

**KEAN UNIVERSITY – COLLEGE OF NATURAL APPLIED & HEALTH SCIENCES**

**(76204) B.S. IN EARTH SCIENCE (Option: Geo Science) 120 S.H.**

Minimum GPA Required for Declaration: 2.0

Minimum GPA Required for Major: 2.0

Overall Minimum GPA Required for Graduation: 2.0

EFFECTIVE DATE: Fall 2019

GENERAL EDUCATION 32 Semester Hours (S.H.)		ACADEMIC MAJOR*** 54 S.H. (Total)	
Foundation Requirements:1	13 S.H.	Major Required Courses:	39 S.H.
GE 1000 Transition to Kean –or– GE 3000 Transfer Transitions2	1	ENV 1000 Introduction to Environmental Science	3
ENG 1030 Composition3	3	ENV 3100 Principles of Environmental Soil Science	4
MATH 1054 Precalculus4	3	ES 1101 Intro to Earth and Geographic Systems	4
COMM 1402 Speech Communication	3	ES 1200 Introduction to Geology	4
GE 2024 Research & Technology	3	ES 1300 Meteorology	4
		ES 2101 Geo-Hydro Systems	4
Disciplinary & Interdisciplinary Distribution Requirements:1	19 S.H.	ES 2400 Intro to Oceanography	4
<i>Humanities</i> 6 S.H. (from different areas)		ES 3010 Data Analysis and Modeling in GeoScience	4
*ENG 2403 World Literature	3	ES 3200 GIS in GeoScience	4
Take one "GE Approved" course from one area below		ES 4200 Remote Sensing	4
Fine Arts/Art History	3	Program Focused Electives:	12 S.H.
Philosophy or Religion	3	Optional: ES 1996 Research Initiative for First Year Students	1
Foreign Languages (Must take I and II for credit)	3	Optional: ES 3171-3173 Internship	1-3
Music or Theatre	3		
Interdisciplinary	3		
<i>Social Sciences</i> 6 S.H. (from different areas)			
*HIST 1062 Worlds of History	3		
Take one "GE Approved" course from one area below			
Psychology	3	**Major Capstone Course***:	3 S.H.
Economics or ES 1010-World Geography	3	SUST 4300 Independent Practicum in Sust. Science (WE)	3
Political Science	3		
Sociology or Anthropology	3		
Interdisciplinary	3	FREE ELECTIVES 8 S.H.	
		at least 50% must be 3000/4000 level	
<i>Science and Mathematics</i> 7 S.H.			
MATH 1016 Statistics	3		
BIO 1000 Principles of Biology**	4		
		Special Notes:	
		1See pre-requisites and equivalencies (on page 2)	
ADDITIONAL REQUIRED COURSES 26 S.H.		2University 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)	
CHEM 1083 Chemistry I****	4		
CHEM 1084 Chemistry II	4		
CHEM 2180 Principles of Organic Chemistry	4	3ENG 1030 requires grade of C or higher	
MATH 2415 Calculus	4	4 A Student whose qualifying score on the placement test makes them eligible to take either MATH 1054 or MATH 2411 may start with that course instead. In that case, the student may take 3 additional credits of free electives instead of MATH 1054 to total 120 credits.	
PHYS 2091 General Physics I	4		
SUST 1000 Introduction to Sustainability Science	3		
SUST 3100 Renewable Energy	3		
		*GE Distribution course required of all students	
		**Course required by Major	
		***All Major courses require a grade of C or better	
		****Must earn a grade of C or better to advance to CHEM 1084	

PROGRAM REVISION DATE 8/20/19

# 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  
\*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.