolled in or earned the identified degree from SMCC and are admissible to the University shall be eligible for credit evaluation under the terms of this agreement.

Admissions requirements: Successful Completion of the Associate in Applied Science in Pre-Engineering and a complete UMaine application for admission.

Scholarships and Financial Aid dates: Applying before June 1st for a fall entry allows students to be considered for transfer merit awards, June 1st is also the on-time FAFSA filing date for fall transfers.

Side by Side Course Equivalency Table as November 2024

Identifies how courses in the Associate in Applied Science in Pre-Engineering at SMCC transfer UMaine when the required grade is earned in each course, minimum C- (C for English Composition) for transfer credit.

SMCC General Education Requirements:		Cr	UMaine Transfer Equivalent:		Cr
ENGL 100	English Composition@	3	ENG 101	English Composition Meets degree & Gen Ed req.	3
ENGL 115	Introduction to Literature@	3	West Cult Trad Gen Ed	ENG 100X English Elective West Cult Trad Gen Ed req.	3
MATH 140 Or CSCI 110	College Algebra[1] Or Prin. of Computer Science@ If you place out of MATH 140 per the placement exam, take CSCI 110	3 Or 4	MAT 111 Or COS 121	College Algebra Does not meet Gen Ed req. Or Coding for Everyone Meets COS elective requirement MET 100X Elective	3 Or 3 + 1

SMCC General Education Requirements:		Cr	UMaine Transfer Equivalent:		Cr
MATH 146	Introduction to Trigonometry[2]	1	Combine with MATH 190	Combine with MATH 190 to transfer as UMaine's 4-credit MAT 122 Pre-Calculus	0
MATH 190 Or Fine Arts /Humanities Elective	Pre-Calculus[3,@] - must be taken with MATH 146 Or Fine Arts /Humanities Elective@ If you test out of MATH 190 per the placement exam, select a course that also meets UM Gen Ed requirement	3 Or 3	MAT 122 Or Art & Creative Expression Elective	Pre-Calculus When taken with MATH 146, meets Quant Reasoning Gen Ed Or Art & Creative Exp Gen Ed Pick one that meets UM Gen Ed requirement	4 Or 3
CHEM 131	Chemistry for Eng with Lab@	4	CHY 121/123	*Xfers as* CHY 131/131 Chemistry for Eng & Lab Meets degree & UMaine Lab Science Gen Ed requirement CHY 131/133 are substitutes for CHY 121/123	4
ENGL 110	Oral Communications@	3	CMJ 103	Public Speaking Meets degree & Social Contexts Gen Ed req.	3
Social Science	Select a course that also meets one of UMaine's Gen Ed Cultural Diversity Electives@	3	Cultural Diversity Gen Ed	Cult Div Gen Ed Pick one that meets UM Cultural Diversity Gen Ed requirement	3
Credits		**23 or 24**	**Credits**		**23 or 24**

A minimum grade of C- (or C for English Composition) is required for transfer credit to be awarded.

1 – MAT 140 College Algebra is a pre-requisite for Pre-calculus at UMaine, it is not included in the MET program. SMCC Electrical/Mechanical Engineering students starting at a more advanced level in math based on placement testing can substitute CSCI 100 Principles of Computer Science students for MATH 140 and MATH 146

2 – MATH 146 Trigonometry is a pre-requisite to MATH 190 Pre-Calculus. Students placing directly into MATH 260 Calculus I are exempt from UMaine's MAT 122 Pre-Calculus requirement.

3- Students placing into MATH 260 Calculus I may substitute MAT 190 Pre-Calcululs with a Fine Arts/Humanities elective

@ - meets a UMaine General Education Requirement

SMCC Major Required Courses:		Cr	UMaine Transfer Equivalent:		Cr
COMM 201	Technical Writing	3	ENG 317	Business & Technical Writing	3
ENGR 100	Introduction to Engineering	2	MET 100	GEE 100X General Engineering Elective substitute for MET 100	2
ENGR 216	Circuits I: Steady State Analysis	3	EET 330	*Xfers as* ECE 210 Circuits I ECE 210 is a substitute for EET 330	3
MATH 260	Calculus I@	4	MAT 126	Calculus I meets degree & Quantitative Reasoning Gen Ed requirements	4
MATH 270	Calculus II@	4	MAT 127	Calculus II meets degree & Quantitative Reasoning Gen Ed requirement	4

