

## **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 2025**

MATL 4/860 (T, S) Mechanical Aspects of Matls - Wang  
MATL 4/869 (T, S) Physical Materials Systems – Sutter  
MATL 4/892 (T, S) Intro to Materials for Nuclear Eng - Cui  
MECH 4/807 (D, T, S) Power Plant Systems Design – Zhang  
MECH 4/839 (T, S) Biomaterial Surface Patterning - Lim  
MECH 4/831 (T, S) Computational Heat Transfer & Fluid Flow - Nama  
MECH 4/853 (D, T, S) Robotics: Kinematics & Design – Markvicka  
MECH 4/857 (D, T, S) Mechatronics Systems Design – Y. Li  
MECH 4/872 (T, S) Additive Manufacturing – Guo  
MECH 4/880 (T, S) Numerical Methods – Bobaru  
MECH 4/892 (D, T, S) Making for Innovation - Farritor  
MECH 4/892 (T, S) Evolution of Science & Tech – Baesu  
MECH 4/892 (T, S) Intro to Nano-Engineering Rsrch – Qian  
MECH 4/892 (T, S) Experimental Mech of Composites - Dzenis

### **Spring 2026**

MATL 4/869 (T, S) Intro to Quantum Materials - Laraoui  
MATL 4/873 (T, S) Corrosion – Cui  
MATL 4/892 (T, S) Soft Materials – Tan  
MECH 4/806 (D, T, S) Air Conditioning Systems Dsgn – Zhang  
MECH 4/813 (T, S) Aerodynamics - Ryu  
MECH 4/837 (D, T, S) Biomedical Device Design – Nelson  
MECH 4/849 (T, S) Adv. Dynamics – TBD  
MECH 4/851 (T, S) Intro to Finite Elements - Bobaru  
MECH 4/892 (D, T, S) Making for Innovation – Farritor  
MECH 4/892 (T, S) Adv. Biomaterials – Lim  
MECH 4/892 (T, S) TBD - Meng

### **Grad ONLY**

MATL 972 Transformation in Materials - Shield  
MECH 812 Viscous Flow I – Ryu  
MECH 910 Continuum Mechanics – Baesu  
MECH 918 Fundamental Finite Elements - Negahban

### **Grad ONLY**

MATL 998 Electron Microscopy Techniques – Sutter  
MECH 801 Analytical Methods I - Grover  
MECH 812 Viscous Flow II – Park  
MECH 888 Nonlinear Optimization in Eng - Bobaru  
MECH 925 Manufac & Dynamic Syst Modeling – Rajurkar  
MECH 933 Theory of Elasticity - Yang  
MECH 942 Theory of Plasticity – Negahban  
MECH 996 Nonlinear Dynamics of Continuum - Grover