

ENGR4901 COURSE CATALOG INFO

Course Code : ENGR4901				Course Name : Introduction to Design Projects			
Semester	Lecture (Le+T+L)	Local Credit	ECTS	Language	Category	Instructional Methods	Prerequisites
7	(1+0+1)	1	1	English	Core	Lecture	-
Course Content	Engineering project and risk management, feasibility analysis. Preparing project proposals. Interdisciplinary teamwork. Examples of social, environmental, ethical, legal aspects of engineering solutions for contemporary real-life problems. Examples of entrepreneurship and innovation practices. Widely used engineering standards.						
Course Outcomes	CO 1. Gain experience for preparing project proposals within interdisciplinary teams CO 2. Gain knowledge about project management CO 3. Gain information about entrepreneurship and innovation CO 4. Gain knowledge about engineering standards and codes CO 5. Gain knowledge of intellectual property rights CO 6. Gain knowledge about sustainable development						

COURSE ASSESMENT AND ECTS WORK LOAD			
Type of Work	Count	ECTS WORK LOAD	
		Time (Hour)(Including prep. time)	Work Load
Attendance	14	1	14
Final Exam			0
Quizzes			0
Term project			0
Reports			0
Final Project			0
Seminar			0
Assignments			0
Presentation			0
Midterms			0

Project			0
Laboratory		0	0
Tutorial		1	0
Other(Self study, Paper reviews)			0
		Total work load	14
		Total work load/25	0.56
		ECTS Credit	1

PROGRAM OUTCOMES - COURSE OUTCOMES RELATIONS		
PO	Program Outcomes	CO
1	1.1. Adequate knowledge in fundamentals of mathematics (algebra, differential equations, integrals, probability etc), science (physics, chemistry, biology etc.) and computer science (programming and simulation);	
	1.2. ability to use theoretical and applied knowledge in these areas in complex engineering problems.	
2	2.1. Ability to identify, formulate, and solve complex engineering problems;	
	2.2. ability to select and apply proper analysis and modeling methods for this purpose.	
3	3.1. Ability to design and integrate components of a complex system or process, as they relate to Electrical and Electronics Engineering discipline, under realistic constraints and conditions, in such a way as to meet desired requirements;	
	3.2. ability to apply modern design methods.	
4	4.1. Ability to devise, select, and use techniques and tools needed for analyzing and solving complex problems encountered in engineering practice;	
	4.2. ability to employ information technologies effectively.	
5	5.1. Ability to design experiments,	
	5.2. ability to conduct experiments, gather, analyze and interpret data.	
6	6.1. Ability to work in intra-disciplinary teams;	
	6.2. ability to work in multi-disciplinary teams;	1

	6.3. ability to take individual responsibilities.	1
7	7.1. Ability to effectively communicate via written and oral means;	
	7.2. knowledge of at least one foreign language;	
	7.3. ability to write effective reports and comprehend written reports;	1
	7.4. ability to write design and manufacturing reports	
	7.5. ability to present effectively,	
	7.6. ability to give and follow clear instructions.	
8	8.1. Recognition of the need for lifelong learning;	
	8.2. ability to access information, to follow developments in science and technology, and to continue to educate him/herself.	
9	9.1. Consciousness to behave according to ethical principles, and about professional and ethical responsibility;	
	9.2. knowledge on standards used in engineering practice.	4
10	10.1. Knowledge about business life practices such as project management, risk management, and change management;	2
	10.2. awareness in entrepreneurship, innovation;	3
	10.3. knowledge about sustainable development.	6
11	11.1. Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering;	
	11.2. awareness of the legal consequences of engineering solutions.	5

Revision Date	Prepared by	Approved by
1.9.2019 1.9.2021		Prof.Dr. Ahmet Aksen