

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
EM 521	Engineering Economics	2	4	0	0	3	8

Prerequisites

Admission Requirements

Language of Instruction Turkish

Course Type Compulsory

Course Level Masters Degree

Objective

The world's resources are decreasing day by day and the efficient use of these resources is one of the major fields of industrial engineering. In this context, Engineering Economics techniques are among the most effective techniques available. The knowledge that the student obtains through this course, which is obligatory in the program, will be advantageous for evaluation of the projects and investments in internships and in professional life. Hence the objectives of this course are to:

- Give an insight about the time value of money
- Ensure that the student is able to compare cash flows occurring at different times.
- Give knowledge about the methods of evaluating a project or an investment alternative in everyday work.

Week 1: Introduction to Engineering Economy

Week 2: The Equivalence of Cash Flows and the Concept of Compound Interest.

Week 3: Measures of Worth I

Week 4: Measures of Worth II – Incremental Analysis

Week 5: Measures of Worth III - Additional Methods for Determining the Economic Value.

Week 6: Quiz - Depreciation

Week 7: Depreciation

Week 8: Midterm

Week 9: Taxes – After-Tax Economy Studies

Week 10: Taxes – After-Tax Economy Studies

Week 11: Retirement and Replacement

Week 12: Retirement and Replacement - Quiz

Week 13: Inflation

Week 14: Inflation

Content

References

- Fleischer, G.A., "Introduction to Engineering Economy", PWS Publishing, Boston, 1994
- Tolga, E., Kahraman, C., "Mühendislik Ekonomisi", İTÜ Yayınları, İstanbul, 1994
- Course Notes

Theory Topics

Week

Weekly Contents