

Tentative Schedule of Classes (By Area of Concentration)

Advanced Energy Technology

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng 250A (3 units) - Advanced Conductive and Radiative Transport
- Mech Eng 254 (3 units) - Thermodynamics

Aerospace Engineering (NEW)

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng 263Z (3 units) - Engineering Aerodynamics
- Mech Eng 236U (3 units) – Control and Dynamics of Unmanned Aerial Vehicles
- Mech Eng 287 (3 units) – Introduction to Continuum Mechanics
- Mech Eng C231A / El Eng C220B (3 units)- Experiential Advanced Control Design I
- Mech Eng C232 / El Eng C220A (3 units) - Advanced Control Systems I

BioMechanics

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng C223 (3 units) – Polymer Engineering
- Mech Eng 292C-001 (3 units)- Human-Centered Design Methods

Control of Robotic and Autonomous Systems (Formerly Experimental Advanced Control Systems Design)

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng C231A / El Eng C220B (3 units)- Experiential Advanced Control Design I
- Mech Eng C232 / El Eng C220A (3 units) - Advanced Control Systems I
- Mech Eng 236 U (3 units) – Introduction to Control of Unmanned Aerial Vehicles

Fluids and Ocean

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng 248 (3 units) – Experimental Methods in Single and Multiphase Flows
- Mech Eng 260A (3 units) – Advanced Fluid Mechanics
- Mech Eng 262 (3 units) – Hydrodynamic Stability and Instability
- Mech Eng 263Z (3 units) - Engineering Aerodynamics

MEMS/Nano

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng 219 (3 units)- Introduction to Microelectromechanical Systems
- Mech Eng C231A / El Eng C220B (3 units)- Experiential Advanced Control Design I
- Mech Eng 280A (3 units) - Introduction to the Finite Element Method

Mechanics and Dynamics

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng 280A (3 units) - Introduction to the Finite Element Method
- Mech Eng 281 (3 units) – Methods of Tensor Calculus and Differential Geometry
- Mech Eng 287 (3 units) - Introduction to Continuum Mechanics

Modeling and Simulation of Advanced Manufacturing Processes

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng C223 (3 units) – Polymer Engineering
- Mech Eng 226 (3 units)- Tribology
- Mech Eng C231A / El Eng C220B (3 units)- Experiential Advanced Control Design I
- Mech Eng 280A (3 units) - Introduction to the Finite Element Method (required)

Product Design

Fall 2021

- Mech Eng 249 (3 units) – Machine Learning Tools
- Mech Eng C223 (3 units) – Polymer Engineering
- Mech Eng C231A / El Eng C220B (3 units)- Experiential Advanced Control Design I
- Mech Eng 239 (4 units) – Robotic Locomotion
- Mech Eng 292C-001 (3 units) - Human-Centered Design Methods
- Mech Eng 292C-002 (3 units) – Advanced Engineering Graphical Communication