MECH Electives & Grad Only Courses

All undergrad students MUST take one (T) Technical elective and one (D) Design elective. One additional elective must be taken that will count as the (S) Senior elective. *A review of your electives should be discussed with your advisor prior to registration.

*Courses and instructors are subject to change without notice.

Fall 2024

MATL 4/862 (T, S) X-ray Diffraction - Shield
MATL 4/869 (T, S) Physical Materials Systems – Sutter
MATL 4/873 (T, S) Corrosion – Cui
MECH 4/808 (D, T, S) Heat Exchanger Design - Zhang
MECH 4/822 (T, S) Industrial Quality Control – Amar
MECH 4/831 (T, S) Comp Heat Transfer & Fluid Flow – Nama
MECH 4/839 (T, S) Biomaterial Surface Patterning - Lim
MECH 4/853 (T, S) Robotics: Kinematics & Design – Markvicka
MECH 4/872 (T, S) Additive Manufacturing - Guo
MECH 4/880 (T, S) Numerical Methods – Bobaru

Spring 2025

MATL 4/892 (T, S) Soft Materials – Fernandez-Ballester
MATL 4/892 (T, S) Quantum Materials – Laraoui
MECH 4/805 (T, S) Turbomachinery – Ryu
MECH 4/807 (D, T, S) Power Plant Systems Design – Zhang
MECH 4/816 (T, S) Engineering Acoustics – Moore
MECH 4/836 (T, S) Intro to Continuum Biomechanics - Pedrigi
MECH 4/849 (T, S) Advanced Dynamics – Baesu
MECH 4/850 (D, T, S) Mech Eng Control Systems Design - Grover
MECH 4/851 (T, S) Intro to Finite Element Analysis - Bobaru
MECH 4/857 (D, T, S) Mechatronic Systems Design – TBD
MECH 4/892 (D, S) Making for Innovation – Farritor

Grad ONLY

MATL 962 Imperfections in Crystals – Wang
MECH 801 Analytical Methods I – Turner
MECH 810 Viscous Flow I – Ryu
MECH 910 Continuum Mechanics - Baesu
MECH 918 Fundamental Finite Elements – Negahban
MECH 934 Theory of Elasticity II – Baesu
MECH 970 Adv. Manufacturing Processes - Rajurkar

Grad ONLY

MECH 933 Theory of Elasticity I – J. Yang
MECH 939 Viscoelasticity - Negahban
MECH 940 Fracture Mechanics - Bobaru