EGEN - General Engineering

PREREQUISITE: PHYS 220 or PHYS 240. COREQUISITE: M 273Q or M 283Q. Equilibrium of particles and rigid bodies; static analysis of structures including trusses, beams, frames and machines; Coulomb friction; area and mass centroids, moments and products of inertia.

Term | CRN  | Section | Session/Dates | Days | Location | Time
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2020 Summer | 10497 | 801 | May-start: 4x4 | - | - | -
2020 Summer | 10183 | 001 | May-start: 4x4 | MTWR | ROBERT 112 | 11:00am - 1:35pm

PREREQUISITE: EGEN 201 or EGEN 221 and M 273Q or M 283Q. Kinematics, kinetics, work-energy, and impulse-momentum for particles and rigid bodies.

EGEN 205. Mechanics of Materials. 3 Credits. (3 Lec) Su On Demand
PREREQUISITE: EGEN 201 or EGEN 221 and M 273Q or M 283Q. Stress and strain, Hooke’s Law, thermal strain, torsion, bending of beams, combined stress, limit analysis, energy methods, virtual work, column theory.

EGEN 310R. Multidisciplinary Engineering Design. 3 Credits. (3 Lec) F,S
PREREQUISITE: Junior standing in an Engineering curriculum or consent of instructor. Advanced topics in NMR phenomena including relaxation, diffusion, chemical shift, and magnetic susceptibility, as well as experimental aspects including phase cycling, magnetic field gradients, rf coil, tuning and matching and pulse sequence development will be covered.

EGEN 330. Business Fundamentals for Technical Professionals. 3 Credits. (3 Lec) F,S,Su
PREREQUISITES: Junior Standing; and M 171Q or M 165Q. Basic business topics for engineers and other technical professionals. Introduces key topics related to financial statements, accounting practices, ethics, and evaluation of capital investment alternatives including present worth, rate of return, and after-tax analysis methods.

EGEN 335. Fluid Mechanics. 3 Credits. (3 Lec) F,S,Su On Demand.
PREREQUISITE: EGEN 202, EGEN 205. Introduction to modern fluid mechanics.

EGEN 350. Applied Engineering Data Analysis. 2 Credits. (2 Lec) F,S,Su
PREREQUISITE: M 166Q or M 172Q. An overview of data variability and applied statistical analysis techniques for a broad range of engineering disciplines. Topics include fundamentals of probability, essential probability distributions, hypothesis testing, experimental design strategies, and regression in the context of engineering applications. Evening exams required. Common final.

EGEN 541. Thy Mag Reson Imag I. 3 Credits. (3 Lec) F,S
PREREQUISITE: Graduate standing, or consent of instructor. Advanced topics in NMR phenomena including relaxation, diffusion, chemical shift, and magnetic susceptibility, as well as experimental aspects including phase cycling, magnetic field gradients, rf coil, tuning and matching and pulse sequence development will be covered.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.