

STEVENSON

U N I V E R S I T Y

College of Southern Maryland
A.S. Transfer Plan

A.S. in Engineering to B.S. in Biomedical Engineering

This transfer plan is intended for students pursuing an **A.S. in Engineering** at **College of Southern Maryland** who are interested in pursuing a **B.S. in Biomedical Engineering** at Stevenson University. The equivalencies below demonstrate how a student can meet both the requirements of the associate degree and prepare for a seamless transfer to Stevenson. Any student who enters Stevenson with an A.A. or A.S. degree will have completed all general education requirements with the exception of composition II if not taken at the community college. Please note:

- Only courses that have course equivalencies are displayed. This guide does not show all transferable courses from this college. It also does not display all Stevenson University courses that will fulfill a specific requirement.
- Program requirements must be completed with a grade of C or better, and general education courses must be passed with a grade of D or better.
- Stevenson University will accept up to 70 credits from 2-year institutions. Up to 90 credits can be applied to degree requirements from a combination of 2-year institutions, 4-year institutions, and non-direct classroom instruction (including CLEP, AP, and other nationally recognized standardized examination scores). For additional information about credit transfer, please see: <http://www.stevenson.edu/admissions-aid/getting-started/transfer-students/transfer-credit-evaluation/>
- For scholarship information please see the “Paying for College” page on: <http://www.stevenson.edu/transfer>
- Transfer plans are intended to be used as planning tools. If you need additional assistance in selecting courses to take prior to transferring to Stevenson University, contact Stevenson Admissions at 443-352-4450.

College of Southern Maryland Degree Requirements	Stevenson Equivalency	Category	Credits Transferred
EGR-1100 - Introduction to Engineering	<ul style="list-style-type: none"> • BME 101 Introduction to Biomedical Engineering 	Program Requirement	3
CHE-1200 - General Chemistry I/L* (4) and CHE-1210 - General Chemistry II/L* (4)	<ul style="list-style-type: none"> • CHEM 115/115L General Chemistry • CHEM 116/116L General Chemistry II 	Program Requirement	8
EGR-1210 - Statics	TR 199	General Elective	3
MTH-1200 - Calculus I and Analytic Geometry	MATH 220 Calculus I	Program Requirement	4
MTH-1210 - Calculus II	MATH 221 Calculus II	Program Requirement	4
MTH-2200 - Calculus III	MATH 222 Calculus III	Program Requirement	4
MTH-2210 - Differential Equations	Fulfills requirement for: MATH 321 Introduction to Differential Equations	Program Requirement	4
PHY-1210 - Calculus-Based Physics I: Mechanics and Fluids (3) and PHY-1210L - Calculus-Based Physics I: Lab (1)	<ul style="list-style-type: none"> • PHYS 215 General Physics I • PHYS 216 General Physics II • PHYS 299 	<ul style="list-style-type: none"> • Program Requirement • Program Requirement • General Elective 	12
PHY-2200 - Calculus-Based Physics II: Vibrations, Heat, and Electricity (3) and PHY-2200L - Calculus-Based Physics II: Lab (1)			
PHY-2210 - Calculus-Based Physics III: Magnetism, Optics, and Modern Physics (3) and PHY-2210L - Calculus-Based Physics III: Lab (1)			

College of Southern Maryland Degree Requirements		Stevenson Equivalency	Category	Credits Transferred
Electives: SU Recommends: <ul style="list-style-type: none"> CHE-2200 - Organic Chemistry I* (3) and CHE-2200L - Organic Chemistry I - Lab* (1) BIO-1060 (3) Principles of Biology I and BIO-1060L: Principles of Biology Lab (1) 		<ul style="list-style-type: none"> CHEM 210 Organic Chemistry I/CHEM 210L Organic Chemistry I* Biology 113 General Biology I: Cell Biology and Genetics and Biology 113* 	<ul style="list-style-type: none"> Program Requirements 	8
ENG-1010 - Composition and Rhetoric		English 151: College Writing I	General Education Requirement	3
General Education Social/Behavioral Science (6 credits)		General Education Social Science		6
General Education Arts		General Education Fine Arts		3
General Education Humanities		General Education Humanities		3
Total	65 credits Please note: A minimum of 60 credits are needed for the associate's degree			

Remaining Courses to be taken at Stevenson

Students who complete the plan above including all recommended courses and earn the A.S. in Engineering will take the following courses at Stevenson to meet the B.S. in Biomedical Engineering requirements. Students who transfer before completing the associate degree may have more general education and program requirements to take and fewer free electives.

General Education Requirements (3 credits)

English 152 Writing about Literature

Total Remaining Program Requirements (52 credits)

SCI 215 Writing in the Sciences, 3 credits

BME 205 Problem Solving and Design, 4 credits

BME 210 Thermodynamics, 3 credits

BME 230 Biofluids, 3 credits

BME 313 Biostatistics, 3 credits

BME 315 Biomaterials, 4 credits

BME 320 Biomedical Engineering Internship, 3 credits

BME 335 Instrumentation, 3 credits

BME 340 Systems Physiology, 4 credits

BME 380 Biomechanics, 4 credits

BME 470/475 Biomedical Engineering Design Capstone I & II*, 6 credits

Basic Science Electives (2 courses, 6-8 credits), choose from:

BIO 217 Principles of Biochemistry

BIO 222 Human Anatomy

BIO 230 Genetics

BIO 310 Cell Biology

BIO 322 Human Physiology

BIO 330 Molecular Genetics

BIOCH 327 Biochemistry

BICH 427 Advanced Biochemistry

CHEM 211 Organic Chemistry II/CHEM 211L Organic Chemistry II Laboratory

BME electives. Take two courses, choose from: (6 credits)

BME 325 Transport Systems*

BME 330 Bioelectric Systems*

BME 365 Independent Research in Biomedical Engineering*

BME 425 Synthetic Biology*

**Courses currently under development. Suitable substitutes will be identified as needed.*

Additional Requirements: (up to 6 credits)

Up to 6 credits of general electives if needed to meet the 120-credit minimum for the B.S. Degree

Total to be taken at SU: 55-60.

Suggested Course Sequence

YEAR 3				
SEMESTER	FALL		SPRING	
RECOMMENDED COURSES	BME 205 Problem Solving and Design	4	Science elective (2 of 2)	3-4
	ENG 152 College Writing II	3	BME 210 Thermodynamics	3
	BME 313 Biostatistics	3	BME 230 Biofluids	3
	BME 380 Biomechanics	4	BME 320 Biomedical Engineering Internship	3
	Science Elective (1 of 2)	3-4	SCI 215 Writing in the Sciences	3
CREDITS	17-18 CREDITS		15-16 CREDITS	
YEAR 4				
SEMESTER	FALL		SPRING	
RECOMMENDED COURSES	BME 335 Instrumentation	3	BME 315 Biomaterials	4
	BME 340 Systems Physiology	4	BME 475 BME Design Capstone II	3
	General elective (if needed)	3	BME Elective (2 of 2)	3
	BME Elective (1 of 2)	3-4	General elective (if needed)	3
	BME 470 BME Design Capstone I	3		
CREDITS	16-17 CREDITS		13 CREDITS	

Signed 11/7/2020