

KEAN UNIVERSITY – The Dorothy and George Hennings College of Science, Mathematics and Technology

**Curriculum Sheet as of 09/01/2026
(ES) B.A. in EARTH SCIENCE/General Option
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

GENERAL EDUCATION: 32 S.H.		ACADEMIC MAJOR: 34 S.H.	
Essential Learning Courses*: 17 S.H.		Major Required Courses***: 16 S.H.	
Critical Reading & Academic Study Skills	4	ES 1100 Introduction to Astronomy	4
<i>All students must take 1 credit in Academic Study Skills: either GE*1000 or GE*3000</i>	1	ES 1200 Introduction to Geology	4
<i>All students must take 3 credits in Critical Reading from the GE PLO Course List.</i>	3	ES 1300 Introduction to Meteorology	4
Written Communication**	3	ES 1500 Coasts and Oceans	4
<i>All students must take 3 credits in Written Communication from the GE PLO Course List.</i>			
Speech Communication	3	Program-focused Elective Requirements: 15 S.H.	
<i>All students must take 3 credits in Speech Communication from the GE PLO Course List.</i>		Any courses ES, ENV, and SUST with at least 50% of credits at the 3000-4000 level. If the course is taken as a Major Requirement, it cannot be counted as a General Education course. Must earn a grade of C or better.	
Quantitative & Scientific Reasoning	7		
<i>All students must take either MATH*1016 or MATH*1054 (3 credits each).</i>	3	FREE ELECTIVES: 32 S.H.	
BIO 1000 Principles of Biology or BIO 1300 Biology I **	4	Students will be advised to take appropriate courses with at least 50% of credits at the 3000-4000 level matched to their career interests and preparation. Students are encouraged to pursue different minor programs offered at KU (e.g. Sustainability, Accounting, Marketing, Management, Criminal Justice, Public Administration, Information Technology, Statistics, Mathematical Sciences, Cyber Security, Computer Science Education, and others in the College of Liberal Arts and Education.)	
Core Competency Courses: 12 S.H.			
Intercultural Knowledge & Understanding	3	G.E. and Major Capstone: 3 S.H.***	
<i>All students must take 3 credits in Intercultural Knowledge & Understanding from the GE PLO Course List.</i>		ES 4981 Environmental Issues Seminar (WE)	3
Critical & Creative Thinking	3		
<i>All students must take 3 credits in the Critical & Creative Thinking from the GE PLO Course List.</i>			
Ethical Reasoning	3		
<i>All students must take 3 credits in Ethical Reasoning from the GE PLO Course List.</i>			
Wellness	3		
Inquiry & Analysis Passion Project: 3 S.H.	3		
<i>All students must take 3 credits in Inquiry & Analysis from the GE PLO Course List.</i>			

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NOTES

All pre-requisites for major courses must be passed with a grade of C or better.

A minimum major GPA of 2.5 and minimum grade of C is required in all major courses,

Where a program-required course appears on the approved GE PLO Course List, students may apply that course toward both their major requirement and their GE requirement, potentially reducing total credits or increasing free elective flexibility.

Examples include, but are not limited to:

MATH 1054	Quantitative Reasoning
CHEM 1083 or BIO 1300 or PHYS 2095	Scientific Reasoning
CHEM 1084 or PHYS 2096	Inquiry and Analysis

GENERAL EDUCATION AND UNIVERSITY REQUIREMENTS

GENERAL EDUCATION INFORMATION AND REQUIREMENTS

Testing and Placement

Incoming freshmen and transfer students may be placed in specific GE Essential Learning, 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 Essential Learning Courses

GE*1000

Required of all freshmen & transfers entering with 0-29 credits

Pre-requisite: None

Equivalency: ID*1001

GE*3000

Required of transfers entering with 30 credits or more

Pre-requisite: 30 credits and ENG*1030 (or equivalent)

ENG*1030

Pre-requisite: Placement testing or exemption from placement testing

Equivalency: ENG*1031/1032, ENG*1033/1034, ENG*1430, ENG*1620, ENG*1020, ENG*1400

MATH*1016

Pre-requisite: MATH*0901 if required by placement testing

Co-requisite: MATH*0902 should be taken concurrently with Math*1016 if required by placement testing

MATH*1054

Pre-requisite: MATH*0901 if required by placement testing and MATH*1000

COMM*1402

Pre-requisite: ENG*1031/1032 or ENG*1033/1034 if required by placement testing; May be taken concurrently with ENG*1030

Equivalency: COMM*1400

Inquiry & Analysis PLO

GE 2021- 2026: *Research and Technology* is offered as a college-based course.

Pre-requisite: CS*0412 if required by placement testing; Written Communication course & Speech Communication course

Equivalency: GE*2020

GE*2021: College of Business and Public Management

GE*2022: College of Education & College Health Professions and Human Services

GE*2023: College of Liberal Arts

GE*2024: College of Science, Mathematics, and Technology & College Health Professions and Human Services

GE*2025: Departments of Fine Arts, Music, and Theatre & Michael Graves College

GE*2026: Undecided Majors and other special populations

GE PLO Courses

Approved GE PLO Course List

All courses taken under the General Education Essential Learning and Core Competency requirements must be selected from the Approved General Education PLO Course List.

Foreign Language Credit

The three credits for a foreign language that may satisfy the GE Intercultural Knowledge & Understanding 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 an

elective.

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

To graduate, all students are required to complete at least one "Writing Emphasis" course within their major. Such courses are designed to provide students with an opportunity to explore writing as it is done in their chosen field. Typically, Writing Emphasis courses are taken in the junior or senior year, after the student's initial composition courses are completed. Students should consult their major program advisor for specific information about the Writing Emphasis course requirement.