



ADDENDUM TO THE ARTICULATION AGREEMENT

between

COLLEGE OF SOUTHERN MARYLAND

and

TEMPLE UNIVERSITY OF THE COMMONWEATH SYSTEM OF HIGHER EDUCATION

for

ASSOCIATE OF SCIENCE in ENGINEERING

to

BACHELOR OF SCIENCE in MECHANICAL ENGINEERING

at

TEMPLE UNIVERSITY COLLEGE OF ENGINEERING

(Effective Fall 2022)

This addendum concerns changes to the program-to-program Transfer agreement between College of Southern Maryland (CSM) Associate of Science in Engineering and Temple University College of Engineering Bachelor of Science in Mechanical Engineering degree signed 10/11/2021.

After signing of that agreement, College of Southern Maryland (CSM) revised their Associate of Science in Engineering curriculum with the following changes:

Three Physics courses were restructured from a 3-credit lecture and 1-credit lab to be a joint 4-credit lecture and lab course as follows:

- PHY 1210: Calculus Based Physics I: Mechanics and Fluids (3) and PHY 1210L: Calculus Based Physics I: Lab (1) were combined and renamed to PHY 1310: Calculus Based Physics.
- PHY 1310: Calculus Based Physics (4) replaces PHY 1210: Calculus Based Physics I: Mechanics and Fluids (3) and PHY 210L: Calculus Based Physics I: Lab (1) in the Second Semester.
- PHY 2200: Calculus-Based Physics II: Vibrations, Heat, and Electricity (3) and PHY 2200L: Calculus-Based Physics II: Lab (1) were combined and renamed to PHY 2300: Calculus Based Physics II.
- PHY 2300: Calculus-Based Physics II (4) replaces PHY 2200: Calculus-Based Physics II: Vibrations, Heat, and Electricity (3) and PHY 2200L: Calculus Based Physics II: Lab (1) in the Third Semester.
- PHY 2210: Calculus Based Physics III: Magnetism, Optics, and Modern Physics (3) and PHY 2210L: Calculus Based Physics III: Lab (1) were combined and renamed to PHY 2320: Calculus Based Physics III.
- PHY 2320: Calculus Based Physics III replaces PHY 2210: Calculus Based Physics III: Magnetism,
 Optics, and Modern Physics (3) and PHY 2210L: Calculus-Based Physics III: Lab (1) in the Fourth
 Semester.

The existing agreement has been updated to reflect these changes, as shown on the following pages.

Pages 4-7 of the agreement signed on 10/11/2021 should be replaced with the following updated pages.

Rodney Redmond
(Jun 2, 2022 18:21 EDT)

Dr. Rodney Redmond Provost and Vice President of Learning College of Southern Maryland

_{Date:} Jun 2, 2022

Michael D. Lawlor

Michael D. Faulor

Associate Vice Provost for Undergraduate Studies

Temple University

Date: June 2, 2022





Associate of Science in Engineering Note 1 at College of Southern Maryland to Bachelor of Science in Mechanical Engineering at Temple University College of Engineering (Effective Fall 2022)

