

Winter 2021 Course List

Updated December 16, 2020

Robotics Core

[ROB 550](#): Robotics Systems Laboratory (Gaskell)

Sensing

AEROSP 740: Visual Navigation for Autonomous Aerial Vehicles (Tzoumas)

[BIOMEDE 517](#): Neural Engineering (Chestek)

[EECS 442](#): Computer Vision (Fouhey)

*Enrollment is primarily reserved for undergraduate students. Grad enrollment with instructor consent

[ROB 530/NAVARCH 568/EECS 568](#): Mobile Robotics (Ghaffari)

Acting

AEROSP 740: Visual Navigation for Autonomous Aerial Vehicles (Tzoumas)

[EECS 461](#): Embedded Control Systems (Cook)

[EECS 560/MECHENG 564 / AEROSP 550](#): Linear Systems Theory (Ozay)

[EECS 561/MECHENG 561](#): Design of Digital Control Systems (Vasudevan)

[EECS 562/AEROSP 551](#): Nonlinear Systems & Control (Meerkov)

[EECS 565](#): Linear Feedback Control (Seiler)

EECS 598: Motion Planning (Berenson)

[MECHENG 542](#): Vehicle Dynamics (Orosz)

MECHENG 599/CEE 501/ISD 599: Dynamics and Control of Connected Vehicles (Orosz)

MECHENG 646 (will also be crosslisted with ROB 646): Mechanics of Human Movement (Rouse)
ROB 510: Robot Kinematics and Dynamics (Gregg)
[ROB 599](#): Bioinspiration (Moore)

Reasoning

[AEROSP 552](#): Aerospace Information Systems (Jeannin)
[EECS 486](#): Information Retrieval & Web Search (Mihalcea)
[EECS 545](#): Machine Learning (Lee)
EECS 559: Optimization for Signal Processing and Machine Learning (Qu)
[EECS 592](#): Foundations of Artificial Intelligence (Durfee)
EECS 598: Motion Planning (Berenson)
[EECS 692](#): Advanced Artificial Intelligence (Laird)
[IOE 511](#): Continuous Optimization Methods (Berahas)
IOE 691: Approximation Algorithms (Nagarajan)

Electives

[AEROSP 585](#): Aerospace Seminar (Waas)
EECS 492: Intro to AI (Chai - undergrad course)
[EECS 460](#): Control Systems Analysis and Design (Meerkov)
[EECS 467](#): Autonomous Robotics (Jenkins)
[EECS 501](#): Probability & Random Processes (Sadanandarao)
[EECS 586](#): Design & Analysis of Algorithms (Lee)
NAVARCH 599: Marine Robotics (Skinner)
[PSYCH 614](#): Advanced Statistical Methods (Beltz)



[SPACE 565](#): Planetary Science (Atreya)

[ROB 599/EECS 598](#): Ethics for AI and Robotics (Kuipers)