Kingdom of Saudi Arabia
Ministry of Education
University of Bisha
College of Engineering
Dept. of Electrical Engineering



المملكة العربية السعودية وزارة التعليـــــم جامعة بيشة

> كلية الهندسة قسم الهندسة الكهربائية

Course Syllabus

| Course Code and Name | CE 26221 — Engineering Mechanics |
|---------------------------------------|--|
| Credit and contact hours | 3 (2, 2, 0) (Lecture, Tutorial, Lab) |
| Required or Elective | Required |
| Level / Year | Level (3) / Year (2) |
| Course Prerequisite | - |
| Textbook | R.C. Hibbler, Engineering Mechanics: Statics and Dynamics, Pearson, latest edition |
| Course Description | This course gives the Engineering students the basic requirements of Engineering Mechanics that must be taught to all Engineering students. The course consists mainly of the two parts of Engineering Mechanics: statics and dynamics. The course is limited to planar static and dynamic systems. |
| Brief List of Topics to be Covered | Statics of Particles Force and moment Equilibrium of particles Equilibrium of rigid bodies Structural analysis Internal forces and moments Dry friction Centroids and Centers of Gravity Kinematics of particles Kinetics of a Particle: Force and Acceleration Planar Kinematics of a Rigid Body Planar Kinetics of a Rigid Body: Force and Acceleration Work-energy for a rigid body |
| Course is prerequisite for | - |