KEAN UNIVERSITY – Hennings College of Science, Mathematics and Technology

(CHEM) B.S. IN CHEMISTRY (EXPANDED OPTION-ACS CERTIFIED) 120 S.H.

Minimum GPA Required for Declaration: **2.00**

Minimum GPA Required for Major: **2.00**

Overall Minimum GPA Required for Graduation: **2.00**

EFFECTIVE DATE: Fall 2025

GENERAL EDUCATION 32 Semester Hours (S.H.)		**ACADEMIC MAJOR*** 57 S.H. (Total)**	
Foundation Requirements:[1] 13 S.H.		**Major Required Courses: 48 S.H.**	
GE 1000 Transition to Kean **–or–** GE 3000 Transfer Transitions[2]	1	CHEM 1083 Chemistry I	4
ENG 1030 Composition[3]	3	CHEM 1084 Chemistry II	4
MATH 1000 Algebra for College Students	3	CHEM 2283 Quantitative Analysis	4
COMM 1402 Speech Communication	3	CHEM 2581 Organic Chemistry I	3
GE 202X Research & Technology	3	CHEM 2582 Organic Chemistry II	3
		CHEM 2581L Organic Chemistry Lab I WE	1
Disciplinary & Interdisciplinary Distribution Requirements:[1] 19 S.H.		CHEM 2582L Organic Chemistry Lab II	1
Humanities **6 S.H. (from different areas)**		CHEM 2491 Inorganic Chemistry	3
*ENG 2403 World Literature	3	CHEM 3284 Instrumental Method of Analysis WE	4
Take one "GE Approved" course from one area below		CHEM 3381 Physical Chemistry I	3
Fine Arts/Art History	3	CHEM 3382 Physical Chemistry II	3
Philosophy or Religion	3	CHEM 3385 Physical Chemistry Laboratory	2
Foreign Languages (Must take I and II for credit)	3	BCHM 4115 Biochemistry	3
Music or Theatre	3	BCHM 4115L Biochemistry Laboratory	1
Interdisciplinary	3	CHEM 4182 Advanced Organic Preparations	3
		CHEM 4481 Advanced Inorganic Chemistry	3
Social Sciences **6 S.H. (from different areas)**		CHEM 4483 Inorganic Chemistry Laboratory	3
*HIST 1062 Worlds of History	3		
Take one "GE Approved" course from one area below			
Psychology	3	**Major Elective Courses: 6 S.H.**	
Economics or ES 1010	3	4000 level Chemistry lab course	3
Political Science	3	One 4000 level lecture courses in Chemistry, Physics, Math or Earth science	3
Sociology or Anthropology	3		
Interdisciplinary	3	****GE and Major Capstone Course**** **3 S.H.**	
		CHEM 4908 Seminar in Chemistry	3
Science and Mathematics **7 S.H.**		**FREE ELECTIVES 11 S.H.**	
**MATH 1054 Pre-Calculus	3	**at least 50% must be 3000/4000 level**	
**PHYS 2095 Physics I	4		
ADDITIONAL REQUIRED COURSES 20 S.H.		**Special Notes:**	
MATH 2415 Calculus I	4		
MATH 2416 Calculus II	4	[1]See pre-requisites and equivalencies (on page 2)	
MATH 3415 Calculus III	4	[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)	
PHYS 2196 Physics II	4		
PHYS 2197 Physics III	4		
		[3]ENG 1030 requires grade of C or higher	
		*GE Distribution course required of all students	
		**Course required by Major	
		***All Major courses require a grade of C or better	

Rev. 1/2025 (Registrar/VPAA/Senate/UCC/GE-120 mandate)

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.