**5-year B.S. IT/M.S. CIS: study Plan (start with Math 1000), 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 October to review and update their 4-year study plans before the early registration period (in November). Students should pay attention to each course’s prerequisites and the available courses in each semester.* Please check the academic guide sheets at <http://yoda.kean.edu/studyplans/>

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| Name: | Faculty Advisor:  |
| Kean Id# | Catalog Year: |

Notes:

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| **1st Year Fall (16)** | **1st Year Spring (18)** |
| **MATH 1000** Algebra (3)  | **MATH 1054** Precalculus (3) |
| **TECH 1010** IT Foundations (3) | **CPS 1231** Fundamentals of CS (4) |
| **COMM 1402** Speech Communication (3) | **TECH 1505** Digital Circuits and Systems (4) |
| **ENG 1030** College Composition (3) | **HIST 1062** Worlds of History (3) |
| **GE 1000/3000** Transition to Kean (1)  | **Lab Science** (4) |
| **ID 1400** Comp. in Modern Society (3) - **Free Elective** #1 |  |

Internship, summer course, or summer research

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| **2nd Year Fall (16)** | **2nd Year Spring (16)** |
| **MATH 2110** Discrete Structures (3) | MATH 2526 Applied Statistics (3) |
| **CPS 2231** Computer Programming (4) | **CPS 2240** IT Data Structures (3) |
| **TECH 2920** Computer Systems (3) | **TECH 2520** Network Technology (3) |
| **ENG 2403** World Literature (3) | **COMM 3590** Business and Professional Communication (3) |
| **GE 2024** Research and Technology (3) | **MGS 2030** Principles of Management (3) |
|  | **TECH 2010** Career Education (1) - **Free Elective** #2 |

Internship, summer course, or summer research

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| **3rd Year Fall (15)** | **3rd Year Spring (15)** |
| **TECH 3500** Web Client-Side Programming (3) – FA only | **CPS 3601** Human Computer Interaction (3) – SP only |
| **TECH 3740** IT Database Management Systems (3) – FA/SP | **TECH 3498** IT Computer Security (3) – FA/SP |
| **TECH 3525** Intro. To Unix/Linux (3) – FA/SP | **TECH 3910** IT Project Management (3) – SP only |
| **ENG 3091** Technical Writing (3) | **Social Sciences (3)** |
| **CPS 3440** Analysis of Algorithms (3) | **Humanities (3)** |
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Internship, summer course, or summer research

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| **4th Year Fall (12+3)** | **4th Year Spring (12+3)** |
| **TECH** **Elective** (3) #1 | **TECH 4513** Senior Project (3) – SP only |
| **TECH** **Elective** (3) #2 | **TECH** **Elective** (3) #3 |
| **Free Elective 3000/4000** (3) #3 | **TECH/CPS** **Elective** (3) #4 |
| **Free Elective 3000/4000** (3) #4 | **Free Elective 3000/4000** (3) #5 |
| **CPS 5440** Advanced Analysis of Algorithms (3) | **CPS 5100** Computer Information Systems (3) |

Internship, summer course, or summer research

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| **5th Year Fall (12)** | **5th Year Spring (12)** |
| CPS 5740 Database Systems (3) | CPS 5981 Software Assurance (3) |
| CPS 5301 Software Engineering (3) | CIS 5995 CIS Capstone (3) |
| CPS 5xxx elective #1 (3) | CPS 5xxx elective #3 (3) |
| CPS 5xxx elective #2 (3) | CPS 5xxx elective #4 (3) |
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| **Fall offered TECH Major Electives** | **Spring offered TECH Major Electives** |
| **TECH 3540** Robotics & Automation (FA)(3) | **TECH 4527** Computer & Cloud System Admin. (SP)(3) |
| **TECH 3620** Mobile App. Development (FA)(3) | **TECH 4750** Health Informatics (SP)(3) |
| **TECH 3750** Health IT (FA)(3) | **CPS 3320** Python Programming (SP)(3) |
| **TECH 4524** Internetworking: Switches & Routers (FA)(3) |  |
| **CPS 4498** Digital Forensics (FA)(3) |  |
| **CPS 4745** Visualization Design & Development (FA)(3) |  |
| **TECH 4601** User Experience Design (TBA)(3) |  |
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| **CPS 5498** Digital Forensics and Investigation (3) | **CPS 5500** Web Design and Development (3) |
| **CPS 5745** Interactive Information visualization (3) | **CPS 5601** Human Computer Interaction (3) |
| **CPS 5802** Machine Learning Innovation 93) | **CPS 5721** Data Mining (3) |
|  | **CPS 5931** Network Systems (3) |
| **CPS 5965** High Performance Computing (3) | **CPS 5801** Artificial Intelligence and Expert Systems 93) |
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