

<b>Faculty</b>	<b>Faculty of Engineering</b>		
<b>Program</b>	<b>B.Sc. in Civil Engineering</b>	<b>Required</b>	
	<b>B.Sc. in Computer Engineering</b>	<b>Required</b>	
	<b>B.Sc. in Electrical-Electronics Engineering</b>	<b>Required</b>	
	<b>B.Sc. in Industrial Engineering</b>	<b>Required</b>	
	<b>B.Sc. in Mechanical Engineering</b>	<b>Required</b>	

<b>Course Code</b>	ECON 112			
<b>Course Title in English</b>	Economics for Engineering			
<b>Course Title in Turkish</b>	Mühendislik için Ekonomi			
<b>Language of Instruction</b>	English			
<b>Type of Course</b>	Lecture			
<b>Level of Course</b>	Undergraduate			
<b>Course Category (by % of Content)</b>	Basic Science	Basic Engineering	Engineering Design	General Education
	30	-	-	70
<b>Semester Offered</b>	Fall			
<b>Contact Hours per Week</b>	Lecture: 2 hours	Recitation: -	Lab: -	Other: -
<b>Estimated Student Workload</b>	131 hours per semester			
<b>Number of Credits</b>	5 ECTS			
<b>Grading Mode</b>	Standard Letter Grade			
<b>Pre-requisites</b>	-			
<b>Expected Prior Knowledge</b>	-			
<b>Co-requisites</b>	-			
<b>Registration Restrictions</b>	-			
<b>Overall Educational Objective</b>	To learn the economic system and obtain profound skills to analyze economic situations which are relevant for an engineer's professional practice.			
<b>Course Description</b>	The course introduces to basic concepts of economics. The course content begins with the analyses of market mechanisms, which are perceived as the elementary organization form of the economy. Subsequently, the role of governmental policies and regularizations are incorporated into the analyses. Firm behavior and the organization of the industry are described in further details. Long-run and short-run dynamics of macroeconomic variables are investigated. The analyzed theoretical concepts are critically reviewed by the help of empirical data. The course ends with applications of presented methods on selected special topics.			
<b>Course Description in Turkish</b>	Bu ders, ekonominin temel kavramlarını tanıtır. Dersin içeriği ekonominin asıl organizasyon biçimi olarak algılanan pazar mekanizmalarının analizleri ile başlar. Daha sonra kamu politikalarının ve düzenlemelerinin rolü analizlere dâhil edilir. Şirket davranışları ve endüstri kuruluşları ayrıntılı tanımlanır. Makro ekonomik değişkenlerin uzun ve kısa vadede dinamikleri incelenir. Analiz edilen teorik kavramlar, ampirik veri yardımıyla eleştirel olarak gözden geçirilir. Ders, seçili özel başlıklar altında sunulan yöntemlerin uygulamalarıyla sona erer.			
<b>Course Learning Outcomes and Competences</b>	Upon successful completion of the course, the learner is expected to: <ol style="list-style-type: none"> <li>1. analyze market mechanisms, which are perceived as the elementary organization form of the economy;</li> <li>2. incorporate the role of governmental policies and regularizations into the analyses;</li> <li>3. describe firm behavior and the organization of the industry;</li> <li>4. use tools for better understanding of both, the potentials and the limits of economic policy;</li> <li>5. use computer software to make basic calculations for analyzing economic situations.</li> </ol>			

Relationship of the Course with the Student Outcomes	Level	Learning Outcome(s)	Assessed by
<b>Student Outcomes</b>	N=None S=Supportive H=High		Exam, Project, HW, Experiment, Presentation, etc.
(1) an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics			
(2) an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors			
(3) an ability to communicate effectively with a range of audiences			
(4) an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts	H	1, 2, 3, 4, 5	Exams, Quizzes
(5) an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives			
(6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions			
(7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies			
<b>Prepared by and Date</b>	Prof. Dr. Murat Donduran / June 2019		
<b>Semester</b>	Fall 2019-2020		
<b>Name of Instructor</b>	Prof. Dr. Murat Donduran		
<b>Course Contents</b>	Week	Topic	
	1.	Introduction and Principles	
	2.	Trade and Market Mechanisms	
	3.	Elasticity, Market Mechanisms and Government Policies	
	4.	Markets and Welfare	
	5.	Economics of the Public Sector	
	6.	Firm Behavior and Industrial Organization	
	7.	Economics and Information	
	8.	Data and Empirical Evidence	
	9.	Production, Growth, Saving and Investments	
	10.	Financial Economics	
	11.	Monetary System	
	12.	Short-Run Economic Fluctuations	
	13.	International Economics and Macroeconomic Policy	
	14.	Applications for International Economics	
	15.	Final Exam/Project/Presentation period	
	16.	Final Exam/Project/Presentation period	
<b>Required/Recommended Readings</b>	<b>Required</b> N. Gregory Mankiw. "Essentials of Economics", South-Western Cengage Learning, 6 <sup>th</sup> or 7 <sup>th</sup> edition. Frank, Bernanke. "Principles of Economics", McGraw-Hill, 5 <sup>th</sup> edition. <b>Recommended</b> Tim Harford, "The Undercover Economist", Random House Trade Paperbacks, 2010.		

	Miller, Benjamin, North. "The Economics of Public Issues", Pearson Series in Economics, 18th Edition, Paperback, 2013.															
<b>Teaching Methods</b>	Lectures and class discussions															
<b>Homework and Projects</b>																
<b>Laboratory Work</b>	-															
<b>Computer Use</b>	-															
<b>Other Activities</b>	-															
<b>Assessment Methods</b>	<table border="1"> <thead> <tr> <th>Types of assessment</th> <th>Number</th> <th>Ratio (%)</th> </tr> </thead> <tbody> <tr> <td>Midterm Exam</td> <td>2</td> <td>40</td> </tr> <tr> <td>Quizzes</td> <td>8</td> <td>20</td> </tr> <tr> <td>Final Exam</td> <td>1</td> <td>40</td> </tr> <tr> <td>Total</td> <td></td> <td>100</td> </tr> </tbody> </table>	Types of assessment	Number	Ratio (%)	Midterm Exam	2	40	Quizzes	8	20	Final Exam	1	40	Total		100
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Midterm Exam	2	40														
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Final Exam	1	40														
Total		100														
<b>Course Administration</b>	<p><b>Instructor's office and phone number:</b>  <b>office hours:</b>  <b>email address:</b></p> <p><b>Missing a quiz:</b>  <b>Missing a midterm:</b>  <b>Missing a final:</b> Faculty regulations.</p> <p><b>A reminder of proper classroom behavior, code of student conduct:</b> YÖK Regulations  <b>Statement on plagiarism:</b> YÖK Regulations</p>															

<b>ECTS Student Workload Estimation</b>	Activity	No/Weeks	Hours			Calculation	Explanation
		No/Weeks per Semester (A)	Preparing for the Activity (B)	Spent in the Activity Itself (C)	Completing the Activity Requirements (D)		
	Lecture/Flipped Classroom	14	1	3		56	A*(B+C+D)
	Quizzes	8	3	1		32	A*(B+C+D)
	Midterm(s)	2	10	2		24	A*(B+C+D)
	Assignment, Project, Presentation					0	A*(B+C+D)
	Final Examination	1	12	2		14	A*(B+C+D)
	Total Workload					126	
	Total Workload/25					5.04	
ECTS					<b>5</b>		