College of Southern Maryland Recommended Course			Temple University Equivalent		
First Semester		Credits	First Semester		
EGR 1100	Introduction to Engineering	3	ENGR 1101	Introduction to Engineering & Engineering Technology	
ENG 1010	Composition and Rhetoric	3	ENG 0802	Analytical Reading & Writing	
MTH 1200	Calculus I and Analytic Geometry Note 2	4	MATH L***	Lower Level Elective- MATH	
CUE 4000/	General Chemistry I/		CHEM 1031/	General Chemistry I/	
CHE 1200/	General Chemistry II		CHEM 1032	General Chemistry II	
CHE 1210	OR	3	OR	OR	
OR CHE 1350	Recommended: General Chemistry for Engineering Note 3		CHEM 1035	Chemistry for Engineers	
Art GenEd	See CSM Requirements Note 1, Note 4	3		Dependent upon course selection Note 12	
	Semester Total:	16		<u> </u>	
Second Semester	•		Second Semester		
EGR 1210	Statics	3	ENGR 2331	Engineering Statics	
MTH 1210	Calculus II Note 2	4	MATH L***	Lower Level Elective-MATH	
PHY 1310	Calculus Based Physics I Note 5	4	PHYS L***	Lower Level Elective- PHYS	
Humanities GenEd	See CSM Requirements Note 1, Note 8	3		Dependent upon course selection Note 12	
Social/Behavioral Science GenEds	See CSM Requirements Note 1, Note 10	3		Dependent upon course selection Note 12	
	Semester Total:	17			
Third Semester			Third Semester		
Elective	Recommended: CSC 2020: Computing Fundamentals for Engineers Note 6	3	ENGR T***	Elective- ENGR	
MTH 2210	Differential Equations	4	MATH 2041	Differential Equations I	
Elective	Recommended: EGR 2720: Introduction to CAD Note 7	2	ENGR 1117	Engineering Graphics	
MTH 2200	Calculus III Note 2	4	MATH L***	Lower Level Elective- MATH	
PHY 2300	Calculus Based Physics II Note 5	4	PHYS L***	Lower Level Elective- PHYS	
1111 2000	Semester Total:	17	111102	Lower Lover Licotive 11110	
Fourth Semester	Jeniester rotai.	.,	Fourth Semes	tor	
Elective	Recommended: EGR 2200: Mechanics of Materials Note 9	3	ENGR 2333	Mechanics of Solids	
PHY 2320	Calculus Based Physics III Note 5	4	PHYS L***	Lower Level Elective- PHYS	
Elective	Recommended: EGR 2210: Dynamics Note 10	3	ENGR 2332	Engineering Dynamics	
Social/Behavioral Science GenEds	See CSM Requirements Note 1, Note 11	6		Dependent upon course selection Note 12	
23,000 0011240	Semester Total:	16			
	Total Credits Taken	66			

Notes:

1.) Students who transfer with an A.S. in Engineering from College of Southern Maryland require certification that five (5) social science and/or humanities classes have been completed for students to transfer as GenEd-to-GenEd; students who are not certified as GenEd-to-GenEd will be required to complete Temple's 45+ General Education requirements. If course recommendations at College of Southern Maryland are followed, then students will have the remaining GenEd areas to satisfy for the 45+ General Education program upon transfer to Temple: Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good (choose one). Students may complete courses in these General Education areas prior to transferring to Temple.





- For more information about how selected courses might transfer to Temple University, refer to Temple University's Transfer Equivalency Tool: https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool)
- 2.) Students who successfully complete MTH 1200: Calculus I and Analytic Geometry, and MTH 1210: Calculus II, and MTH 2200: Calculus III will satisfy Temple MATH 1041: Calculus I, MATH 1042: Calculus II, and MATH 2043: Calculus III through a DARS exception. Student transferring without these courses may require additional time to degree completion.
- 3.) It is strongly recommended students select CHE 1350: General Chemistry for Engineering. CHE 1350: General Chemistry for Engineering transfers to Temple as CHEM 1035: Chemistry for Engineers and satisfies a major requirement. CHE 1350 will also satisfy CHEM 1033: General Chemistry Laboratory I through a DARS exception. Student transferring without this course may require additional time to degree completion.
- 4.) It is strongly recommended students select an Art GenEd course that transfers to Temple to fulfil Temple's GenEd Arts requirement. Students transferring without this course may require additional time to degree completion. For more information about how selected courses might transfer to Temple University, refer to Temple University's Transfer Equivalency Tool: https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool)
- 5.) Students who successfully complete PHY 1310: Calculus Based Physics I, PHY 2300: Calculus Based Physics II, and PHY 2320: Calculus Based Physics III will satisfy Temple PHYS 1061: Elementary Classical Physics I and PHYS 1062: Elementary Classical Physics II through a DARS exception. Students transferring without these courses may require additional time to degree completion.
- 6.) It is strongly recommended students select CSC 2020: Computing Fundamentals for Engineers to satisfy CSM's elective requirement. CSC 2020: Computing Fundamentals transfers to Temple as ENGR T***: Engineering Elective. CSC 2020 will satisfy ENGR 1102: Introduction to Engineering Problem Solving through a DARS exception. Students transferring without this course may require additional time to degree completion.
- 7.) It is strongly recommended students select EGR 2720: Introduction to CAD to satisfy CSM's elective requirement. EGR 2720: Introduction to CAD transfers to Temple as ENGR 1117: Engineering Graphics. ENGR 1117 will satisfy MEE 1117: Fundamentals of Mechanical Engineering Design through a DARS exception. Students transferring without this course may require additional time to degree completion.
- 8.) It is strongly recommended students select a Humanities GenEd course that transfers to Temple to fulfil Temple's GenEd Race and Diversity requirement. Students transferring without this course may require additional time to degree completion. For more information about how selected courses might transfer to Temple University, refer to Temple University's Transfer Equivalency Tool: https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool)
- 9.) It is strongly recommended students select EGR 2200: Mechanics of Materials to satisfy CSM's elective requirement. EGR 2200: Mechanics of Materials transfers to Temple as ENGR 2333: Mechanics of Solids and satisfies a major requirement. Students transferring without this course may require additional time to degree completion.
- 10.) It is strongly recommended students select EGR 2210: Dynamics to satisfy CSM's elective requirements. EGR 2210: Dynamics transfers to Temple as ENGR 2332: Engineering Dynamics and satisfies a major requirement for Temple's B.S. in Mechanical Engineering degree. Students transferring without these courses may require additional time to degree completion.
- 11.) It is strongly recommended students select Social/Behavioral Science GenEd courses that transfer to Temple to fulfil Temple's GenEd Human Behavior and World Society requirements. Students transferring without these courses may require additional time to degree completion. For more information about how selected courses might transfer to Temple University, refer to Temple University's Transfer Equivalency Tool: https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool)
- 12.) For more information on how individual courses transfer to Temple, please refer to the Temple Transfer Tool: https://admissions.temple.edu/transfer-equivalency-tool





