Engineering Project

Course Code:
CSE 492
Course Period:
Spring
Course Type:
Core
Credits:
3
Theoric:
1
Practice:
0
Laboratory Hour:
4
ECTS:
8
Course Language:
English
Course Objectives:
The aim of this course is to provide students with knowledge and abilities to complete an engineering project.

Course Content:

Requirement analysis, design, implementation, experimental methodology, report writing, presentation skills, awarness of professional and ethical responsibility and recognition of the need for lifelong learning.

Course Methodology:

1: Lecture, 2: Question-Answer, 3: Lab, 4: Case-study

Course Evaluation Methods:

A: Testing, B: Experiment, C: Homework, D: Project

Course Learning Outcomes	Program	Teaching Methods	Assessment Methods	
	Learning Outcomes		linetinette	
1) Adequate knowledge in writing a project proposal	10,11	1,2	D	
 Ability to carry out a requirement analysis for the proposed project. 	7	4	B,C,D	
 Ability to design and implement an engineering project. 	1,2,3	4	D	
 Ability to devise and experimental methodology to test and verify the project. 	5	4	B,D	
5) Ability to write an engineering project report.	7	1	D	
6) Ability to present an engineering project.	7	1	D	
7) Awareness of professional and ethical responsibility, and recognition of the need for lifelong learning	8, 9	1,2		

COURSE CONTENT

Week	Topics	Study Materials
1	PROJECT PROPOSAL	
2	REQUIREMENT ANALYSIS	
3	REQUIREMENT ANALYSIS	
4	DESIGN	
5	DESIGN	
6	DESIGN	
7	IMPLEMENTATION	
8	IMPLEMENTATION	
9	IMPLEMENTATION	

10	IMPLEMENTATION					
11	TESTS					
12	TESTS AND CLOSING ENGINEERING CYCLE					
13	ENGINEERING PROJECT REPORT					
14	ENGINEERING PROJECT REPORT AND PRESENTATION					
RECO	RECOMMENDED SOURCES					
Textbook						
Additional Resources						
MATERIAL SHARING						
Docu	ments					
Assig	nments					
Exam	S					

ASSESSMENT

IN-TERM STUDIES	NUMBER	PERCENTAGE
Mid-terms	0	0
Quizzes	0	0
Assignment	0	0
Lab Work	0	0
Term Project	1	100
Total		100
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		100
CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE		0
Total		100
COURSE'S CONTRIBUTION TO PROGRAM		
No Program Learning Outcomes	C	ontribution

		1	2	3	4	5
1	Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied information in these areas to model and solve engineering problems.					X
2	Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.					X
3	Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.					X
4	Ability to devise, select, and use modern techniques and tools needed for engineering practice; ability to employ information technologies effectively.					
5	Ability to design and conduct experiments, gather data, analyze and interpret results for investigating engineering problems.					Х
6	Ability to work efficiently in intra-disciplinary and multi- disciplinary teams; ability to work individually.					
7	Ability to communicate effectively both orally and in writing; knowledge of a minimum of one foreign language.					X
8	Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.					Х
9	Awareness of professional and ethical responsibility.					X
10	Information about business life practices such as project management, risk management, and change management; awareness of entrepreneurship, innovation, and sustainable development.					X
11	Knowledge about contemporary issues and the global and societal effects of engineering practices on health, environment, and safety; awareness of the legal consequences of engineering solutions.					X

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION

Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration	14	4	56

Hours for off-the-classroom study (Pre-study, practice)	0	0	0
Midterm examination	0	0	0
Homework	0	0	0
Project	1	130	150
Final examination (presentation)	1	1	1
Total Work Load			207
Total Work Load / 25 (h)			8.28
ECTS Credit of the Course			8