

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.

Spring 2025

MATL 4/892 (T, S) Polymer Eng & Processing – Fernandez-Ballester
 MATL 4/892 (T, S) Intro to Quantum Materials – Laraoui
 MECH 4/805 (T, S) Turbomachinery – Ryu
 MECH 4/836 (T, S) Intro to Continuum Mechanics - Pedrigi
 MECH 4/837 (D, T, S) Biomedical Device Design – Nelson
 MECH 4/849 (T, S) Advanced Dynamics – Baesu
 MECH 4/850 (D, S) Mech Eng Control Sys Design - Grover
 MECH 4/851 (T, S) Intro to Finite Element Analysis – Bobaru
 MECH 4/874 (T, S) Manufacturing Engineering I – Rajurkar
 MECH 4/875 (T, S) Intro to Mechanical Vibrations - Turner
 MECH 4/892 (D, S) Making for Innovation – Farritor
 MECH 4/892 (T, S) Experimental Mech of Comp - Dzenis
 MECH 4/892 (T, S) Biofabrication - Meng

Grad ONLY

MATL 998 Low-Dim Matls: Synth & Functional Prop - Sutter
 MECH 925 Manufacturing & Dynamic Systems Modeling - Rajurkar
 MECH 933 Theory of Elasticity I – J. Yang
 MECH 939 Viscoelasticity – Negahban
 MECH 940 Fracture Mechanics - Bobaru

Fall 2025

MATL 4/869 (T, S) Physical Materials Science – Sutter
 MATL 4/892 (T, S) Corrosion – Cui
 MECH 4/806 (D, T, S) Air Conditioning Systems Dsgn – Zhang
 MECH 4/831 (T, S) Computational Heat Transfer&Fluid Flow - Nama
 MECH 4/853 (T, S) Robotics: Kinematics & Design – Markvicka
 MECH 4/857 (T, S) Mechatronic Systems Design - Lehman
 MECH 4/872 (T, S) Additive Manufacturing - Guo
 MECH 4/880 (T, S) Numerical Methods – Bobaru
 MECH 4/892 (T, S) Adv. Biomaterials – Lim
 MECH 4/892 (T, S) History of Science - Baesu

Grad ONLY

MATL 972 Transformation in Materials - Shield
 MECH 801 Analytical Methods I – Grover
 MECH 810 Viscous Flow I – Ryu
 MECH 910 Continuum Mechanics - Baesu
 MECH 918 Fundamental Finite Elements – Negahban
 MECH 922 Conduction Heat Transfer – Gogos
 MECH 924 Radiation Heat Transfer – TBA
 MECH 950 Impact Engineering - TBA
 MECH 970 Adv. Manufacturing Processes – TBA