June 7, 2021

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 2021

MATL 4/869 (T, S) Physical Materials Science – Sutter
MATL 4/871 (T, S) Electron Microscopy of Materials – Cui
MECH 4/808 (D, T, S) Heat Exchanger Design - Zhang
MECH 4/836 (T, S) Intro to Continuum Biomechanics – Pedrigi
MECH 4/842 (D, T, S) Intermediate Kinematics - Farritor
MECH 4/850 (D, T, S) Control System Design – Grover
MECH 4/853 (T, S) Robotics: Kinematics & Design – Markvicka
MECH 4/880 (T, S) Numerical Methods – Bobaru
MECH 4/892 (T, S) Sustainable Manufacturing – Williams
MECH 4/892 (T, S) Nanoscale Heat Transfer - Ghashami
MECH 4/892 (T, S) MEMS/NEMS Fabrication&Microfluidics – Ndao
MECH 4/892 (T, S) Intro to Cell Mechanics – Ryu
MECH 4/892 (T, S) Advanced Biomaterials – Lim

Spring 2022

MATL 4/892 (T, S) Soft Materials – Tan
MATL 4/892 TBD – Laraoui
MECH 4/805 (T, S) Turbomachinery – Ryu
MECH 4/807 (D, T, S) Power Plant Systems Design – Zhang
MECH 4/816 (T, S) Engineering Acoustics - Moore
MECH 4/822 (T, S) Industrial Quality Control – Rao
MECH 4/831 (T, S) Computational Heat Transfer&Fluid Flow - Gogos
MECH 4/837 (D, T, S) Biomedical Device Design – Nelson
MECH 4/849 (T, S) Advanced Dynamics - Baesu
MECH 4/857 (D, T, S) Mechatronic Systems Design – R. Yang
MECH 4/875 (T, S) Intro to Mechanical Vibrations - Turner
MECH 4/892 (T, S) Experimental Mechanics of Composites - Dzenis
MECH 4/892 (T, S) Additive Manufacturing – Sealy
MECH 4/892 (D, S) Making for Innovation – Farritor
MECH 4/892 TBD – Grover
MECH 4/892 (T, S) Comparative Fluids – Park

Grad ONLY

MATL 962 Imperfections in Crystals – Wang
MATL 972 Phase Transformations – Shield
MECH 801 Analytical Methods I – Turner
MECH 810 Viscous Flow I – Ryu
MECH 902 Optimal Control Theory – Terry
MECH 910 Continuum Mechanics - Baesu
MECH 918 Fundamental Finite Elements – Negahban
MECH 934 Theory of Elasticity II – Baesu
MECH 950 Impact Engineering - Stolle
MECH 970 Adv. Manufacturing Processes – Rajurkar
MECH 996 Electrochemical Manufacturing - Tan

Grad ONLY

MATL 998 Advanced Electron Microscopy – Sutter
MECH 888 Nonlinear Optimization in Engineering - Bobaru
MECH 923 Convection Heat Transfer - Zhang
MECH 925 Manufacturing & Dynamic Systems Modeling – Rajurkar
MECH 933 Theory of Elasticity I – J. Yang
MECH 942 Theory of Plasticity - Negahban

*For undergraduates using the 2019 or later catalog, if both MECH 343 and 300 are taken, one of these can fulfill the senior elective requirement.