

MCET 260C : Mechanical Design II

A continuation of MCET 250C, treating the topics of rigid and elastic fasteners, shafts and bearings, welds, springs, clutches, and brakes. A series of design projects combining several of these elements will be assigned. Computer methods will be employed where appropriate.

Credits 4

Lab/Practicum/Clinical Hours 2

Lecture Hours 3

Prerequisite Courses

MATH 205C

MCET 250C

Learning Outcomes

- Design shafts and axles for power transmission applications.
- Make selections of sliding and roller bearings.
- Specify standard mechanical hardware for use in machine design
- Understand bolted joint mechanics and select fasteners.
- Calculate the strength of simple welded joints and design welded connections.
- Design/specify various types of springs.
- Design simple clutches and brakes.