(30104) B.S. IN SCIENCE & TECHNOLOGY (Mathematics 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 2019

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 Requirements[2]: 20 S.H.

Humanities: 6 S.H.

*ENG 2403	World Literature	3	
Take ONE GE Approved course from one area below			
	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 COURSES[1]: 16 S.H.

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 MAJOR[5]: 61 S.H.

Program Core Requirements[5]: 12 S.H.

STME 2200	Math. & Comp. Methods of Sci. III &	3	
STME 2299	Math. & Comp. Methods of Sci. III Lab	1	
Select TWO course sequences from below:			
(8 total cr. - must take lecture & lab for each course)			
STME 1800	Living Systems II &	3	
STME 1899	Living Systems II Lab	1	
STME 1100	Chemical Systems II &	3	
STME 1199	Chemical Systems II Lab	1	
STME 2800	Physical Systems II &	3	
STME 2899	Physical Systems II Lab	1	

Program Option Requirements[5]: 23-27 S.H.

MATH 3110	Introduction to Proofs	3	
MATH 3225	Comp. Methods in Matrix and Linear Algebra II	3	
MATH 3342	Euclidean and Non-Euclidean Geometry	3	
MATH 3415	Calculus III	4	
MATH 3455	Differential Equations	3	
STME 4805	Mathematical Modeling with Applications	3	
STME 3610	Current Issues[6] OR	1	
STME 2903	Research Experience-RFI[7]	2	
STME 3903	Advanced Research Experience-RFI[7]	3	
MATH 3891	History of Math	3	

**Major Capstone Course[5]: 3 S.H.

STME 4610	Science & Technology Seminar (WE)	3	

Professional Education Requirements[5,8]: 16 S.H.

EMSE 2801	Intro. Field Exp. Subj. Area K-12	3	
EMSE 3220	Math 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	

Major Electives[5]: 3-7 S.H. *(select with advisement)*

FREE ELECTIVES: 9 S.H.
(at least 50% must be 3000/4000 level)

	TOTAL CREDITS:		

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 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.

GENERAL EDUCATION AND UNIVERSITY REQUIREMENTS

GENERAL EDUCATION INFORMATION AND REQUIREMENTS

Testing and Placement
Incoming freshmen and transfer students may be placed in specific GE Foundations, Developmental or ESL courses as a result of testing prior to registration. Students may be exempt from testing due to SAT scores or prior college work.

Prerequisites and Equivalencies for GE Foundations Courses

GE 1000
Required of all freshmen & transfers entering with 0-29 credits
Prereq: None
Equiv: ID 1001

GE 3000
Required of transfers entering with 30 credits or more
Prereq: 30 credits and ENG 1030

ENG 1030
Prereq: Placement testing or exemption from placement testing
Equiv: ENG 1031/1032, ENG 1033/1034, ENG 1430, ENG 1620, ENG 1020, ENG 1400

MATH 1000 or 1010 or 1016 or 1030
Prereq: MATH 0901 if required by placement testing
Equiv of MATH 1000: MATH 1001/1002, MATH 1003/1004, MATH 1051

MATH 1044* or 1054
Prereq: MATH 0901 if required by placement testing and MATH 1000
*MATH 1044 is available as a Foundation option for CBPM students only

COMM 1402
Prereq: CS 0412 if required by placement testing
ENG 1031/1032 or ENG 1033/1034 if required by placement testing
May be taken concurrently with ENG 1030
Equiv: COMM 1400

GE 2021- 2026 *Research and Technology* is offered as college-based course
GE 2021 College of BPM
GE 2022 College of EDU
GE 2023 College of CLA
GE 2024 College of NAHS & NJCSTM & NWGC
GE 2025 SFPA & Michael Graves College
GE 2026 Undecided Majors and other special populations
Prereqs: CS 0412 if required by placement testing
ENG 1030 or equivalent
COMM 1402
Equiv: GE 2020

GE Distribution Courses

Approved GE Distribution Courses
All courses taken under the General Education Disciplinary/Interdisciplinary Distribution requirements must be selected from the Approved General Education Distribution Course List.
These courses are designated as GEHU, GESS, and GESM.
GEHU   Humanities
GESS   Social Sciences
GESM   Science and Mathematics

Required GE Distribution Courses

ENG 2403 is a required Humanities Distribution course with an emphasis on diversity.
Prereq: CS 0412 if required by placement testing; ENG 1030 or equivalent
Equiv: ENG*2203

HIST 1062 is a required Social Sciences Distribution course.
Prereq: None

Foreign Language Credit
The three credits for a foreign language that may satisfy the GE Disciplinary/Interdisciplinary Distribution Requirement are awarded only upon successful completion of the second of two semesters of study at the introductory or intermediate level.
Credit for the first semester may be used as elective credit.

UNIVERSITY REQUIREMENTS

GE 1000/3000 Requirement
All undergraduate students must satisfy this University requirement for graduation by successfully completing one of the following courses at Kean University: GE 1000 Transition to Kean (all freshmen and transfers entering with 0-29 credits) or GE 3000 Transfer Transitions (transfers entering with 30 credits or more).

Writing-Emphasis Requirement
All students are required to complete one "Writing-Emphasis" course. The "W-E" course must be within the major portion of your program. Consult your major program advisor for specific information.