

MECHANICAL ENGINEERING GRADUATE COURSES - 2024-25*

* These courses are subject to change throughout the year.

Fall 2024

BIOE 220A	Molecular Bioengineering	Plaxco, Kevin
ECE/ME 210A	Matrix Analysis & Computation	Chandrasekaran, Shiv
ECE 203/ME 243A	Linear Systems I	Hespanha, Joao
ECE 289	Introduction to Robotics: Dynamics & Controls	Byl, Katie
MATRL 207/ME 219	Mechanics of Materials	Begley, Matthew
ME 200	Professional Seminar	TBD
ME 210D/MATH 206D/CMPSC 211D/ECE 210D/CHEM 211D	Numerical Solutions of Partial Differential Equations – Finite Element Methods	Atzberger, Paul
ME 211	Pattern Formation 7 Self-Organization	Stowers, Ryan
ME 215A	Applied Dynamical Systems I	Mezic, Igor
ME 220A	Fundamental of Fluid Mechanics	Luzzatto-Fegiz, Paolo
ME 225AS	Special Topics: Multi Flow	Sauret, Alban
ME 225TD	Special Topics: Advanced Engineering Thermodynamics	Liao, Bolin
ME 225YZ	Special Topics: Intro to Interfacial	Zhu, Yangying
ME 257	Introduction to Multiphysics Simulation	Meinhart, Carl
ME 292	Design Transducers	Pennathur, Sumita
ME 295	Group Studies: Controls, Dynamical Systems, & Computation	Teel, Andrew

Winter 2025

BIOE 220B	Cellular Bioengineering	Stowers, Ryan
BIOE 240	Haptics: Touch Perception, Interaction, and Engineering	Visell, Yon
ECE/ME 236	Nonlinear Control Systems	Teel, Andrew
MATRL 220/ME 264	Mechanical Behavior of Materials	Zok, Frank
MATRL/ME 232	Plasticity	Beyerlein, Irene
MATRL 240/ME 271	Finite Element Structural Analysis	Begley, Matthew
ME 203	Operator Theory Methods in Dynamical Systems	Mezic, Igor
ME 210B	Numerical Simulation	Petzold, Linda
ME 211	Pattern Formation & Self-Organization	Kodio, Ousmane
ME 220B	Fundamentals of Fluid Mechanics	Bennett, Ted
ME 225ED	Special Topics: Bio-Design	Dressaire, Emilie
ME 225EY	Special Topics: Biological Computing	Yeung, Enoch
ME 225FA	Special Topics: Failure Analysis	Daly, Samantha
ME 225FM	Special Topics: Fluid Mechanics & Soft Matter in Additive Manufacturing	Sauret, Alban
ME 225HT	Special Topics: Advanced Heat Transfer	Zhu, Yangying
ME 225NN	Special Topics: Modeling & Optimization of Neural Networks	Bullo, Francesco
ME 225RM	Special Topics: Chemo-Mechanics	McMeeking, Robert
ME 226	Applied Numerical Methods	Gibou, Frederic
ME 235	Wind & Tidal	Luzzatto-Fegiz, Paolo
ME 252A	Computational Fluid Dynamics	Meiburg, Eckart
ME 291A	Physics Transducers	Valentine, Megan
ME 295	Group Studies: Controls, Dynamical Systems, & Computation	Teel, Andrew

Spring 2025

BIOE/ME 241	Radiative Energy Transfer	Stowers, Ryan
BIO/BMSE/ME 258	Methods in Mechanobiology & Biofabrication	Pruitt, Beth
ECE 232/ME 256	Robust Control Theory	Bassam, Bamieh
MATRL 234/ME 275	Fracture Mechanics	McMeeking, Robert
ME 200	Professional Seminar	TBD
ME 201	Advanced Dynamics	Mezic, Igor
ME 210C/MATH 206C/CMPSC 211C/ECE 210C/CHEME 211C	Numerical Solution of Partial Differential Equations – Finite Difference Methods	Ceniceros, Hector
ME 221	Advanced Viscous Flow	Dressaire, Emilie
ME 225F	Special Topics: Flow Instabilities & Turbulence	Sauret, Alban
ME 225MB	Special Topics: TBA	Begley, Matt
ME 225MV	Special Topics: Wicked Problems and Global Challenges	Valentine, Megan
ME 225RA	Special Topics: Radiative Energy Transfer	Bennett, Ted
ME 280	Crystalline Defects	Beyerlein, Irene
ME 295	Group Studies: Controls, Dynamical Systems, & Computation	Teel, Andrew