

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