

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 2021)

College of Southern Maryland Recommended Course			Temple University Equivalent	
First Semester			First Semester	
		Credits		
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
CHE 1200/ CHE 1210 OR CHE 1350	General Chemistry I/ General Chemistry II OR Recommended: General Chemistry for Engineering ^{Note 3}	3	CHEM 1031/ CHEM 1032 OR CHEM 1035	General Chemistry I/ General Chemistry II OR Chemistry for Engineers
Art GenEd	See CSM Requirements ^{Note 1, Note 4}	3		Dependent upon course selection ^{Note 12}
Semester Total:		16		
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 1210/ PHY 1210L	Calculus Based Physics I: Mechanics and Fluids/ Calculus Based Physics I: Lab ^{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 GenEd	See CSM Requirements ^{Note 1, Note 11}	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 2200/ PHY 2200L	Calculus Based Physics II: Vibrations, Heat and Electricity/Calculus Based Physics II: Lab ^{Note 5}	4	PHYS L***	Lower Level Elective- PHYS
Semester Total:		17		
Fourth Semester			Fourth Semester	
Elective	Recommended: EGR 2200: Mechanics of Materials ^{Note 9}	3	ENGR 2333	Mechanics of Solids
PHY 2210	Calculus Based Physics III: Magnetism, Optics, and Modern Physics/Calculus Based Physics III: Lab ^{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}
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> Students who do not take the recommended courses at College of Southern Maryland may require additional time to degree completion.
- 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 fulfill 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 1210/PHY 1210L: Calculus Based Physics I: Mechanics and Fluids/ Calculus Based Physics I: Lab, and PHY 2200/ PHY 2200L: Calculus Based Physics II: Vibrations, Heat and Electricity/Calculus Based Physics II: Lab, and PHY 2210: Calculus Based Physics III: Magnetism, Optics, and Modern Physics/Calculus Based Physics III: Lab will satisfy Temple PHYS 1061: Elementary Classical Physics I and PHYS 1062: Elementary Classical Physics II through a DARS exception. Student 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 fulfill 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. Students transferring without this 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 fulfill 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
GenEd ^{Note a, Note b}	Intellectual Heritage I: The Good Life OR Intellectual Heritage II: The Common Good	3
ENGR 3571	Classical and Statistical Thermodynamics	3
ECE 2112	Electrical Devices & Systems I	3
ECE 2113	Electrical Devices & Systems I Lab	1
ENGR 3201	Material Science for Engineers	3
MEE 2305	Instrumentation and Data Acquisition Lab	1
Free Elective		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
ENGR 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
Free Elective		3
Semester Total:		17
Eighth Semester		
ENGR 4296	Senior Design Project II.	3
MEE 4422/MEE4405 OR MEE 4571/ MEE 4506	Mechanical Vibrations/ Vibrations Laboratory OR Advanced Thermodynamics and Combustion/ Energy Conversion Laboratory	4
MEE XXXX	Mechanical Engineering Technical Elective #4	3
ENGR 3001	Engineering Economics	3
Semester Total:		13
<i>Credits transferred as part of the A.S. in Engineering at CSM:</i>		66
<i>Remaining B.S. in Mechanical Engineering Requirements to complete at Temple:</i>		62
Total Credits for the B.S. in Mechanical Engineering		128

Notes:

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- b.) To earn the B.S. in Mechanical Engineering degree, a student must complete a minimum of 128 credits. Students who transfer with an A.S. in Engineering from the College of Southern Maryland and are certified as completing five (5) social science and/or humanities classes will transfer as GenEd-to-GenEd and will be required to take a Free Elective instead of Intellectual Heritage I: The Good Life or Intellectual Heritage II: The Common Good.

- c.) 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>
- d.) 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.
- e.) 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.
- f.) Per Temple's Transfer Policy for [Permission to Complete a Course at Another Institution after Matriculation](#), students who transfer 60 credits or more cannot receive permission to transfer additional course work after matriculation.