

CE 471 Water Resources Engineering
Spring 2026
Izmir Institute of Technology, Civil Engineering

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Reference books:

- Applied Water Resources Engineering by Melih Yanmaz
- Engineering Hydrology by Nurünnisa Usul

Course Outline

Week	Topic
1	Introduction
2	Hydrologic Processes –Precipitation, Streamflow, Infiltration
3	Hydrograph Analysis; Reservoir Routing
4	Dams - Classification and parts of dams
5	Dams - Reservoir capacity determination
6	Dams - Construction principles
7	Midterm I
8	Spillways - design flow; hydraulics
9	Energy dissipators, Design of water intakes
10	Water Supply - Municipal water requirements and population estimation
11	Water Supply - Hydraulics and Design of gravity transmission lines
12	Midterm II
13	Irrigation and Drainage - Design of irrigation systems
14	Class Presentations