

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	<p>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:</p> <ul style="list-style-type: none">• 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.
Content	<p>Week 1: Introduction to Engineering Economy</p> <p>Week 2: The Equivalence of Cash Flows and the Concept of Compound Interest.</p> <p>Week 3: Measures of Worth I</p> <p>Week 4: Measures of Worth II – Incremental Analysis</p> <p>Week 5: Measures of Worth III - Additional Methods for Determining the Economic Value.</p> <p>Week 6: Quiz - Depreciation</p> <p>Week 7: Depreciation</p> <p>Week 8: Midterm</p> <p>Week 9: Taxes – After-Tax Economy Studies</p> <p>Week 10: Taxes – After-Tax Economy Studies</p> <p>Week 11: Retirement and Replacement</p> <p>Week 12: Retirement and Replacement - Quiz</p> <p>Week 13: Inflation</p> <p>Week 14: Inflation</p>
References	<ul style="list-style-type: none">• 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