

Fall 2018 Course List

Updated November 5, 2018

Robotics Core:

- ROB 501: Math for Robotics (Grizzle)
- ROB 550: Robotics Systems Lab (Revzen & Gaskell)

Sensing:

- AEROSP 566: Data Analysis & System Identification (Bernstein)
- EECS 442: Computer Vision (Corso)
- EECS 542: Advanced Topics in Computer Vision (Deng)
- EECS 551: Matrix Methods for Signal Processing (Fessler)
- ROB 535 / MECHENG 599/ NAVARCH 565/ EECS 498: Self Driving Cars: Perception and Control (Johnson-Roberson & Vasudevan)

Reasoning:

- AEROSP 584: Navigation & Guidance of Aerospace Vehicles (Panagou)
- EECS 545: Machine Learning (Clayton)
- EECS 550: Information Theory (Pradhan)
- EECS 563: Hybrid Systems: Specification, Verification, and Control (Ozay)
- EECS 592: Foundations of Artificial Intelligence (Laird)
- EECS 595: Natural Language Processing (Mihalcea)
- EECS 598: Computational Modeling in Human-Computer Interaction (Banovic)
- EECS 598: Computational Data Science (Nadakuditi)
- EECS 598: Reinforcement Learning (Baveja)

- IOE 536: Cognitive Ergonomics (Sarter)
- IOE 611: Nonlinear Programming (Epelman)

Acting:

- AEROSP 540 / MECHENG 540: Intermediate Dynamics (Orosz)
- AEROSP 740: Applied Nonlinear Control (Girard)
- EECS 461: Embedded Systems Control (Freudenberg)
- EECS 563: Hybrid Systems: Specification, Verification, and Control (Ozay)
- EECS 566: Discrete Event Systems (Lafortune)
- MECHENG 461: Automatic Control (Rouse)
- ROB 510 / EECS 567 / MECHENG 567: Robot Kinematics and Dynamics (EECS 398 for Undergrad ONLY) (Jenkins)
- ROB 535/ MECHENG 599/ NAVARCH 565/ EECS 498: Self Driving Cars: Perception and Control (Johnson-Roberson & Vasudevan)

Elective:

- EECS 498: Intro to Algorithmic Robotics (Berenson)
- EECS 501: Probability & Random Processes (Sadanandarao/Teneketzi)
- EECS 560 / MECHENG 564 / AEROSP 550: Linear Systems Theory (Gillespie)
- EECS 598: Topics in Hardware Security (Genkin)
- ISD 599F: Vehicle Crashworthiness and Occupant Protection (Hu)
- ME 552: Mechatronic Systems Design (Awtar)
- KIN 431: Clinical Gait Analysis (Gates)
- MOVESCI 510: Musculoskeletal Simulation and Optimal Control (Umberger)