If the suggested classes are successfully completed at College of Southern Maryland and an Associate of Science in Engineering degree is awarded, the remaining four semesters for the **Bachelor of Science in Mechanical Engineering** are as follows:

Remaining Requirements	at Temple University	
Fifth Semester		Credits
	Intellectual Heritage I: The Good Life	
GenEd	OR	3
	Intellectual Heritage II: The Common Good	
NGR 3571	Classical and Statistical Thermodynamics	3
CE 2112	Electrical Devices & Systems I	3
CE 2113	Electrical Devices & Systems I Lab	1
NGR 3201	Material Science for Engineers	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
GenEd	·	3
	Semester Total:	17
Sixth Semester		
ENGR 3553	Mechanics of Fluids	3
MEE 3506	Fluid Mechanics Laboratory	1
MEE 3301	Machine Theory and Design	3
MEE 3011	Analysis & Computation of Linear Systems	3
ENGR 2196	Technical Communication	3
MEE 3305	Materials Laboratory	1
NGR 4169	Engineering Seminar	1
	Semester Total:	15
Seventh Semester		
ENGR 4177	Senior Design Project I for Mechanical Engineering	2
MEE 4572	Heat and Mass Transfer	3
MEE 3117	Computer-Aided Mechanical Design	3
MEE XXXX	Mechanical Engineering Technical Elective #1	3
MEE XXXX	Mechanical Engineering Technical Elective #2	3
GEnEd		3
	Semester Total:	17
ighth Semester		
NGR 4296	Senior Design Project II.	3
MEE XXXX	Mechanical Engineering Technical Elective #3	4
MEE XXXX	Mechanical Engineering Technical Elective #4	3
ENGR 3001	Engineering Economics	3
	Semester Total:	13
	66	
R	62	
	Pemaining B.S. in Mechanical Engineering Requirements to complete at Temple: Total Credits for the B.S. in Mechanical Engineering	128

Notes:

- a.) Students who transfer with an A.S. in Pre-Engineering from the College of Southern Maryland require certification that five (5) social science and/or humanities classes have been completed for students to transfer as GenEd-to-GenEd; students who are not certified as GenEd-to-GenEd will be required to complete Temple's 45+ General Education requirements. If course recommendations at College of Southern Maryland followed, then students will have the remaining GenEd areas to satisfy for the 45+ General Education program upon transfer to Temple: Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good (choose one).
- b.) Students can complete courses in these General Education areas prior to transferring to Temple. For more information about how selected courses might transfer to Temple University, refer to Temple University's Transfer Equivalency Tool: https://admissions.temple.edu/apply/transfer-students/transfer-equivalency-tool)
- c.) Inquiries specific to the Temple's Mechanical Engineering program or specific course requirements can be directed to Shawn Fagan, College of Engineering Assistant Dean of Undergraduate Affairs, sfagan@temple.edu.
- d.) Temple University requires that all undergraduate degree candidates complete 45 hours of the last 60 hours of the degree or program as matriculated students at Temple University. If a matriculated student previously took Temple courses on a non-matriculated basis, those courses are counted towards this requirement.





e.) Per Temple's Transfer Policy for <u>Permission to Complete a Course at Another Institution after Matriculation</u>, students who transfer 60 credits or more cannot receive permission to transfer additional course work after matriculation.