



KARADENİZ TECHNICAL UNIVERSITY
DEPARTMENT OF CIVIL ENGINEERING
STATICS (3+1) SYLLABUS
2023-2024 Spring

Instructor : Dr. Gökhan ADIYAMAN

(Room: 403, Dept. Of Civil Eng.; E-mail: gadiyaman@ktu.edu.tr)

Lectures : Tuesday 15:00-17:00 / Wednesday 10:00-12:00 (14 Weeks)

CS-260

Office Hours : Monday 9:00-12:00

Textbook :

- Hibbeler, R.C., "Engineering Mechanics: Statics", Pearson-Prentice Hall. (14th ed.)

Lecture Notes : They will be given at "<https://avesis.ktu.edu.tr/gadiyaman>"

Other Books :

- Beer, F.P., Johnston, E.R., "Vector Mechanics for Engineering Statics", McGraw-Hill International Book Company (9th ed.)
- Meriam, J.L., Kraige, L.G., "Engineering Mechanics, Statics", John Wiley & Sons Inc. (7th ed.)
- Mehmet H. Omurtag, "Mühendislik Mekaniği - Statik", Birsen Yayınevi (5th ed.)

Grading : Midterm (50%)

Final (50%)

Prerequisites : Calculus

Attendance : At least 70% attendance is compulsory.

Assignments : Problem sets will be given at "<https://avesis.ktu.edu.tr/gadiyaman>", 6 sets in total. ***They will not be collected or graded. But it is strongly recommended to solve those problems.***

Course Content :

Week	Topic
1	General principles; Force vectors
2	Equilibrium of a particle (Coplanar force systems)
3	Equilibrium of a particle (3D force systems)
4	Force system resultants
5	Equilibrium of a rigid-body (Conditions for rigid-body equilibrium; Equilibrium in 2D dimensions)
6	Equilibrium of a rigid-body (Equilibrium in 3D dimensions)
7	Structural analysis: Trusses (Simple trusses; The method of joints; The method of sections)
8	Structural analysis: Trusses (Space trusses)
	Midterm (2 weeks)
9	Structural analysis: Frames and machines
10	Structural analysis: Frames and machines
11	Cables
12	Cables
13	Friction
14	Center of gravity and centroid
	Final
	Makeup