

KEAN UNIVERSITY - School of Integrative Science and Technology
(36110) B.S. IN SCIENCE & TECHNOLOGY (Biomedicine Option) 120 S.H.

Minimum GPA Required for Declaration: N/A
 Minimum GPA Required for Major: 2.75
 Overall Minimum GPA Required for Graduation: 3.0

EFFECTIVE DATE: FALL 2022

GENERAL EDUCATION: 34 Semester Hours (S.H.)			
Foundation Requirements^{1,2}: 14 S.H.			
GE 1000	Transition to Kean ³ or GE 3000 Transfer Transtion ³	1	
ENG 1030	College Composition ¹	3	
STME 2000	Math. & Comp. Methods of Science I ⁴ &	3	
STME 2099	Math. & Comp. Methods of Science I ⁴ Lab	1	
COMM 1402	Speech Communication As Critical Citizen ¹	3	
GE 2024	Research & Technology	3	
Disciplinary & Interdisciplinary Distribution Requirements²: 20 S.H.			
Humanities: 6 S.H.			
*ENG 2403	World Literature	3	
	Foreign Language (2 nd semester)	3	
Social Sciences: 6 S.H.			
*HIST 1062	Worlds of History	3	
*SOC 1000	Introduction to Sociology	3	
Science and Mathematics: 8 S.H.			
STME 2100	Math. & Comp. Methods of Science II &	3	
STME 2199	Math. & Comp. Methods of Science II Lab	1	
STME 1000	Chemical Systems I &	3	
STME 1099	Chemical Systems I Lab	1	
ADDITIONAL REQUIRED COURSES¹: 19 S.H.			
	Foreign Language (1 st semester)	3	
PSY 1000	General Psychology	3	
STME 1700	Living Systems I &	3	
STME 1799	Living Systems I Lab	1	
STME 2700	Physical Systems I &	3	
STME 2799	Physical Systems I Lab	1	
STME 2300	Probabilistic Methods in Science &	3	
STME 2399	Probabilistic Methods in Science Lab	1	
STME 1903	Research Methods-RFI	1	

Special Notes:	
All pre-requisites for major courses must be passed with a grade of C or better.	
* GE Distribution course required of all students	** Course required by Major
¹ Foundation Requirements & Additional Required Courses require a grade of C or better, except ENG 1030 and COMM 1402 require B- or better.	
² See prerequisites & equivalencies (on page 2).	
³ University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen & transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more).	
⁴ Prerequisite of qualifying test score or the equivalent of MATH 1054.	
⁵ A minimum major GPA of 2.75 and minimum grade of C is required in all major courses, except major capstone requires a grade of B- or better.	
⁶ Non-Research First Initiative (RFI) students only.	
⁷ Required for RFI students – must complete with RFI sponsor faculty.	
⁸ At a minimum, 3 total credits is required for students choosing to do a STEM Internship. Students may take any combination of STME 3171, 3172, 3173 (1, 2 or 3 credits) per semester that they choose to do an internship.	

ACADEMIC MAJOR⁵: 67 S.H.			
Program Core Requirements⁵: 22 S.H.			
STME 1800	Living Systems II &	3	
STME 1899	Living Systems II Lab	1	
STME 1100	Chemical System II &	3	
STME 1199	Chemical Systems II Lab	1	
STME 2681	Organic Chemistry Honors Lecture I	3	
STME 2683	Organic Chemistry Honors Lab I	2	
STME 2682	Organic Chemistry Honors Lecture II	3	
STME 2684	Organic Chemistry Honors Lab II	2	
STME 2800	Physical Systems II &	3	
STME 2899	Physical Systems II Lab	1	
Program Option Requirements⁵: 38-42 S.H.			
BIO 3403	Anatomy & Physiology I	4	
BIO 3404	Anatomy & Physiology II	4	
BIO 3405	Basic Gross Anatomy	4	
STME 3100	Biochemistry Honors I &	3	
STME 3199	Biochemistry Honors I Lab	1	
BIO 3709	Genetics	4	
BIO 3315	Microbiology	3	
BIO 3315L	Microbiology Lab	1	
BIO 4316	Immunology	3	
BIO 4316L	Immunology Lab	1	
BIO 4310	Virology	4	
BIO 3406	Neuroscience	4	
STME 4611	NJCSTM Serv. Learning (<i>taken w/STME 4610</i>)	1	
STME 2903	Research Experience-RFI ⁷ &	2	
STME 3903	Advanced Research Experience-RFI ⁷	3	
	OR		
STME 3171-73	STEM Internship ^{6,8}	3	
	OR		
STME 3610	Current Issues ⁶	1	
**Major Capstone Course⁵: 3 S.H.			
STME 4610	Science & Technology Seminar (WE)	3	
MAJOR ELECTIVES⁵: 0-4 S.H.			
<i>(Select major elective courses with advisement in STME, BIO or CHEM at the 3000 level or higher)</i>			
FREE ELECTIVES: 1 S.H.			
<i>(Select with advisement courses in ecology, ethics & issues courses, history of science/medicine, medical anthropology, human rights/genocide, sustainability; at least 50% must be 3000/4000 level)</i>			