FALL 2019

ELECTIVES FOR CS MAJORS: ENTRY YEARS PRIOR TO 2018

ALGORITHMS AND COMPLEXITY

15354	Computational Discrete Mathematics
15453	Formal Languages, Automata and Computability
15455	Undergraduate Complexity Theory
21301	Combinatorics

LOGICS AND LANGUAGES

15312	Foundations of Programming Languages
15316	Software Foundations of Security and Privacy
15317	Constructive Logic
15424	Logical Foundations of Cyber-Physical Systems
21300	Basic Logic (prior to EY 2017)
80310	Formal Logic (prior to EY 2017)

SYSTEMS

15410	Operating System Design and Implementation
15411	Compiler Design
15418	Parallel Computer Architecture and Programming
15440	Distributed Systems
15441	Computer Networks
15445	Database Systems

APPLICATIONS

05391	Designing Human-Centered Software
10315	Introduction to Machine Learning
11411	Natural Language Processing
15281	Artificial Intelligence: Representation and Problem Solving **(NEW COURSE NUMBER)**
15322	Introduction to Computer Music
15462	Computer Graphics
16384	Robot Kinematics and Dynamics
16385	Computer Vision
17313	Foundations of Software Engineering

PROBABILITY

21325	Probability
36217	Probability Theory and Random Processes (prior to EY 2017)
36218	Probability Theory for Computer Scientists (for EY 2017)
36225	Introduction to Probability Theory

TECHNICAL COMMUNICATION

15300	Research and Innovation in Computer Science
76270	Writing for the Professions