KEAN UNIVERSITY
THE DOROTHY AND GEORGE HENNINGS COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY
(78294) B.A. IN MATHEMATICAL SCIENCES (Teacher Certification K-12) 120 S.H
Minimum GPA Required for Declaration: 3.0
Minimum GPA Required for Major: 3.0
Overall Minimum GPA Required for Graduation 3.0
EFFECTIVE FALL 2019

GENERAL EDUCATION 41-42 Semester Hours (S.H.)		**** ACADEMIC MAJOR 40 S.H. (Total)**	
Foundation Requirements:[1] 13 S.H.		**[**] Foundation Core Courses: 18 S.H.**	
GE 1000 Transition to Kean[2] **–or–** GE 3000 Transfer Transitions[2]	1	MATH 2415 Calculus I	4
ENG 1030 Composition[3]	3	MATH 2416 Calculus II	4
MATH 1054 Precalculus[4,5,6]	3	MATH 2995 Matrix and Linear Algebra	3
COMM 1402 Speech Communication[3]	3	MATH 3415 Calculus III	4
GE 2024 Research & Technology	3	MATH 3544 Probability and Math Statistics	3
Disciplinary & Interdisciplinary Distribution Requirements:[1] 29-30 S.H.		**[**] Concentration Courses: 13 S.H.**	
Humanities **9 S.H. (from different areas)**		MATH 2526 Applied Statistics I	3
*ENG 2403 World Literature	3	MATH 2800 Mathematical Software	1
Take two "GE Approved" courses from two areas below:		MATH 3110 Intro to Proofs	3
Fine Arts or Art History	3	MATH 3342 Euclidean and Non-Euclidean Geometry	3
Philosophy or Religion	3	MATH 3891 History of Mathematics	3
Foreign Language (Must take I and II for credit)	3		
Music or Theatre	3	**[**] Major Elective Courses (with advisement, 3000-4000) 6 S.H**	
Interdisciplinary	3	MATH	3
		MATH	3
Social Sciences **9 S.H.**			
*HIST 1062 Worlds of History	3	***/[**] Major Capstone Course: 3 S.H.**	
PSY 1000 General Psychology	3	MATH 4890 Senior Seminar in Mathematics (WE)	3
SOC 1000 Intro to Soc or ANTH 1800 Cultural Anthropology	3		
		PROFESSIONAL EDUCATION: 31 S.H	
		Must pass Praxis Core and have a GPA of 3.0 minimum before applying for admission to the Secondary Education Department. **Grades of B- or higher in all education courses and "Satisfactory" grades in EMSE 4711 and EMSE 4811 are required.**	
		Sophomore Level	
Science and Mathematics **10 or 11 S.H.**		EMSE 2801 Intro to Clinical Experience	3
CPS 1231 Fund of Comp Science	4	**Junior Level**	
BIO 1000 Principles of Biology	4	EDUC 3000 Curriculum, Evaluation and the learner[7]	3
[6]One course from Biology, Chemistry; Environmental Science, Earth Science, Forensics Science, Interdisciplinary, Physics, or Sustainability Science	3,4	EDUC 3401 Language Arts/ Reading K-12[7] EMSE 3122 Technology in Education EMSE 3903 Teaching English Language Learners	3 3 1
		Senior Level	
ADDITIONAL REQUIRED COURSES 6 S.H.		EMSE 3220 Mathematics Education K-12	3
PSY 2110 Psychology of Adolescence ID 2995 Disabled Persons in American Society	3 3	EMSE 4711 Clinical I Practice/ Subj Area K-12[8,9] EMSE 4811 Clinical II Practice/ Subj Area K-12[8,10,11] (Must have passing score on Praxis II), (edTPA required and completed with state's qualifying score during Clinical II)	3 9

		Professional Capstone Course **3 S.H** EDUC 4000 Teacher and Classroom[11] **Free Electives**: 1-2 S.H No mathematics courses allowed other than MATH 1000 or MATH 1996 Optional: MATH 1996 Research Methods 1 S.H	3
Special notes: 1 See prerequisites and equivalencies. 2 University Requirement for Graduation for all undergraduate students that must be satisfied in one of two ways: Complete GE 1000 (all freshmen and transfers entering with 0-29 credits) OR complete GE 3000 (transfers entering with 30 credits or more) 3 ENG 1030 and COMM 1402 require a grade of B- or higher. 4 Students who do not qualify on the placement test to take MATH 1054 must take MATH 1000 first. 5 Students whose qualifying score on the placement test makes them eligible to take Math 2415 may take that course instead. In that case the student must take another 3 credits in free electives to total 120 S.H. 6 C or better		7 Should be completed prior to Clinical I 8 Requires submission of application to TPC 9 Clinical I and Clinical II must be done in consecutive semesters in the final year of studies 10 No student may enter Clinical II unless Math Praxis II passing score is submitted to TPC 11 Clinical II must be completed the final semester prior to graduation and taken in conjunction with EDUC 4000 *G.E. required course; WE: Writing Emphasis ****All math major courses require a grade of C or better.**	

Rev. 7.18.19

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

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 SVPA & 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.