



COURSE OUTLINE
CE 332
CONSTRUCTION ENGINEERING AND MANAGEMENT
Spring 2012-2013

1. Credit hours: (3-0) 3

2. Catalogue description: Profile of the construction sector; company and site organization and types of contracts. Construction projects; estimating, tendering, planning and execution. Professional responsibility and engineering ethics. Productivity, quality, health and safety issues. Construction equipment; selection criteria, hourly cost determination and output analysis of excavators.

3. Course objectives/goals:

To introduce the students a general picture of the construction industry together with the contemporary management topics.

To provide the students with basic information on principles of construction project management and increase their awareness on major tasks of a construction manager.

To present some of the techniques and methods used during the management of a construction project such as network analysis, cost estimating techniques, hourly output estimation of equipment etc.

To help the students to understand the roles and responsibilities of all parties involved in a construction project, basic phases of a construction project and the way different parties work together to increase performance in a construction project.

To give them brief information about the Turkish construction industry and Turkish practice giving reference to current rules and regulations (eg. Health and Safety Regulations for Public Works).

To increase the awareness of students on the issues of quality, health and safety, professional responsibility, engineering ethics etc. and the environmental and economic impacts of the construction industry.

4. Instructors:

Section	Instructors	Course Hour	Room No
1	Assoc. Prof. Dr. Rifat Sönmez	Friday-TH6 13:40 – 16:30	K1-414
2	Asst. Prof. Dr. Aslı Akçamete	Friday-TH7 13:40 – 16:30	K1-244
3	Prof. Dr. İrem Dikmen Toker	Tuesday-TH8 08:40 – 11:30	K1-410
4	Assoc. Prof. Dr. Rifat Sönmez	Tuesday-TH6 08:40 – 11:30	K1-414
5	Asst. Prof. Dr. Aslı Akçamete	Tuesday-TH7 08:40 – 11:30	K1-244

5. Course Assistants

Research Assistant	Room Number	e-mail	Telephone
Açelya Ecem Yıldız	K1-407	yacelya@metu.edu.tr	210 7483
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Emre Caner Akçay	K1-411	ecakcay@metu.edu.tr	210 5463
Gözde Bilgin	K1-407	gbilgin@metu.edu.tr	210 7483
Hüseyin Erol	K1-407	herol@metu.edu.tr	210 7483

6. Course contents and schedule

Week	Topic
1	Construction project management and construction industry
2	Project delivery systems
3	Cost estimating and bidding
4	Cost estimating and bidding
5	Construction project planning
6	Construction project planning
7	Construction project planning and Managing quality
8	Introduction to MS Project
9	Construction machinery and equipment
10	Construction machinery and equipment
11	Construction machinery and equipment
12	Managing health and safety

7. Text book and references

Lecture Notes prepared by the Construction Management Staff

Reference books:

- Harris, F., and McCaffer, R. (2001), “Modern Construction Management”, 5th Edition, Blackwell Science, UK.
- Halpin, D. W. (2006), “Construction Management”, 3rd Edition, John Wiley and Sons, USA.
- Smith, N. J. (1996), “Engineering Project Management”, Blackwell Science Publications, UK.
- Peurifoy, R.L., and Schexnayder, C. J. (2002), “Construction Planning, Equipment, and Methods”, 6th Edition, McGraw-Hill Higher Education, International Edition.

8. Grading:

1st Midterm Examination: 28%
2nd Midterm Examination: 28%
Final Examination: 38%
Homework: 4%
Unannounced quizzes: 2 %

NA will be given to the students who miss an exam (Midterm or Final) without a medical report!