EGEN - General Engineering

EGEN 201. Engineering Mechanics--Statics. 3 Credits. (3 Lec) F,S,Su On Demand.
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  | Session | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10706 | 801 | May Start | - | - | -
2018 Summer | 10276 | 001 | May Start | MTWR | ROBH307 | 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.

Common Exams.

Term | CRN  | Session | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10707 | 801 | June-start: 4x4 | - | - | -
2018 Summer | 10437 | 001 | June-start: 4x4 | MTWR | ROBH307 | 11:00am - 1:35pm

EGEN 203. Applied Mechanics. 3 Credits. (3 Lec) F,S,Su On Demand.
PREREQUISITE: PHYS 240 or PHYS 240. EGEN 201 or EGEN 205. Three-dimensional vector analysis; moment and product of inertia; plane and space kinematics; fundamental principles of dynamics; relationship of forces and motion; centroids and mass properties of structures; buoyancy; moments of inertia in beams and structures; design; problem solving.

Term | CRN  | Session | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10759 | 001 | May Start | MTWR | ROBH210 | 8:00am - 10:35am

EGEN 205. Mechanics of Materials. 3 Credits. (3 Lec) F,S,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.

Term | CRN  | Session | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10708 | 801 | June-start: 4x4 | - | - | -
2018 Summer | 10455 | 001 | June-start: 4x4 | MTWR | ROBH312A | 8:00am - 10:35am

EGEN 208. Applied Strength of Materials. 3 Credits. (3 Lec) F,S,Su On Demand
PREREQUISITE: EGEN 201 or EGEN 203 or EGEN 221 and M 166Q or M 172Q or M 182Q. Equilibrium and deformation of structural elements; concepts of stress and strain and interrelationship; representation and transformation of combined stress states; axial, torsional and flexural stresses and deformation; column buckling.

Term | CRN  | Session | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10773 | 001 | June-start: 4x4 | MTWR | ROBH301 | 8:00am - 10:35am

EGEN 310R. Multidisciplinary Engineering Design. 3 Credits. (3 Lec) F,S
PREREQUISITE: Junior standing in an Engineering curriculum or consent of instructor. Introduces engineering students to topics such as design process, creative design, project management, teamwork, and technical leadership while highlighting the skills needed to work in an multi-disciplinary environment.

Term | CRN  | Session | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10869 | 001 | May Start | MTWR | JABS111 | 11:00am - 1:35pm
2018 Summer | 11188 | 002 | First Half | - | - | -

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, project management, and evaluation of capital investment alternatives including present worth, rate of return, and after-tax analysis methods.

Term | CRN  | Section | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 11407 | 001 | May Start | MTWR | ROBH301 | 11:00am - 1:35pm

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

Term | CRN  | Section | Session/Dates | Days | Location | Time
--- | --- | --- | --- | --- | --- | ---
2018 Summer | 10751 | 802 | Second Half | - | - | -
2018 Summer | 11089 | 801 | July-start: 4x4 | Session | Session | Session

EGEN 350. Applied Engineering Data Analysis. 2 Credits. (2 Lec) F,S,Su
PREREQUISITE: EGEN 335. Fluid Mechanics. 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.
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.