

**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 2026**

MATL 4/862 (T, S) X-ray Diffraction – Shield  
 MATL 4/869 (T, S) Physical Materials Systems – Sutter  
 MATL 4/871 (T, S) Electron Microscopy of Materials – Cui  
 MECH 4/808 (D, T, S) Heat Exchanger Design – Zhang  
 MECH 4/815 (T, S) Two-Phase Flow/Heat Transfer – Devah VS  
 MECH 4/822 (T, S) Industrial Quality Control - Andurkar  
 MECH 4/831 (T, S) Computational Heat Transfer & Fluid Flow – Nama  
 MECH 4/853 (D, T, S) Robotics: Kinematics & Design – TBD  
 MECH 4/860 (D, S) Making for Innovation – Farritor  
 MECH 4/872 (T, S) Additive Manufacturing – Guo  
 MECH 4/892 (T, S) AI in Mechanical Engineering – Bobaru  
 MECH 4/892 (T, S) Responsive Mtls for Mech Apps – Dana  
 MECH 4/892 (1 cr.) Intro to Nano-Eng Rsrch Core Fac – Qian

**Tentative Spring 2027**

MATL 4/892 (T, S) Intro to Quantum Materials – Laraoui  
 MATL 4/892 (T, S) Polymer Eng & Proc – Fernandez-Ballester  
 MECH 4/807 (D, T, S) Power Plant Systems Dsgn – Zhang  
 MECH 4/837 (D, T, S) Biomedical Device Design – Nelson  
 MECH 4/849 (T, S) Adv. Dynamics – Baesu  
 MECH 4/851 (T, S) Intro to Finite Element – Bobaru  
 MECH 4/850 (D, T, S) Adv. Controls – Grover  
 MECH 4/857 (D, T, S) Mechatronics – Lehman  
 MECH 4/860 (D, S) Making for Innovation – Farritor  
 MECH 4/874 (T, S) Manufacturing Systems I – TBD  
 MECH 4/875 (T, S) Intro to Mech Vibrations - TBD  
 MECH 4/892 (T, S) Biofabrication – Meng  
 MECH 4/892 (T, S) History of Science – Baesu  
 MECH 4/892 (T, S) Math MdIng Physiological Systems – Razavi  
 MECH 4/892 (T, S) Fluids in Engineering Practice – Park  
 MECH 4/892 (T, S) Parametric Scripting – Wagner

**Grad ONLY**

MECH 801 Analytical Methods I – Grover  
 MECH 810 Viscous Flow I – Park  
 MECH 910 Continuum Mechanics – Baesu  
 MECH 918 Fundamental Finite Elements – Negahban  
 MECH 934 Theories of Elasticity II – Baesu

**Grad ONLY**

MATL 962 Imperfections in Crystals – Wang  
 MATL 998 Low Dimensional Materials – Sutter  
 MECH 930 Mech of Composite Materials – Dzenis  
 MECH 939 Viscoelasticity – Negahban  
 MECH 940 Fracture Mechanics – Bobaru  
 MECH 970 Adv. Manufacturing Processes – TBA