

**KEAN UNIVERSITY – COLLEGE OF NATURAL APPLIED & HEALTH SCIENCES
(77100) B.S. IN SUSTAINABILITY SCIENCES 20 S.H.**

Minimum GPA Required for Declaration: 2.5

Minimum GPA Required for Major: 2.5

Overall Minimum GPA Required for Graduation: 2.5

EFFECTIVE DATE: Fall 2019

GENERAL EDUCATION 32 Semester Hours (S.H.)		ACADEMIC MAJOR REQUIREMENTS 50-53 S.H.,	
Foundation Requirements:¹	13 S.H.	Major Required Courses: 37 S.H.	
GE 1000 Transition to Kean –or– GE 3000 Transfer Transitions ²	1	For Energy and Business Concentration 37 S.H.	
ENG 1030 Composition ³	3	For Environmental Engineering Concentration 38 S.H.	
MATH 1054 Precalculus ^{**3}	3	ENV 1000 Introduction to Environmental Science	3
COMM 1402 Speech Communication	3	ES 1101 Introduction to Earth and Geog Systems	4
GE 2024 Research & Technology	3	ES 2101 Geo-hydro Systems	4
		SUST 1000 Introduction to Sustainability	3
Disciplinary & Interdisciplinary Distribution Requirements:¹	19 S.H.	SUST 2200 Laws for Environmental Sustainability	3
Humanities 6 S.H. (from different areas)		SUST3200 Environmental Health and Safety	3
*ENG 2403 World Literature	3	SUST 4100 Life Cycle Assessment	3
Take one "GE Approved" course from one area below			
		Energy & Business Concentration (only)	
Fine Arts/Art History	3	ES 3010 Data Analysis and Modeling or ES 3200 GIS	4
Philosophy or Religion	3	SUST 3110 Renewable Energy	3
Foreign Languages (Must take I and II for credit)	3	SUST 3300 LEED Lab and AP Credential Preparation	4
Music or Theatre	3	SUST 4000 Technology for Sustainability	3
Interdisciplinary	3		
		Environmental Engineering Concentration (only)	
Social Sciences 6 S.H. (from different areas)		ENV 3100 Intro to Soil Science	4
*HIST 1062 Worlds of History	3	SUST 3400 Intro to Environmental Engineering	4
Take one "GE Approved" course from one area below		SUST 4700 Water and Wastewater Treatment	4
Psychology	3	SUST 4600 Air Pollution Control	3
Economics or ES 1010-World Geography	3		
Political Science	3	Major Elective Courses: 12-15 S.H.	
Sociology or Anthropology	3	For Energy & Business Concentration 13-16 SH	
Interdisciplinary	3	For Environmental Engineering Concentration 11-14 SH	
		Optional: ES 1996 Research Initiative for First Year Students	1
		Optional: ES 3171-3173 Internship	1-3
Science and Mathematics 7 S.H.			
MATH 1016 Statistics	3		
CHEM 1083 Chemistry I ^{****}	4	**Major Capstone Course^{***}: 3 S.H.	
		SUST 4300 Independent Practicum in Sustainability Science	3
ADDITIONAL REQUIRED COURSES 26 S.H.			
BIO 1300 Introduction to Biology I	4	FREE ELECTIVES 6-9 S.H	
BIO 1400 Introduction to Biology II	4	at least 50% must be 3000/4000 level	
CHEM 1084 Chemistry II	4		
MATH 2415 Calculus I	4		
PHYS 2091 General Physics I	4		
		Special Notes:	
Energy and Business Concentration (only)		¹ See pre-requisites and equivalencies (on page 2)	
ECO 1021 Principles of Economics II	3	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)	
MGS 2030 Principles of Management	3	³ ENG 1030 requires grade of C or higher	
Environmental Engineering Concentration (only)		*GE Distribution course required of all students	
MATH 2416 Calculus II	4	**Course required by Major	
PHYS 2197 Physics II	4	***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 12/4/2019

GENERAL EDUCATION AND UNIVERSITY 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.

Additional Required Courses

MATH 2415: has a prereq of MATH 1054

GE/Major Capstone Course

A Capstone course is a major course that satisfies three credits of GE requirements.

Each major guide sheet will count three credits for the Capstone as either GE credits or major credits, but not both.

Optional Research and Internship Courses

Optional course that may be counted toward free electives.

WE-Writing Emphasis

Upon approval

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.