

CE 508 Advanced Fluid Mechanics
Spring 2026
Izmir Institute of Technology, Civil Engineering

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Course Outline

Week	Topic
1	Introduction to Fluid Mechanics,
2	Properties of Fluids-Classification of Flows
3	Fundamental Equations
4	Navier Stokes Equations, Description of the Project #1
5-6	Computational Fluid Dynamics
7-8	Description of the Project #2
9	Class Presentations I
10	Dimensional Analysis
11	Boundary Layer Theory
12	Incompressible External Flow: Lift and Drag
13	Compressible Flow
14	Class Presentations II