



**Izmir Institute of Technology / Department of Civil Engineering**

**CE 241 – Materials Science**

2026-2027 Fall Semester

**Instructor:** Dr. Yunus Seyrek (yunusseyrek@iyte.edu.tr)

**Research Assistant:** Birkan Şimşek (birkansimsek@iyte.edu.tr)

**Course Time and Location:**

Tuesday

- 13:30–14:15
- 14:30–15:15
- 15:30–16:15
- 16:30–17:15

Room: B211

**Textbook and References:**

- B. Baradan, *İnşaat Mühendisleri için Malzeme Bilgisi*. DEÜ Mühendislik Fakültesi Yayın Bürosu, İzmir, 2014.
- T.Y. Erdoğan, M. Tokyay, İ.Ö. Yaman, S.T. Erdoğan, *Introduction to Materials Science for Engineering*, METU Press, Ankara, 2010.
- M.S. Mamlouk, J.P. Zaniewski, *Materials for Civil and Construction Engineers*, Pearson.

**Grading:**

- Midterm: 30%
- Lab: 20%
- Final Exam: 50%

**Course Content:**

Internal structure of solids; mechanical properties of materials; stress-strain relationships and time-dependent behavior; cyclic loading and fatigue; physical and chemical properties of materials; metals and alloys, glasses, polymers, ceramics, bituminous materials, and wood.