## **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 4/831 (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 4/871 (T, S) Electron Microscopy of Materials - Cui 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 4/836 (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