

**School of Engineering and Natural Sciences / Industrial Engineering (English)**

**2022 - 2023 Academic Year**

**ENGINEERING PROJECT I**

**Syllabus**

<b>Course Description</b>					
<b>Name</b>	<b>Code</b>	<b>Semester</b>	<b>T+A Hour</b>	<b>Credit</b>	<b>ECTS</b>
ENGINEERING PROJECT I	IND4210788	Spring Semester	1+2	2	6
<b>Prerequisites Courses</b>	MATEMATİK II; FİZİK I; FİZİK I LAB; FİZİK II; FİZİK II LAB; AKADEMİK İLETİŞİM BECERİLERİ I; AKADEMİK İLETİŞİM BECERİLERİ II				
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	English				
<b>Course Level</b>	First Cycle (Bachelor's Degree)				
<b>Course Type</b>	Required				
<b>Course Coordinator</b>	Assoc.Prof. Melis Almula KARADAYI				
<b>Name of Lecturer(s)</b>	Assoc.Prof. Melis Almula KARADAYI				
<b>Assistant(s)</b>					
<b>Aim</b>	Mühendislik bitirme projesi mühendislik öğrencilerine öğrenimleri boyunca edindikleri teorik bilginin pratikte çalışan bir sisteme uygulamasını amaçlar.Öğrencilere, program dâhilinde kazandıkları bilgi ve becerileri kullanarak gerçek hayattan alınan bir problemi analiz etmeyi, modellemeyi ve çözmeyi öğrenir. Küçük gruplar halinde çalışacak olan mühendislik öğrencileri iddialı bir mühendislik tasarım projesini tasarlar, yapar, ve sunar.				
<b>Course Content</b>	This course contains; Choose a topic for the capstone project.,Literature research and designing of the project.,To form a work-timeline plan.,Obtain preliminary results,Semester reporting and presentation..				
<b>Course Learning Outcomes</b>		<b>Teaching Methods</b>		<b>Assessment Methods</b>	
Through understanding of complete requirements for a given project.		1, 14, 16, 22, 3, 5, 8		B, D	
Learning of all steps from the design and implementation of a project.		1, 14, 16, 22, 3, 5, 8		B, D	
Throughout the project life-cycle, keeping the awareness about ethical issues.		1, 16, 22, 3, 5, 8		B, D	
Developing oral and written communication skills.		1, 14, 16, 22, 3, 5, 8		B, D	
Understanding the importance of lifelong learning.		1, 16, 22, 3, 5, 8		B, D	
The ability to show perseverance during difficult moment of project execution.		1, 14, 16, 22, 3, 5, 8		B, D	
The usage of modern tools and techniques for a given project.		1, 14, 16, 22, 3, 5, 8		B, D	
<b>Teaching Methods</b>	1: Lecture, 14: Self-Study, 16: Project Based Learning, 22: -, 3: Discussion, 5: Demonstration, 8: Teamwork				
<b>Assessment Methods</b>	B: Oral Exam, D: Project / Design				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	Choose a topic for the capstone project.	Meeting with academic faculty or industry.			
2	Literature research and designing of the project.	Literature research.			
3	To form a work-timeline plan.	Identification of the main parts of the project and required time for realization.			
4	Obtain preliminary results	Learning the required skills.			
5	Semester reporting and presentation.	Technical writing and presentation skills to be acquired.			
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		30			
General Exam		70			
<b>Resources</b>					