

### (AI) B.S. in AI: 4-year Study Plan

1st Year Fall (15)	1st Year Spring (17)
<b>MATH 1054</b> Precalculus (3)	<b>MATH 2110</b> Discrete Structures (3)
<b>CPS 1231 Fundamentals of Computer Science</b> (4)	<b>CPS 2231</b> Computer Programming (4)
<b>ENG 1030</b> College Composition (3)	<b>COMM 1402</b> Speech Comm. (3)
<b>GE 1000/3000</b> Transition to Kean (1)	<b>ID 1400</b> Comp. in Modern Society (3) - <b>Free Elective #1</b>
<b>Lab Science 1</b> (4)	<b>Lab Science 2</b> (4)

Internship, summer course, or summer research

2nd Year Fall (17)	2nd Year Spring (16)
<b>MATH 2415</b> Calculus I (4)	<b>MATH 2995</b> Matrix & Linear Algebra (3)
<b>CPS 2232</b> Data Structures (4)	<b>TECH 2920</b> Computer Systems (3)
<b>CPS 2800</b> Fundamentals of AI (3)	<b>CPS 3830</b> Machine Learning Foundations (3)
<b>HIST 1062</b> Worlds of History (3)	<b>ENG 2403</b> World Literature (3)
<b>GE 2024</b> Research and Technology (3)	<b>Social Sciences</b> (3)
	<b>CPS 2010</b> Career Education - <b>Free Elective #2</b> (1)

Internship, summer course, or summer research

3rd Year Fall (15/16)	3rd Year Spring (15/16)
<b>MATH 2526</b> Applied Statistics I (3)	<b>CPS 3820</b> Trustworthy and Responsible AI (3)
<b>CPS 3440</b> Analysis of Algorithms (FA) (3)	<b>CPS 4841</b> Computer Vision or <b>CPS 4845</b> Language Processing
<b>CPS 3840</b> Deep Learning and Applications (3)	<b>CPS Elective #1</b> (3)
<b>MATH or Science #1</b> (3/4)	<b>MATH or Science #2</b> (3/4)
<b>Humanities</b> (3)	<b>ENG 3091</b> Technical Writing (3)

Internship, summer course, or summer research

4th Year Fall (12/13)	4th Year Spring (12)
<b>MATH Elective</b> 3xxx (3/4)	<b>CPS 4951</b> Capstone (SP)(3) or <b>CPS 4961</b> Sr. Research (3)
<b>CPS 4851</b> Edge AI or <b>CPS 4861</b> Human Centered AI	<b>CPS Elective #3</b> (3)
<b>CPS Elective #2</b> (3)	<b>CPS Elective #4</b> (3)
<b>Free Elective</b> 3000/4000 #4 (3)	<b>Free Elective</b> 3000/4000 #5 (3)

Internship, summer course, or summer research

Fall offered CPS Major Electives	Spring offered CPS Major Electives
<b>CPS 2390</b> Computer Organization & Architecture (FA/SP)(3)	<b>CPS 3250</b> Computer Operating Systems (FA/SP)(3)
<b>CPS 3310</b> Programming Languages (FA)(3)	<b>CPS 3320</b> Python Programming (SP)(3)
<b>CPS 3351</b> Information Systems Programming (FA)(3)	<b>CPS 3330</b> Software Development with Frameworks (SP)(3)
<b>CPS 3498</b> Computer Security (FA)(3)	<b>CPS 3500</b> Programming WWW (SP)(3)
<b>CPS 4150</b> Computer Architecture (FA)(3)	<b>CPS 3525</b> Programming in the UNIX Environment (SP)(3)
<b>CPS 4301</b> Software Engineering (FA)(3)	<b>CPS 3601</b> Human Computer Interaction (SP)(3)
<b>CPS 4498</b> Digital Forensics (FA)(3)	<b>CPS 3740</b> Database Management Systems (SP)(3)
<b>CPS 4745</b> Visualization Design & Development (FA)(3)	<b>CPS 3962</b> Object Oriented Analysis & Design (SP)(3)
<b>CPS 4802</b> AI Machine Learning Algorithms (FA)(3)	<b>CPS 4200</b> Systems Programming (SP)(3)
<b>CPS 4931</b> Distributed Systems Applications (FA)(3)	<b>CPS 4721</b> Data Mining Principles (SP)(3)
<b>CPS 4601</b> User Experience Design (TBA)(3)	<b>CPS 4801</b> Artificial Intelligence Applications (SP)(3)