MATH 275	Differential Equations	4	MAT 258	Intro to Differential Equations with Linear Algebra	4
PHYS 200	Physics for Engineers I with Lab@	4	PHY 107	*Xfers as* PHY 121 Physics for Eng. & Physical Science I PHY 121 is a substitute for PHY 107 Meets UMaine Lab Science Gen Ed req.	4
PHYS 250	Physics for Engineers II with Lab@	4	PHY 108	*Xfers as* PHY 122 Physics for Eng. & Physical Science II PHY 122 is a substitute for PHY 108 Meets UMaine Lab Science Gen Ed req.	4
Mechanical Engineering Option		**Cr**	**UMaine Transfer Equivalent:**		**Cr**
ENGR 200	Engineering Statics	3	MET 150	*Xfers as* MEE 150 Applied Mechanics: Statics MEE 150 is a substitute for MET 150	3
ENGR 230	Thermodynamics I	3	MET 233	*Xfers as* MEE 130 Thermo I MEE 130 is a substitute for MET 233	3
ENGR 250	Strength of Materials	3	MET 219	*Xfers as* MEE 251 Strength of Materials MEE 251 is a substitute for MET 219	3
MATH 280	Calculus 3	4	MAT 228	Calculus III	4
Credits		**41**	**Credits**		**41**
	Total Program Credits	**64 or 65**		**Transfer Credits**	**64 or 65**

A minimum grade of C- (or C for English Composition) is required for transfer credit to be awarded.
@ - meets a UMaine General Education Requirement

Special Notes:
For an up to date list of how SMCC courses transfer to UMaine and which courses at SMCC can be used to meet UM General Education Requirements, please consult the UMS Online Transfer Equivalency Tool that can be found online.

Courses taken at SMCC in which the student did not earn the required grade to satisfy either transfer credit or degree requirements would need to be retaken at either UMaine or SMCC in order to earn the grade needed to count toward the degree at UMaine. Once enrolled at UMaine, the student would need to seek permission from his or her advisor and complete a domestic study away form to alert Student Records if the student plans to take any subsequent courses at SMCC.

Black Bear Advantage Program:
UMaine offers a concurrent enrollment program for SMCC students who have previously been offered admission to UMaine and are pursuing SMCC degrees that have articulation agreements with UMaine programs, such as this one for Pre-Engineering with Mechanical Engineering Technology. Students complete a Black Bear Advantage Participation Form, and if approved, agree to co-enroll in a UMaine course (often online) each semester while attending SMCC full-time. Students in the program will be assigned a UMaine academic advisor to assist them with academic planning while attending SMCC. Black Bear Advantage students can participate in UMaine student life activities, attend UMaine athletic events and take advantage of UMaine support services. They may qualify for up to a $2,000 one-time merit scholarship when they officially transfer to UMaine (depending on how many semesters they were co-enrolled at UMaine while attending SMCC). Additional details and the participation form

are available on UMaine' s Black Bear Advantage web page: https://go.umaine.edu/transfer-to-umaine/black-bear-advantage/.

UMaine courses suggested for Black Bear Advantage students in the Pre-Engineering program planning to transfer to UMaine's Mechanical Engineering Technology program are:

- 1st semester at SMCC: ENG 101 (UMaine) to be substituted for ENGL 100 (SMCC)
- 2nd semester at SMCC: CMJ 103 (UMaine) to be substituted for ENGL 110 (SMCC)
- 3rd semester at SMCC: GenEd-Art (UMaine) to be substituted for Fine Arts Elective (SMCC)
- 4th semester at SMCC: GenEd-Cult (UMaine) to be substituted for Social Science Elective (SMCC)

Suggested course sequence for the last 4 semesters at UMaine as of November 2024

For those who have earned their associate degree in SMCC's Associate in Applied Science in Pre-Engineering transferring into the UMaine BS in Mechanical Engineering Technology degree. Courses may vary for students who transfer before earning their associate degree or transfer in the spring semester.

Mechanical Engineering Technology

Semester 5		**Cr**	**Semester 6**		**Cr**
MET 317	Dynamics	3	MET 325	Fluid Flow Technology	3
MET 355	Engineering Materials	3	MET 234	Mech. Tech. Laboratory I	3
MET 121	Technical Drawing	3	MET 462	Design I	4
Gen Ed	Population & Environment course	3	MET 107	Machine Tool Lab I	3
Gen Ed	Artistic & Creative Expression course	3	MET 126	Machine Drawing	3
	Credits	**15**		**Credits**	**16**

Summer between 5 & 6th Semesters		**Cr.**
Technical Elective	MET Technical Elective - Varies*	3
EET 484	Engineering Economics	3
	Credits	**6**

* Suggest MET 394 "Mechanical Engineering Technology Practice"

Semester 7		**Cr**	**Semester 8**		**Cr**
MET 463	Design II	3	MET 236	Thermal Applications	3
MET 464	Senior Design Project I	2	Technical Elective	Engineering Sustainability Technical Elective - Varies	3
MET 213	Intro to CAM	2	MET 465	Senior Design Project II	2
MET 270	Manufacturing Technologies	3	Technical Elective	Lab Based MET Technical Elective - Varies	3
MET 312	Machine Tool Processing II	3	Technical Elective	MET Technical Elective - Varies	3
	Credits	**13**		**Credits**	**14**
	Total UMaine credits	**64**			

General Education courses do not have to be taken in the order shown. Students must have advisor approval for all Technical Electives

Degree Requirement Notes:

Total minimum degree credit hours required for the Bachelor of Science in Mechanical Engineering Technology is **127 credits** consisting of specific degree requirements, specific elective requirements, and general education requirements. MET majors must accumulate a GPA of 2.0 in all required MET classes.

