(78309) B.S. in CS/M.S. in CIS: 5-year study Plan, total 126+24 = 150 credits

This first-year study plan is for new students only. All new students should see their CS/IT faculty advisor (in Oct) to review and update their 4-year study plans before the early registration period (in Nov). Students should pay attention to each course's prerequisites and the offered semester (CourseID CourseName (credits) (semester offered)). Please check the academic guide sheets at http://yoda.kean.edu/studyplans/

Name:		Faculty Advisor:
Kean Id#		Catalog Year:

Notes: (Tip) Modify this template by typing the year, moving courses around, adding rows, etc. and make your personalized study plan.
All transfer students should take CPS 1010 (1 credit).

1st Year Fall (15)	**1st Year Spring (17)**
MATH 1054 Precalculus (3)	**MATH 2110** Discrete Structures (3)
CPS 1231 Fundamentals of CS (4) (FA/SP)	**CPS 2231** Computer Programming (4) (FA/SP)
ENG 1030 College Composition (3)	**COMM 1402** Speech Communication (3)
GE 1000/3000 Transition to Kean (1)	**HIST 1062** Worlds of History (3)
Lab Science 1 (4)	**Lab Science 2** (4)

Internship, summer course, or summer research

2nd Year Fall (17)	**2nd Year Spring (16/17)**
MATH 2415 Calculus I (4)	**MATH 2416** Calculus II (4) or MATH 2995 Linear Algebra (3)
CPS 2232 Data Structures (4) (FA/SP)	**TECH 2920** Computer Systems (3) (FA/SP)
CPS 2390 Computer Org. and Arch. (3) (FA/SP)	**CPS 3250** Computer Operating Systems (3) (FA/SP)
ENG 2403 World Literature (3)	**ENG 3091** Technical Writing (3)
GE 2024 Research and Technology (3)	**Social Sciences** (3)
	CPS 2010 Career Education – recommend Free Elective #1 (1)

Internship, summer course, or summer research

3rd Year Fall (15/16)	**3rd Year Spring (15/16)**
MATH 2526 Applied Statistics I (3)	**CPS 3962** Object Oriented Analysis & Design (3) (SP)
CPS 3440 Analysis of Algorithms (3) (FA)	**CPS 4200** Systems Prog. (3) (SP) or **CPS Elective** (3) #1
CPS 3498 Computer Security (3) (FA/SP)	**CPS Elective** (3) #1 (recommend CPS 3740 (3) Database)
MATH or Science (3/4) #1	**MATH or Science** (3/4) #2
Humanities (3)	**Free Elective** (3) #2

Internship, summer course, or summer research

4th Year Fall (12+3)	**4th Year Spring (12+3)**
MATH Elective 3xxx (3/4)	**CPS 4951** Senior Project (3) (SP)
CPS 4150 Computer Arch. (3) (FA) or **CPS Elective** (3) #1	**CPS 4222** Principles of Networking (3) (SP)
CPS Elective (3) #3	**CPS Elective** (3) #4
Free Elective 3000/4000 (3) #3	**Free Elective 3000/4000** (3) #4
CPS 5440 Advanced Analysis of Algorithms (3) (FA)	**CPS 5100** Computer Information Systems (3) (SP)

Internship, summer course, or summer research

5th Year Fall (12)	**5th Year Spring (12)**
CPS 5740 Database Systems (3) (FA)	**CPS 5981** Software Assurance (3) (SP)
CPS 5301 Software Engineering (3) (FA)	**CPS 5995** CIS Capstone (3) (SP)
CPS 5xxx Elective #1 (3)	**CPS 5xxx Elective** #3 (3)
CPS 5xxx Elective #2 (3)	**CPS 5xxx Elective** #4 (3)

Fall offered CPS Major Electives	**Spring offered CPS Major Electives**
CPS 3310 Programming Languages (3) (FA)	**CPS 3320** Python Programming (3) (SP)
CPS 3351 Information Systems Programming (3) (FA)	**CPS 3498** Computer Security (3) (FA/SP)
CPS 3440 Analysis of Algorithms (3) (FA)	**CPS 3525** Programming in the UNIX Environment (3) (SP)
CPS 3498 Computer Security (3) (FA/SP)	**CPS 3601** Human Computer Interaction (3) (SP)
CPS 4150 Computer Architecture (3) (FA)	**CPS 3962** Object Oriented Analysis & Design (3) (SP)

Rev. 08/2021

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CPS 4301 Software Engineering (3) (FA)	**CPS 4200** Systems Programming (3) (SP)
CPS 4498 Digital Forensics (3) (FA)	**CPS 4222** Principles of Networking (3) (SP)
CPS 4931 Distributed Systems Applications (3) (FA)	**CPS 4801** Artificial Intelligence Applications (3) (SP)
CPS 3310 Programming Languages (3) (FA)	
CPS 3351 Information Systems Programming (3) (FA)	**CPS 5500** Web Design and Development (3) (SP)
	CPS 5601 Human Computer Interaction (3) (SP)
CPS 5498 Digital Forensics and Investigation (3) (FA)	**CPS 5721** Data Mining (3) (SP)
CPS 5745 Interactive Information visualization (3) (FA)	**CPS 5801** Artificial Intelligence and Expert Systems (3) (SP)
CPS 5802 Machine Learning Innovation (3) (FA)	**CPS 5931** Network Systems (3) (SP)
CPS 5965 High Performance Computing (3) (FA)	

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