Undergraduate

- ROB 101: Computational Linear Algebra (Berger/Grizzle)
- ENG 100.850: Robotics Mechanisms (Yeo)
- ROB 103: Robotics Mechanisms (Yeo)
- ROB 204: Intro to Human-Robot Systems (Stirling)
- ROB 310: Robot Sensors & Signals (Gaskell)
- ROB 320: Robot Operating Systems (Jenkins)
- ROB 498: Robot Learning for Planning & Control (Berenson / Fazeli)
- ROB 498.002: Deep Learning for Robot Perception (Opipari/Jenkins)
- ROB 498.004: Applied Optimal Control (Prof. Hubicki from FAMU)
- See courses that count for Robotics upper level electives and major design experience requirements in Winter 2023

Graduate

Robotics Core

- ROB 550: Robotics Systems Lab (Gaskell)

Sensing

- BIOMEDE 517: Neural Engineering (Chestek)
- CEE 575: Sensors, Data, and Smart Systems (Kerkez)
- EECS 442: Computer Vision (Fouhey)
    - Enrollment is primarily reserved for undergraduate students. Grad enrollment with instructor consent
- EECS 598: Action and Perception (Yu)
- ROB 530/NAVARCH 568/EECS 568: Mobile Robotics (Ghaffari)
- ROB 535 / MECHENG 599 / NAVARCH 565 / EECS 498: Self Driving Cars: Perception and Control (Girard)
- ROB 599.009: Deep Learning for Robot Perception (Jenkins)

Reasoning

- EECS 486: Information Retrieval & Web Search (Mihalcea)
- EECS 545: Machine Learning (Lee)
- EECS 548: Information Visualization (Card)
- EECS 553: Machine Learn ECE (Scott)
- EECS 559: Optimization for Signal Processing and Machine Learning (Qu)
- EECS 592: Foundations of Artificial Intelligence (Chakraborty)
- EECS 692: Advanced Artificial Intelligence (Chai)
- IOE 434: Human Error and Complex Systems Failures (Sarter)
- IOE 511: Continuous Optimization Methods (Berahas)
- ROB 498: Robot Learning for Planning & Control (Berenson / Fazeli)
- ROB 511: Advanced Robot Operating Systems (Jenkins)

- ROB 599.009: Deep Learning for Robot Perception (Jenkins)

Acting

- EECS 461: Embedded Control Systems (Cook)
- EECS 560/MECHENG 564/AEROSP 550: Linear Systems Theory (Freudenberg)
- EECS 562/AEROSP 551: Nonlinear Systems & Control (Panagou)
- EECS 565: Linear Feedback Control (Seiler)
- MATSCIE 593: Soft Robotic Materials and Actuators (Pena-Francesch)
- MECHENG 461: Automatic Control (Kish)
- MECHENG 542: Vehicle Dynamics and Automation (Orosz)
- ROB 498: Robot Learning for Planning & Control (Berenson / Fazeli)
- ROB 646/MECHENG 646 Locomotor Mechanics and Design / Control of Wearable Robotic Systems (Rouse)
- ROB 510/EECS 567/MECHENG 567: Robot Kinematics and Dynamics (Gregg)
- ROB 511: Advanced Robot Operating Systems (Jenkins)
- ROB 535 / MECHENG 599 / NAVARCH 565 / EECS 498: Self Driving Cars: Perception and Control (Girard)
- ROB 599: Bioinspiration (Moore)
- ROB 599: Soft Robotics (Huang)

- ROB 599.010: Applied Optimal Control (Prof. Hubicki from FAMU)

Elective

**In addition to the courses listed below, any 500-level CoE course can count as an elective.*

- AEROSP 585: Aerospace Seminar (Waas)
- ECON 409: Game Theory (Peralta)
- EECS 409: Data Science Seminar
- EECS 410 / ENGR 410: Patent Fundamentals (Islam)
- EECS 460: Control Systems Analysis and Design (Meerkov)
- EECS 471: Applied GPU Programming (Tenishev)
- EECS 501: Probability & Random Processes (Anastasopoulos)
- EECS 586: Design & Analysis of Algorithms (Saranurak)
- ELI 521: Writing for Academic Purposes I (Nezami Nav / Bricker)
- ENTR 500: Intro to Innovation Careers (Crumm)
- ENTR 550: Interpersonal Skills (Fretz)
- PSYCH 614: Advanced Statistical Methods (TBD)
- ROB 599/EECS 598: Ethics for AI and Robotics (Kuipers)
- TO 628: Advanced Big Data Analytics (Kumar)