



ECTS COURSE INFORMATION FORM

Faculty	Faculty of Engineering
Program	B.Sc. in Civil Engineering
	Required

Course Code	CE 492			
Course Title in English	CE Senior Design Project			
Course Title in Turkish	İnşaat Mühendisliği Tasarım Projesi			
Language of Instruction	English			
Type of Course	Project			
Level of Course	Undergraduate			
Course Category (by % of Content)	Basic Science	Basic Engineering	Engineering Design	General Education
	-	-	100	-
Semester Offered	Fall and Spring			
Contact Hours per Week	Lecture:	Recitation: 8 hours	Lab:	Other:
Estimated Student Workload	169 hours per semester			
Number of Credits	7 ECTS			
Grading Mode	Standard Letter Grade			
Pre-requisites	CE 490			
Expected Prior Knowledge	Basic knowledge about civil engineering design			
Co-requisites	None			
Registration Restrictions	Only Undergraduate Students – Senior year level			
Overall Educational Objective	To learn and experience how to analyze a system or process to determine requirements and constraints and to design that system or process to meet desired needs within realistic constraints for the solution of a specific realistic civil engineering problem by using the knowledge and skills acquired through previous classes.			
Course Description	In this course, based on the problem selected, students will propose a design process for the problem specific civil engineering system or process, and apply the proposed design to the selected problem under the supervision of their advisors.			
Course Description in Turkish	Bu ders İnşaat Mühendisliği bitirme tasarım projesidir. Öğrenciler seçilen problemi baz alan bir inşaat mühendisliği sistemi veya prosesi için bir tasarım önerecek ve tasarımlarını seçtikleri problem üzerinde pratikte uygulayacaklardır. Tüm süreç seçilen konunun danışmanın idaresinde sürdürülecektir.			
Course Learning Outcomes and Competencies	Upon successful completion of the course, the learner is expected to: 1. model, analyze and solve a practical civil engineering problem by applying appropriate techniques, skills, and modern engineering tools necessary for practice; 2. collect, analyze and interpret report data (experiments, surveys, measurements, etc.) depending on the characteristics of the problem; 3. design a system, component or process to meet desired needs within realistic constraints, and address the uncertainties in the design process; 4. deliver a design project in formal written format; 5. demonstrate effective presentation skills; 6. define professional and ethical responsibility followed during a design process; 7. explain the impact of civil engineering solutions in a global, economic, environmental, ethical, constructability and sustainability context; 8. explain contemporary issues on the identification, formulation and solution of civil engineering problems; 9. function effectively as a member of a team; 10. demonstrate skills of self-directed learning.			

Relationship of the Course with the Student Outcomes	Level	Learning Outcome(s)	Assessed by
Student Outcomes	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	H	1	Meetings, Project Report and Presentation
(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	H	3	Meetings, Project Report and Presentation
(3) an ability to communicate effectively with a range of audiences	H	4, 5	Meetings, Project Report and Presentation
(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	6, 7, 8	Meetings, Project Report and Presentation
(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	H	9	Meetings, Project Report and Presentation
(6) an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	S	2	Project Report
(7) an ability to acquire and apply new knowledge as needed, using appropriate learning strategies	H	10	Project Report
Prepared by and Date	Asst. Prof. Gökçe Tönük / August 2020		
Semester	Fall 2020-2021		
Name of Instructor	Asst. Prof. Gökçe Tönük (Coordinator)		
Course Contents	Week	Topic	
	1.	Teams setting, project topic selection	
	2.	Advisor assignment	
	3.	Weekly meeting with the advisor.	
	4.	Weekly meeting with the advisor.	
	5.	Weekly meeting with the advisor.	
	6.	Weekly meeting with the advisor.	
	7.	Weekly meeting with the advisor.	
	8.	Weekly meeting with the advisor.	
	9.	Weekly meeting with the advisor.	
	10.	Evaluation of the progress of the project through the submitted Interim Report	
	11.	Weekly meeting with the advisor.	
	12.	Weekly meeting with the advisor.	
	13.	Weekly meeting with the advisor.	
	14.	End of semester report to advisor.	
	15.	Final Exam/Project/Presentation Period	
	16.	Final Exam/Project/Presentation Period	
Required/Recommended Readings	<ul style="list-style-type: none"> • Project Specifications • Books, articles, codes and other references related to the project topic 		

Teaching Methods	Weekly meetings with the advisors															
Homework and Projects	Senior Design Project															
Laboratory Work	Depends on the subject															
Computer Use	Computer usage is limited to analyzing systems or components of a structure or an infrastructure. No design software shall be used.															
Other Activities																
Assessment Methods	<table border="1"> <thead> <tr> <th>Types of assessment</th> <th>Number</th> <th>Ratio (%)</th> </tr> </thead> <tbody> <tr> <td>In Semester Evaluation</td> <td></td> <td>20</td> </tr> <tr> <td>Project Report</td> <td>1</td> <td>45</td> </tr> <tr> <td>Project Presentation</td> <td>1</td> <td>35</td> </tr> <tr> <td>Total</td> <td></td> <td>100</td> </tr> </tbody> </table>	Types of assessment	Number	Ratio (%)	In Semester Evaluation		20	Project Report	1	45	Project Presentation	1	35	Total		100
Types of assessment	Number	Ratio (%)														
In Semester Evaluation		20														
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Project Presentation	1	35														
Total		100														
Course Administration	<p>Instructor's office and phone number: 5th Floor, A535 office hours: via email email address: tonukq@mef.edu.tr</p> <p>Meeting with the advisors: You are responsible for all arrangements of weekly meetings with your advisor.</p> <p>Final report: No late submission. Students do not submit their progress reports on time will fail the course.</p> <p>Presentation: Students that miss their presentation time/day will fail the course.</p> <p>A reminder of proper classroom behavior, code of student conduct: YÖK Regulations</p> <p>Statement on plagiarism: YÖK Regulations (http://3fcampus.mef.edu.tr/uploads/cms/webadmin.mef.edu.tr/4833_2.pdf)</p> <p>Disclaimer: The instructor reserves the right, when necessary, to alter the grading policy, change examination dates, and modify the syllabus and course content. Modifications will be announced through BB. Students are responsible for the announced changes.</p>															

ECTS Student Workload Estimation	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)		
	Weekly meeting with advisor	14	1	1	2	56	A*(B+C+D)
	Project Time Line					0	A*(B+C+D)
	Progress report and presentation					0	A*(B+C+D)
	Project Report	1	72			72	A*(B+C+D)
	Project Presentation	1	40	1		41	A*(B+C+D)
	Total Workload					169	
	Total Workload/25					6.76	
	ECTS					7	