



HASAN KALYONCU UNIVERSITY
Faculty of Engineering
Course Description Form

COURSE: Graduation Project				
CODE: CENG499		SEMESTER: SPRING or FALL		
LANGUAGE: ENGLISH		TYPE: COMPULSORY		
PRE-REQUISITES: COME302	THEORY	PRACTICAL	CREDIT	ECTS
WEEKLY HOURS:	0	8	4	5

CONTENT OF THE COURSE:

The projects will demonstrate the students' ability to apply, analyze, synthesize, evaluate information, and communicate significant knowledge and comprehension. This is an opportunity to expand the student personal knowledge and apply it to real-life situations, which will serve to benefit their growth and promote lifelong learning. Students shall complete their projects under the direction and supervision of faculty members. At the end of this course, students must deliver a product or significant study with a major component that has passed through the design, analysis, implementation, testing, and evaluation stages.

OBJECTIVE OF THE COURSE:

Upon successful completion of the course, students are expected to have the following competencies:

LO1: Analyze the problem, and conducting an effective literature survey and be able to contrast and critique related work. Plan effectively for the various project lifecycle activities, and then develop an efficient solution.

LO2: Be able to work effectively as part of a team with colleagues and advisor.

LO3: Manage one's own learning and development, including time management and organizational skills.

LO4: Appreciate the need for continuing professional development.

WEEKLY SCHEDULE	
Weeks	Topics
1-2	Phase 1: Initiating <ul style="list-style-type: none"> • Creating the groups and select the topic(Students must submit the Project Selection Form)
3-4	Phase 2: Problem definition (Problem Statement) <ul style="list-style-type: none"> • Literature Reviews (Historical and theoretical background). • Current / Existing systems. • Proposed scope and enhancement. • Development of Project Objectives.
5-6	Phase 3: <ul style="list-style-type: none"> • Software Requirements Specification (SRS) • Software Design Description (SDD)
7	Interim Report are due
8-13	Phase 4: Implementation/Test <ul style="list-style-type: none"> • The final product will be built. • Testing: making some test to ensure that the final product and its all functionalities have been implemented working properly. • Designing the project poster.
14	Final Report is due <ul style="list-style-type: none"> • Checking the format and similarity
15	Final Report (last version) is due
16	Demo-Day (Discussion and Jury Evaluation)

TEXTBOOK:

Students will be guided by the supervisor through some study notes, books, and research articles.

Other appropriate learning resources are possibly related to the nature of the research project.

EVALUATION SYSTEM:		
IN-TERM STUDIES	QUANTITY	PERCENTAGE (%)
Interim Report	1	20
Final Report	1	40
Poster	1	10
Project Presentation and Jury Evaluation	1	30
TOTAL	4	100
CONTRIBUTION OF INTERM STUDIES TO OVERALL GRADE	2	60
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE	2	40
TOTAL	4	100

COURSE CATEGORY:	PERCENTAGE (%)
Mathematics and Basic Sciences	20
Engineering	20
Engineering Design	40
Social Sciences	20

TABLE OF ECTS / WORKLOAD:			
Activities	QUANTITY	Duration (Hour)	Total Workload
Course Duration (Meetings with the supervisor)	13	1	13
Hours for off-the-classroom study (Pre-study, practice)	14	9	126
Total Work Load			139
Total Work Load / 30			4,63
ECTS Credit of the Course			5

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
LO1	3	3	3	3	0	0	0	0	0	1	1
LO2	0	0	0	0	0	3	0	0	0	0	0
LO3	2	2	2	2	2	3	0	0	0	0	0
LO4	1	1	1	1	0	0	0	0	0	0	0
	PO: Program Outcomes LO: Learning Outcomes Values: 0: None 1: Low 2: Medium 3: High										

INSTRUCTOR(S):	Asst. Prof. Dr. Saed ALQARALEH
FORM PREPARATION DATE:	13/9/2019

LEARNING OUTCOMES OF THE COURSE:	PROGRAM OUTCOMES:
<p>LEARNING OUTCOMES OF THE COURSE:</p> <p>LO1: Analyze the problem, and conducting an effective literature survey and be able to contrast and critique related work. Plan effectively for the various project lifecycle activities, and then develop an efficient solution.</p> <p>LO2: Be able to work effectively as part of a team with colleagues and advisor.</p> <p>LO3: Manage one's own learning and development, including time management and organizational skills.</p>	<p>PO1: Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.</p> <p>PO2: Ability to identify, formulate, and solve complex engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.</p> <p>PO3: 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.</p> <p>PO4: Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice; ability to employ information technologies</p>

LO4: Appreciate the need for continuing professional development.

effectively.

PO5: Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex engineering problems or discipline specific research questions.

PO6: Ability to work efficiently in intra-disciplinary and multi-disciplinary teams; ability to work individually.

PO7: Ability to communicate effectively in Turkish, both orally and in writing; knowledge of a minimum of one foreign language; ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.

PO8: 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.

PO9: Consciousness to behave according to ethical principles and professional and ethical responsibility; knowledge on standards used in engineering practice.

PO10: Knowledge about business life practices such as project management, risk management, and change management; awareness in entrepreneurship, innovation; knowledge about sustainable development.

PO11: 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; awareness of the legal consequences of engineering solutions.