Computer Science Focus Areas

AI/Machine Learning	Cyber Security	Data Science & Engineering	Game Engineering	Theory/ Algorithms	Visual Computing/ HCI	Software Engineering	Hybrid Example: Data Science and ML
CS-GY 6613 Artificial Intelligence I	CS-GY 6813 Information, Security & Privacy	CS-GY 6053 Foundations of Data Science	CS-GY 6533 Interactive Computer Graphics	CS-GY 6033 Design & Analysis of Algorithms I	CS-GY 6313 Information Visualization	CS-GY 6063 Software Engineering I	CS-GY 6053 Foundations of Data Science
CS-GY 6643 Computer Vision	CS-GY 6823 Network Security	CS-GY 6083 Principles of Database Systems	CS-GY 6543 Human Computer Interaction	CS-GY 6043 Design & Analysis of Algorithms II	CS-GY 6533 Interactive Computer Graphics	CS-GY 6083 Principles of Database Systems	CS-GY 6923 Machine Learning
CS-GY 6923 Machine Learning	CS-GY 6903 Applied Cryptography	CS-GY 6313 Information Visualization	CS-GY 6553 Game Design	CS-GY 6703 Computational Geometry	CS-GY 6543 Human Computer Interaction	CS-GY 6313 Information Visualization	CS-GY 6313 Information Visualization
CS-GY 6953 Deep Learning	CS-GY 9163 Application Security CS-GY 9223 Privacy in the Electronic Society	CS-GY 6513 Big Data CS-GY 6923 Machine Learning	CS-GY 6613 Artificial Intelligence I	CS-GY 6763 Algorithmic ML and Data Science	CS-GY 6643 Computer Vision	CS-GY 6373 Programming Languages CS-GY 6543 Human Computer Interaction	CS-GY 6513 Big Data
CS-GY 6763 Algorithmic ML and Data Science	CS-GY 9223 Security and Human Behavior * Refer to the MS in Cybersecurity program as well	CS-GY 6913 Web Search Engines CS-GY 9223 Cloud Computing	CS-GY 6943 AI for Games CS-GY 9223 Virtual and Augmented Reality	CS-GY 6753 Theory of Computation	CS-GY 9223 Virtual and Augmented Reality CS-GY 6703 Computational Geometry	CS-GY 6813 Information, Security & Privacy CS-GY 9163 Application Security	CS-GY 6763 Algorithmic ML and Data Science CS-GY 6953 Deep Learning

These courses are suggested courses that may help you if you have an interest in pursuing a career in one of these focus areas of Computer Science.

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NOTE:

- **There is no guarantee you will be able to register for any of the courses in your preferred focus area.**
- **There is no official designation to your degree for completing courses within a focus area.**
- **There can be hybrid focus areas, for example, a focus area combining Data Science and AI/Machine Learning, as shown in the last column.**
- **The linear list in each focus area does not imply the order of taking courses. Also, prerequisite courses may not be listed. Please refer to the course description for the prerequisites.**