

KEAN UNIVERSITY - School of Integrative Science and Technology
(36102) B.S. IN SCIENCE & TECHNOLOGY (Chemistry Option) 120-124 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 Transition 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	
<i>Take ONE GE Approved course from one area below</i>			
	Fine Arts or Art History		
	Philosophy or Religion		
	Foreign Languages (must take I & II for credit)		
	Music or Theater		
	Interdisciplinary		
Social Sciences: 6 S.H.			
*HIST 1062	Worlds of History	3	
*PSY 1000	General Psychology	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.			
ES 1000	Observing the Earth	3	
PSY 2110	Psychology of Adolescence	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	

ACADEMIC MAJOR⁵: 64-68 S.H.			
Program Core Requirements⁵: 22 S.H.			
STME 2200	Math. & Comp. Methods of Sci. III &	3	
STME 2299	Math. & Comp. Methods of Sci. III Lab	1	
STME 2800	Physical Systems II &	3	
STME 2899	Physical Systems II Lab	1	
STME 1100	Chemical Systems 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	
Program Option Requirements⁵: 23-27 S.H.			
CHEM 2283	Quantitative Analysis	4	
CHEM 2491	Inorganic Chemistry	3	
CHEM 3284	Instrumental Methods of Analysis (WE)	4	
MATH 3415	Calculus III (before PHYS 2097 & CHEM 3381)	4	
PHYS 2097	Physics III	4	
CHEM 3381	Physical Chemistry Lecture I	3	
STME 3610	Current Issues ⁶	1	
	OR		
STME 2903	Research Experience-RFI ⁷	2	
STME 3903	Advanced Research Experience-RFI ⁷	3	
**Major Capstone Course⁵: 3 S.H.			
STME 4610	Science & Technology Seminar (WE)	3	
Professional Education Requirements^{5,8}: 16 S.H.			
EMSE 2801	Clinical Experience	3	
EMSE 3230	Science Ed. K-12	3	
EDUC 3000	Curriculum, Evaluation & the Learner	3	
EMSE 3903	Teaching English Language Learners	1	
EMSE 5315	Intro to Language Arts & Reading in Teaching Content ⁹	3	
EMSE 5320	Computers in the School Curriculum I ⁹	3	
FREE ELECTIVES: 0-3 S.H.			
<i>(at least 50% must be 3000/4000 level)</i>			

Special Notes:	
<p>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).</p>	<p>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 professional education courses and major capstone require 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 Students must pass the Praxis I Core and have a 3.0 (or higher) GPA to be declared in the education major. ⁹ Graduate education courses require a grade of B or better. EMSE 5315 & EMSE 5320 apply to the baccalaureate degree.</p>