Fall 2019 Course List

Updated September 13, 2019

Robotics Core:

- ROB 501: Math for Robotics (Gregg)
- ROB 599: Programming for Robotics (Haggenmiller)
- ROB 550: Robotics Systems Lab (Gaskell)

Sensing:

- EECS 442: Computer Vision (Fouhey)
  *Enrollment is primarily reserved for undergraduate students. Grad enrollment with instructor consent
- EECS 542: Advanced Topics in Computer Vision (TBD)
- EECS 551: Matrix Methods for Signal Processing (Fessler)
- EECS 598.005: Deep Learning for Computer Vision (Johnson)
- 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 505: Computational Data Science and Machine Learning (Nadakuditi)
- EECS 545: Machine Learning (Clayton)
- EECS 550: Information Theory (Pradhan)
- EECS 558: Stochastic Control (Anastasopoulos)
- EECS 576: Advanced Data Mining (Koutra)
- EECS 592: Foundations of Artificial Intelligence (Durfee)
- EECS 598: Computational Modeling in HCI (Banovic)
- EECS 598.008: Crowdsourcing and Human A-I Interaction (Lasecki)
- IOE 536: Cognitive Ergonomics (Sarter)
- IOE 611: Nonlinear Programming (Epelman)

Acting:

- AEROSP 540 / MECHENG 540: Intermediate Dynamics (Bernstein)
- EECS 461: Embedded Systems Control (Freudenberg)
- EECS 560/ MECHENG 564 / AEROSP 550: Linear Systems Theory (Gillespie)
- MECHENG 461: Automatic Control (Rouse)
- NAVARCH 583: Adaptive Control (Sun)
- 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:
*In addition to the courses listed below, any 500-level CoE course can count as an elective.

- AEROSP 495: Fundamentals of Aerospace Computing (Jeannin)
- EEB 800: Comparative Biomechanics of Locomotion (Revzen)
- EECS 402: Programming for Scientists and Engineers (Morgan)
- EECS 501: Probability & Random Processes (Pradhan)
- EECS 598.001: Brain-Inspired Computing (Mazumder)
- EECS 598.007: Topics in Surveillance: Law & Technology (Halderman/Schlanger)
- EECS 598.009: Applied GPU Programming (Das)
- EECS 598.011: Accelerated Systems for AI & Health (Narayanasamy)
- EECS 598.012: Censorship & Privacy Tech (Ensafi)
- ELI 521: Writing for Academic Purposes I
- ENTR 500: Intro to Innovation Careers
- ENTR 520: Tech-Inspired Business Models
- ENTR 530: Innovation & IP Strategy
- ENTR 550: Interpersonal Skills
- ENTR 560: Project Management and Consulting
- ENTR 599.021: Innovation, Creativity and Design
- ENTR 599.050: Diversity, Equity & Inclusion in Entrepreneurship

- ISD 599F: Vehicle Crashworthiness and Occupant Protection (Hu)
- MATH 451: Advanced Calculus I (Kaletha)
- MATH 525: Probability Theory (Zieve)
- MECHENG 552: Mechatronic Systems Design (Awtar)
- MECHENG 560: Modeling Dynamic Systems (Stein)
- TCHNCLCM 610: Academic and Professional Writing