### KEAN UNIVERSITY – COLLEGE OF Natural Applied & Health Sciences ( 78305 ) B.S. IN Computer Science: 124 S.H.

EFFECTIVE DATE: Fall 2012		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	41
GE 1000 Transition to Kean <sup>2</sup>	1	REQUIRED: Major Core <sup>3, 9</sup> 14 S.H.	
ENG 1030 Composition <sup>3</sup>	3	CPS 2231 Computer Organization & Programming	4
MATH 1054 Precalculus <sup>4</sup>	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 <sup>3,9</sup> 12 S.H.	
Humanities: 6 S.H. (from different areas)		CPS 3440 Analysis of Algorithms OR	3
*ENG 2403 World Literature	3	CPS 4501 Formal Languages & Automata	
Fine Arts/Art History	3	CPS 3962 Object Oriented Analysis & Design	3
Philosophy or Religion	3	CPS 4150 Computer Architecture OR	3
Foreign Languages (Must take I and II for credit) <sup>5</sup>	3	CPS 4200 Systems Programming	
Music or Theatre	3	CPS 4222 Principles of Networking	3
Interdisciplinary	3		
		Major Electives <sup>3, 7, 9</sup> 15 S.H.	
Social Sciences: 6 S.H. (from different areas)		CPS 3xxx or 4xxx (recommended CPS 3150)	3
*HIST 1000 (America) or HIST 1062 (World)	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: 20/21 S.H. at least 50% must be 3000/4000 level	20/21
CPS 1231 Fundamentals of Computer Science <sup>3, 6</sup>	4		
Lab Science <sup>8</sup>	4		
Biology; Chemistry; Physics; Geology; Meteorology; or Earth Science			
G.E. and Major** Capstone: 3 S.H. <sup>3, 9</sup>			
CPS 4951 Sr. Project or CPS 4961 Sr. Research	3		
•		Other Transfer:	
Additional Required ** Courses: <sup>3</sup> 26/27 S.H.			1
Lab Science II - Bio II, Chem II, Metr II, Phys II	4		
Tech 2920 Computer Systems	3	Special Notes:	
Eng 3091 Technical Writing	3	*G.E. required course	
Math 2110 Discrete Structures	3	**Courses required by Major	
Math 2526 Applied Statistics	3	***All Major courses require a grade of C or better	1
Math 2415 Calculus I <sup>4</sup>	4	>Require advisor permission	
Math 2416 Calc II or Math 2995 Matrix & Linear Algebra	4/3	Note: See foreign language requirements	
Select one from: Math 3120, 3155, 3225, 3451, 3455, OR	3	TOTAL CREDITS:	
Math 3544, 3815, 3940, 4800	-	Advisor:	
		Advisor Signature:	

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<sup>1</sup> See approved GE Distribution course list at http://www.kean.edu/~gened/advisementinfo.html

<sup>2</sup> Required of all Freshmen and Transfers with fewer than 10 credits.

<sup>3</sup>All major and Additional Required courses, including the Capstone, require a grade of C or better.

<sup>4</sup> 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.

<sup>5</sup> Credit granted only upon completion of two semesters of elementary or intermediate foreign language. Three credits may be applied to Humanities and three credits may be applied to free electives.

<sup>6</sup> Students who have had prior programming experience may enter CPS 2231 directly. In this case, CPS 2231 will be counted as a General Education requirement and the student may take another three credits in Major electives.

<sup>7</sup>Select five CPS courses (or max 1 IT/TECH courses from an approved list), with department advisement, at the 3000 level or higher.

<sup>8</sup>Select any 2 course lab science sequence, with 4 credits in GE and 4 credits in Additional Requirements.

<sup>9</sup> Students must take at least half of their CPS credits at Kean University

#### NOTE ON FREE ELECTIVES

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 Computer science, 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.

#### ADMISSION REQUIREMENTS

The Department of Computer Science has formally adopted the following standards for admission to all options of the Computer Science major:

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

2. Completion of at least 9 credits of CPS courses at Kean University with grade of "C" or better in each.

#### **Comments:**

Evaluator's	
Signature	Date
—	
Advisor's Signature	Date

Your major department is located in the HH Hennings Hall, Room 215, phone (908)737-3800.

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