

PROGRAMME 2026-2027 FALL

WEEK	DATE	CHAPTER	TOPICS
1	21.09.2026	1	Introduction
	23.09.2026	1	FBD and SF-BM diagrams
2	28.09.2026	2	Stress Analysis&Stress states
	30.10.2026	2	Loading cases, Mohr circle
3	05.10.2026	2	Tutorial-Stress analysis
	07.10.2026	2	Pressurized Cylinders
4	12.10.2026	3	Deflection Analysis
	14.10.2026	3	Tutorial-Castigliano's theorem
5	19.10.2026	3	Buckling
	21.10.2026	3	Tutorial-Buckling
6	26.10.2026	4	Design for Static Strength-Failure Theories
	28.10.2026	4	Tutorial- Design for Static Strength
7	02.11.2026	4	Tutorial- Design for Static Strength
	04.11.2026	1-4	Midterm-1
8	09.11.2026	5	Fatigue Failure-Part 1
	11.11.2026	5	Fatigue Failure-Part 2
9	16.11.2026	5	Tutorial-Fatigue Failure
	18.11.2026	5	Tutorial-Fatigue Failure
10	23.11.2026	6	Tolerances&Fits
	25.11.2026	6	Tutorial- Tolerances&Fits
11	30.11.2026	7	Design of Power screws
	02.12.2026	7	Tutorial-Design of Power screws
12	07.12.2026	5-7	Midterm-2
	09.12.2026	8	Design of bolted joints-Part 1
13	14.12.2026	8	Design of bolted joints-Part 2
	16.12.2026	8	Tutorial-Design of bolted joints
14	21.12.2026	9	Design of riveted joints
	23.12.2026	9	Tutorial-Design of riveted joints
15		5-8-9	Final

TEXTBOOK:

Shigley's Mechanical Engineering Design, Eighth Edition, Budynas–Nisbett, McGraw–Hill.

REFERENCE BOOK: (Highly recommended)

Solved Problems Machine Elements Volume 1, Filiz, İ. H., Akademisyen Kitabevi, Ankara.
Online Order: akademisyen.com

NINTH EDITION IN SI UNITS

Shigley's Mechanical Engineering Design

RICHARD G. BUDYNAS
J. KEITH NISBETT



Solved Problems

Machine Elements

Volume 1



İ. Hüseyin FİLİZ



AKADEMİSYEN
KİTAPÇI