KEAN UNIVERSITY

College of Natural, Applied and Health Sciences
(Major Code 72110) B.S. in Chemistry: Forensic Science Option - 120 Semester Hours (S.H.)
Effective Fall 2022
Minimum 2.5 Cumulative and Major GPA Requirement

GENERAL EDUCATION: 35 SH		**ACADEMIC MAJOR COURSES: 65 SH**	
Foundation Requirements[1]	**13 SH**	**Major Required Courses[3]**	**26 SH**
GE 1000 Transition to Kean[2] **OR** GE 3000 Transfer Transitions[2]	1	CHEM 1084 Chemistry II	4
		CHEM 2283 Quantitative Analysis	4
ENG 1030[3] College Composition	3	CHEM 2491 Inorganic Chemistry	3
MATH 1054 Precalculus	3	CHEM 2581 Organic Chemistry Lecture I	3
COMM 1402 Speech Communication	3	CHEM 2582 Organic Chemistry Lecture II	3
GE 2024 Research & Technology	3	CHEM 2581L Organic Chemistry Lab I	1
DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION REQUIREMENTS:		CHEM 2582L Organic Chemistry Lab II	1
Humanities (GEHU)	**6 SH**	CHEM 3284 Instrumental Methods of Analysis	4
ENG 2403 World Literature	3	CHEM 3381 Physical Chemistry I	3
PHIL 2300 Introduction to Ethics	3	**Major Required Courses: Biology**	**8 SH**
Social Sciences (GESS)	**6 SH**	BIO 1300 General Biology I	4
HIST 1062 Worlds of History	3	BIO 1400 General Biology II	4
Select <u>one</u> courses from the following		**Criminal Justice**	**9 SH**
Economics/Geography	3	CJ 2600 Criminal Justice in America	3
Political Science	3	CJ 3700 Proof and Verification	3
Psychology	3	CJ 4100 Trial Advocacy	3
Sociology/Anthropology	3	**Major Required Courses: Forensic Science**	**18 SH**
Interdisciplinary	3	FSC 1000 Introduction to Forensic Science	3
Science and Mathematics (GESM)	**7 SH**	FSC 2000 Forensic Science Fundamentals	3
MATH 1016 Statistics	3	FSC 3000 Crime Scene Investigation	4
CHEM 1083 Chemistry 1	4	FSC 4010 Criminalistics: Trace and Impression Evidence	4
Major/GE Capstone[3]	**3 SH**	FSC 4030 Forensic Chemistry	4
CHEM 4908 Seminar in Chemistry	3	**Free Electives**	**4 SH**
ADDITIONAL REQUIRED COURSES	**20 SH**	CHEM 1996 Applied Research in Chemistry[5]	1
MATH 2415 Calculus I	4	CHEM 3291, 2, 3 Internship[5]	1-3
MATH 2416 Calculus II	4	BCHM 4115 Biochemistry	3
MATH 3415 Calculus III	4	BCHM 4115L Biochemistry Lab	1
PHYS 2095 Physics I	4		
PHYS 2197 Physics III	4		
Advisor's Signature:			

Minimum cumulative GPA of 2.5 at time of application for acceptance as declared major
Minimum 2.5 cumulative and major GPA requirement. Graduate Schools likely require a 3.0 minimum for eligibility

[1]See prerequisites & 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, Capstone & Major Courses require C or higher
[4]C or higher needed to progress to next course
[5]Student may use <u>optional</u> Internship or Applied Research courses to fulfill Free Elective.

<u>GENERAL EDUCATION INFO & REQUIREMENTS</u>

<u>Testing and Placement</u>: 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

ENG 1030 Prereq: Placement testing; Equiv: ENG 1031/32; 1033/34; 1430; ENG 1020; 1400

MATH 1054 Precalc Prereq: 3 yrs secondary school math including 2 yrs algebra + 1 yr geometry or equivalent & qualifying score on placement exam or equivalent

COMM 1402 Prereq: CS 0411 or 0412 if required by testing; ENG1031/32;1033/34Maybe taken concurrently w/ENG1030;Equiv:COMM1400

GE 2021-2024 Research & Technology is offered as college-based course
GE 2021 College of BPA; GE 2022 College of ED; GE 2023 College of AHSS; GE 2024 College of NAHS
Prereq: ENG 1030 or equivalent & MATH 1000 or equivalent; Equiv: GE 2020

Course Paired with Reading Must be taken concurrently with CS 0412 if required by placement testing.

General Education Distribution Courses

All courses under GE Disciplinary/Interdisciplinary Distribution requirements must be selected from the Approved GE Distribution Course List.
(GEHU Humanities; GESS Social Sciences; GESM Science and Mathematics; GEHPE Health and Physical Education)

Required GE Distribution Courses

ENG 2403 is a required Humanities Distribution course with an emphasis on diversity. Prereq: ENG 1030 or equivalent
HIST 1062 is a required Social Sciences Distribution course with an emphasis on diversity.

Major/GE 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.

Course Prerequisites (Pre/Corequisites may change, consult Keanwise; Some course may require approved petitions)

BIO 1300: Math 1000 (College Algebra) or the University's math placement exam score to qualify & Corequisite: MATH 1054 (precalculus) or instructor permission
BIO 1400: Prerequisite BIO 1300 and Corequisite CHEM 1083 General Chemistry I
BCHM 4115: BIO 1400, BIO 3315, and BIO 3315L
BCHM 4115L: BIO 1400, BIO 3315, and BIO 3315L

FSC 2000: FSC 1000 & CJ 2600
FSC 3000: CJ 3700 & FSC 2000
FSC 4010: CJ 3700 & FSC 2000
FSC 4030: CHEM 2581,CHEM 2583 & BIO 4105

CHEM 1083: Prerequisite MATH 1000 (College Algebra); Corequisite MATH 1054 (Precalc)
CHEM 1084: MATH 1054, & CHEM 1083 with grade of C or better
CHEM 2283: CHEM 1084 with grade of C or better
CHEM 2491: Math 2415, C or better in CHEM 1084 or permission of instructor
CHEM 2581: CHEM 1084 with grade of C or better
CHEM 2582: CHEM 2581 with grade of C or better
CHEM 2581L: Corequisite of CHEM 2581 with grade of C or better
CHEM 2582L: CHEM 2583 with grade of C or better & Corequisite of CHEM 2582
CHEM 3284: CHEM 2283, MATH 2415, PHYS 2097, or permission of the instructor
CHEM 4908: All GELAP requirements & permission of instructor

CJ 3700: CJ 2600 or permission of instructor
CJ 4100: CJ 3685, 9 SH of CJ courses or permission of the instructor

MATH 2415: MATH 1054 (Precalc)
MATH 2416: MATH 2415

PHYS 2095: Prerequisite of Math 2415; Corequisite of MATH 2416
PHYS 2197: Prerequisite of PHYS 2095 & MATH 2416