KEAN UNIVERSITY – College of Natural Applied & Health Sciences (78307) B.S. Computer Science (Cybersecurity Option): 120 S.H.

EFFECTIVE DATE: Fall 2018		START TERM: _____	
NAME		TRANSFER INSTITUTIONS (X) Credits:	
STUDENT ID#		In Progress	
GENERAL EDUCATION: 36 Semester Hours (S.H.)			
Foundation Requirements 13 S.H.		**ACADEMIC Major ** 41 S.H.Total Credits**	
GE 1000 Transition to Kean or GE 3000 Transfer Transitions[2]	1	**REQUIRED: Major Core [3, 9] 14 S.H.**	
ENG 1030 Composition [3]	3	CPS 2231 Computer Organization & Programming	4
MATH 1054 Precalculus [4]	3	CPS 2232 Data Structures	4
COMM 1402 Speech Communication	3	CPS 2390 Organization & Architecture	3
GE 2024 Research & Technology	3	CPS 3250 Computer Operating Systems	3
DISCIPLINARY & INTERDISCIPLINARY DISTRIBUTION REQUIREMENTS: [1]		**Major Concentration Requirements [3, 9] 15 S.H.**	
Humanities: 6 S.H. (from different areas)		CPS 3440 Analysis of Algorithms	3
*ENG 2403 World Literature	3	CPS 3498 Computer Security	3
Fine Arts/Art History	3	CPS 3740 Database Systems	3
Philosophy or Religion	3	CPS 4222 Principles of Networking	3
Foreign Languages (Must take I and II for credit)[5]	3	CPS 4498 Digital Forensics	3
Music or Theatre	3		
Interdisciplinary	3		
		Major Electives [3, 7, 9] 12 S.H.	
Social Sciences: 6 S.H. (from different areas)			
*HIST 1062 Worlds of History	3	CPS 3xxx or 4xxx	3
Psychology	3	CPS 3xxx or 4xxx	3
Economics or Geography	3	CPS 3xxx or 4xxx	3
Political Science	3	CPS 3xxx or 4xxx [7]	3
Sociology or Anthropology	3		
Interdisciplinary	3		
Science and Mathematics: 8 S.H.		**FREE ELECTIVES: 9/11 S.H. [10]** **at least 50% must be 3000/4000 level**	
CPS 1231 Fundamentals of Computer Science [3, 6]	4		
Lab Science I [8] - BIO 1300 / CHEM 1083 / PHYS 2091/95	4		
G.E. and Major Capstone: 3 S.H. [3, 9]**			
CPS 4951 Sr. Project or CPS 4961 Sr. Research	3		
Additional Required ** Courses: [3] 32/34 S.H.**		**Special Notes:**	
Lab Science II - BIO 1400 /CHEM 1084 / PHYS 2092/96/97	4	*G.E. required course	
TECH 2920 Computer Systems	3	**Courses required by Major**	
ENG 3091 Technical Writing	3	***All Major courses require a grade of C or better**	
MATH 2110 Discrete Structures	3	**>Require advisor permission**	
MATH 2526 Applied Statistics	3	**Note: See foreign language requirements**	
MATH 2415 Calculus I [4]	4	**TOTAL CREDITS:**	
MATH 2995 Matrix & Linear Algebra	3		
MATH 3225, 3526, 3544, 3815, 3700, 3710, 3760, 3780, 3790 [11]	3		
Math/Science (Math elective 2xxx-4xxx level only; Math 2416 Calculus II recommended)	3/4		
Math/Science (Math elective 2xxx-4xxx level only)	3/4	Advisor Signature:	

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[1] See approved GE Distribution courses at
http://www.kean.edu/~gened/forms/Approved_GE_Distribution_Courses_Oct2009.pdf
[2] Requirement for graduation 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 and all Major and Additional Required courses, including Capstone, require a 'C' or better.

[4] Students who do not qualify on the placement test to take MATH 1054, must take Math 1000 from Free Electives instead. If they qualify on the placement test, or grades, to start in Math 2415, then they should take Math 2415 in Foundations, and Math 2416 in Additional Required courses, which means 3 credits more in free electives.

[5] Credit granted only upon completion of two semesters of elementary or intermediate foreign language. (3 credits applied to Humanities and 3 credits applied to free electives).

[6] Students who have had prior programming experience may enter CPS 2231 directly. CPS 2231 will count as a GE requirement and the student may take another 3 credits in Major electives.

[7] Select five CPS courses, with department advisement, at the 3000 level or higher.

[8] A 2-course lab science sequence, with 4 credits in GE and 4 credits in Additional Requirements. Both lab science courses must be from the same department (BIO, CHEM, or PHYS)

[9] Students must take at least half of their CPS credits at Kean University

[10] Two Graduate CPS courses for the MS in CIS 5-year program, may be free electives in B.S. in CS.

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Math Classes	Prerequisites
Math 3120, 3155	Math 3110 (Math elective)
Math 3225	Math 2995 and Math 2416
Math 3415, 3455, 3544, 3940	Math 2416
Math 3526	Math 2526 (required for BS in CS)
Math 3815	No Prerequisite

<u>NOTE ON FREE ELECTIVES</u>

CPS 4999 Cooperative Education may be counted as a free elective (no more than 3 S.H.). There are four prerequisites for CPS 4999 which include the following:

       (a) a minimum of 21 credits in CS, including all Core Requirements in the major;

       (b) a minimum 3.00 GPA in the major;

       (c) a minimum 2.75 cumulative GPA; and

       (d) approval of the Departmental Advisory Committee.

REQUIREMENTS FOR ADMISSION TO THE MAJOR

The Department of Computer Science has adopted the following standards for admission:

1. Minimum cumulative GPA of 2.5 at the time of admission to the major.

2. Completion of at least 12 credits of CPS courses at Kean, each with a grade of "C".

Evaluator's Signature_____ **Date**_____

Your major department is located in North Avenue Building, Room 233.

BRING THIS EVALUATION AND YOUR KEAN UNIVERSITY TRANSCRIPT TO ALL ADVISING/REGISTRATION SESSIONS.