İzmir Institute of Technology / Department of Civil Engineering
CE 122 Engineering Mechanics I - Statics / Spring 25-26 - Course Outline

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Course Schedule
Monday 10:45 - 12:30 Room: B-211
Thursday 13:30 - 15:15 Room: B-211

Course Page

Teams page is going to be activated soon and used throughout the semester.

Textbook/References

- Principles of Statics, R.C. Hibbeler, 10^{th} Edition, metric version, Pearson-Prentice Hall, 2006, (**Textbook**).
- Vector Mechanics for Engineers - Statics, F.P. Beer & E.R. Johnston, Jr., D.F. Mazurek, 10^{th} Edition, McGraw Hill, 2013.
- Engineering Mechanics. 1. Statics, J.L. Meriam, L.G. Kraige, 7^{th} Edition, Wiley, 2012.

Objectives

The objective is to learn the fundamental principles of statics and their use for analysis of engineering structures.

Course Content

- Introduction
- Statics of Particles
  - Forces in a Plane
  - Forces in Space
- Rigid Bodies: Equivalent System of Forces
- Equilibrium of Rigid Bodies
  - Equilibrium in Two Dimensions
- Distributed Forces : Centroids and Center of Gravity
- Analysis of Structures
  - Trusses
  - Frames
- Forces in Beams
- Moments of Inertia of Areas
- Friction (If time permits)

Grading

The tentative overall grade constitution is as follows:

- Mid-term I : 30 %
- Mid-term II : 30 %
- Final : 40 %

Course Conduct

Attendance to lectures is COMPULSORY as stated by the regulations of İzmir Institute of Technology.