Transfer students will be accorded the same standards and criteria for admission to a major degree sequence as UMaine students. All applicants accepted to UMaine's baccalaureate programs must fulfill the graduation requirements as identified in UMaine's academic catalog. For up to date degree information please check UMaine's online catalog at http://catalog.umaine.edu/. The most recent transfer credit equivalency information is available through the online transfer equivalency listing located at https://peportal.maine.edu/. See appendix A for complete degree requirements.

Contacts/designee at each campus for more information:

Southern Maine Community College

Matthew J. Goodman
Acting Vice President/Academic Dean
Dean of Academic Excellence and Strategic Initiatives
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University of Maine:

Sharon Oliver
Director of Admissions Operations
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207.581.1561

Articulation Implementation and Agreement Review

The Chief Academic Officer designee of the collaborating institutions shall be responsible for implementing this agreement, for identifying and incorporating any changes into subsequent agreements, and for conducting a periodic review of this agreement.

Signatures to this Agreement

This agreement becomes effective on December 1, 2024 and will be reviewed in 2029 for renewal discussion.

Southern Maine Community College:

Kristin Miller
President

11/26/2024
Signature date

Matthew Goodman
Acting Vice President/Academic Dean
Dean of Academic Excellence and Strategic Initiatives

11/26/2024
Signature date

Adam Tambone
Co-Chair, Engineering Technology

11/26/24
Signature date

University of Maine:

John C. Volin
Executive Vice President for Academic Affairs & Provost

12/09/2024
Signature date

Kevin Coughlin
Vice President of Enrollment Management

12/05/2024
Signature date

Giovanna Guidoboni
Dean, Maine College of Engineering and Computing

12/05/2024
Signature date

Will Manion
Director of the School of Engineering Technology

12/5/2024
Signature date

Brett Ellis
Associate Professor & Coordinator, MET, UMaine

Brett Ellis 12/04/2024
Signature date

Appendix A

UMaine Bachelor of Science Degree Mechanical Engineering Technology - November 2024

First Semester

UMaine		Cr.
ENG 101	College Composition	3
MAT 122	Pre-Calculus	4
MET 100	Intro to MET	2
MET 121	Technical Drawing	3
PHY 107	Technical Physics I	4
	Semester Credits	**16**

Second Semester

		Cr.
MAT 126	Calculus I	4
MET 107	Machine Tool Laboratory I	3
MET 150	Statics	3
PHY 108	Technical Physics II	4
COS Elec	Computer Science Elective	3
	Semester Credits	**17**

Third Semester

UMaine		Cr.
CMJ 103	Public Speaking	3
MAT 127	Calculus II	4
MET 219	Strength of Materials	3
MET 233	Thermal Science	3
MET 270	Manufacturing Technologies	3
	Semester Credits	**16**

Fourth Semester

		Cr.
EET 330	Electrical Applications	3
MAT 126	Machine Drawing	3
MET 234	Mech. Tech Laboratory I	3
MET 236	Thermal Applications	3
MAT 258	Intro to Diff. Eqs. with Linear Algebra	4
	Semester Credits	**16**

Fifth Semester

UMaine		Cr.
CHY 121	General Chemistry	3
CHY 123	General Chemistry Lab I	1
ENG 317	Business & Technical Writing	3
MET 213	Intro to CAM	2
MET 312	Machine Tool Processing II	3
MET 317	Dynamics	3
	Semester Credits	**15**

Sixth Semester

		Cr.
MET 325	Fluid Flow Technology	3
MET 462	Design I	4
Gen Ed	Cultural Div & Int'l Perspective course	3
Tech Elective	Lab Based MET Technical Elective - Varies	3
Tech Elective	MET Technical Elective - Varies	3
	Semester Credits	**16**

Seventh Semester

UMaine		Cr.
MET 355	Engineering Materials	3
MET 463	Design II	3
MET 464	Senior Design Project I	2
EET 484	Engineering Economics	3
Tech Elective	MET Technical Elective - Varies	3
Gen Ed	Western Cultural course	3
	Semester Credits	**17**

Eighth Semester

		Cr.
MET 463	Senior Design Project II	2
Gen Ed	Artistic & Creative Expression course	3
Tech Elective	Engineering Sustainability Technical Elective - Varies	3
Gen Ed	Population & Environment course	3
Tech Elective	Technical Elective - Varies	3
	Semester Credits	**14**

Minimum Program Credits required for the degree: 127 credits. Students must see their advisor for approval of all Technical Electives. Gen Ed courses do not have to be taken in the order presented.