KEAN UNIVERSITY – COLLEGE OF NATURAL, APPLIED & HEALTH SCIENCES
(28701) B.S. in Information Technology (Cybersecurity Option): 120 S.H.
Minimum GPA Required for Declaration: 2.50
Minimum GPA Required for Major: 2.50
Overall Minimum GPA Required for Graduation: 2.50

EFFECTIVE DATE: Fall 2019

GENERAL EDUCATION	33 S.H.	ACADEMIC MAJOR	43 S.H.
Foundation Requirements [1]	**13 S.H.**	**Major Core** **	**13 S.H.**
GE 1000 Transition to Kean [2] *or* GE 3000 Transfer Transitions [2]	1	TECH 1010 IT Foundations	3
ENG 1030 College Composition [3]	3	TECH 1505 Digital Systems and Communications	4
MATH 1000 Algebra for College Students [4]	3	TECH 2520 Networking Essentials for Technology	3
COMM 1402 Speech Communication as Critical Citizenship	3	TECH 2920 Computer Systems	3
GE 2024 Research & Technology	3		
		Major Concentration **	**15 S.H.**
Disciplinary & Interdisciplinary Distribution Requirements [1]		TECH 3498 IT Computer Security	3
Humanities	**6 S.H.**	TECH 3500 Web Client-Side Programming	3
ENG 2403 World Literature *	3	TECH 3525 Introduction to Unix/Linux	3
take one "GE Approved" course from one area below		TECH 3740 Database System Concepts and Applications	3
Fine Arts/Art History	3	TECH 3910 IT Project Management WE	3
Philosophy or Religion	3		
Foreign Languages *(must take I and II for credit)*	3	**Major Electives** **, [6]	**12 S.H.**
Music or Theatre	3	TECH 3xxx or 4xxx	3
Interdisciplinary		TECH 3xxx or 4xxx	3
		TECH 3xxx or 4xxx	3
Social Sciences	**6 S.H.**	TECH *or* CPS 3xxx or 4xxx	3
HIST 1062 Worlds of History *	3		
take one "GE Approved" course from one area below		**Major Capstone** **	**3 S.H.**
Psychology	3	TECH 4513 Senior Project in IT	3
Economics or ES 1010 World Geography	3		
Political Science	3		
Sociology or Anthropology	3	**FREE ELECTIVES**	**13 S.H.**
Interdisciplinary	3	*at least 50% must be 3000/4000 level*	
		(recommended: ID 1400 Computing in Modern Society)	3
Science and Mathematics	**8 S.H.**	*(recommended: TECH 1996 Research Initiative for Freshmen)* [7]	1
CPS 1231 Fundamentals of Computer Science **, [5]	4	*(recommended: TECH 2010 Career Education)*	1
Lab Science (BIO 1000, CHEM 1083, ES 1100, ES 1200, ES 1300, *or* PHYS 2091)	4	*(recommended: TECH 3171/72/73 Internship in IT)* [8]	1-6
		(recommended: TECH 3291/92/93 Career Internship in IT) [8]	1-6
ADDITIONAL REQUIRED COURSES **	**31 S.H.**		
COMM 2405 Public Speaking	3		
ENG 3091 Technical Writing	3	**Special Notes:**	
MGS 2030 Principles of Management	3	[1] See pre-requisites and equivalencies (on page 2)	
CPS 2231 Computer Organization & Programming [5]	4	[2] University requirement for graduation for all undergraduate	
CPS 2240 IT Data Structures and Applied Programming	3	students that must be satisfied in one of two ways: Complete GE	
CPS 3601 Human-Computer Interaction	3	1000 (all freshmen and transfers entering with 0-29 credits) OR	
CPS 4498 Digital Forensics Principles	3	complete GE 3000 (transfers entering with 30 credits or more)	
MATH 1054 Precalculus [4]	3	[3] ENG 1030 requires grade of C or higher	
MATH 2110 Discrete Structures	3	[4, 5, 6, 7, 8] See notes (on page 2)	
MATH 2526 Applied Statistics I	3	*GE Distribution course required of all students	
		**All Major courses, All Additional and supporting courses, including Capstone requires grade of C or higher	
		WE Writing Emphasis course	

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.

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[4] Students eligible to take MATH 1054 based on their placement test may take that course in place of MATH 1000 (In this case, MATH 1054 will fulfill GE Foundation Requirements and the student may take an additional 3 credits in Free Electives to total 120 S.H.).

[5] Students who have had prior programming experience may enter CPS 2231 directly with approval of the Departmental Advisory Committee (In this case, CPS 2231 will fulfill GE Science and Mathematics Distribution and the student may take another 4 credits in Major Electives to total 120 S.H.).

[6] Select 4 TECH Elective courses with department advisement, at the 3xxx level or higher. (1 CPS Elective course may be selected, with faculty permission).

[7] **Optional Freshman Research Course**
Students can take 1 credit which may fulfill Free Electives requirements with approval of the Departmental Advisory Committee. TECH 1996 Research Initiative for Freshmen is recommended to be taken in the second semester of the freshman year.

[8] **Optional Internship Course**
Students can take a maximum of 6 credits for TECH 3171/72/73 Internship in IT which may fulfill Free Electives requirements with the approval of the Departmental Advisory Committee. TECH 1996, TECH 2010, and TECH 3171/72/73 are TECH courses acceptable for use in Free Electives and are managed by the School of Computer Science. TECH 3291/92/93 Career Internship in IT are also internship courses acceptable for use in Free Electives managed by Career Services. Students interested should contact Career Services.

Additional Required Courses Prerequisites (Pre/corequisites may change, consult KeanWise)

Course	Prerequisite
COMM 2405 Public Speaking	COMM 1402
ENG 3091 Technical Writing	ENG 1030
MGS 2030 Principles of Management	COMM 1402 and GE 202x
MATH 1054 Precalculus	MATH 1000
MATH 2110 Discrete Structures	MATH 1504
MATH 2526 Applied Statistics I	MATH 1504

REQUIREMENTS FOR DECLARATION TO THE MAJOR
The School of Computer Science has adopted the following standards for declaration to all options of the Information Technology major:
  a) Minimum cumulative GPA of 2.5 at the time of declaration to the major.
  b) Completion of at least 13 credits of CPS and TECH Major courses at Kean University with grade of C or higher in each.

Your major department is located in North Avenue Academic Building, Room 233, Tel: 908-737-6150.