

<b>Course name:</b> CENG 515 Design for Electrical and Computer Engineers						<b>Department:</b> Computer Engineering		
<b>Semester</b>	<b>Methods of Education</b>							<b>Credit (ECTS)</b>
	<b>Lecture</b>	<b>Recitation</b>	<b>Lab</b>	<b>Project (F. Study)</b>	<b>HomeW</b>	<b>Others</b>	<b>Total</b>	
1	42	42	0	80	40	21	225	7,5
<b>Language</b>	English							
<b>Comp. or Elective</b>	Elective							
<b>Prerequisites</b>								
<b>Course Contents</b>	The Engineering Design Process Design Tools Professional Skills							
<b>Course Objectives</b>	To learn design theory and concepts and how to use design tools for project excellence							
<b>Learning Outcomes and Competences</b>	<ul style="list-style-type: none"> <li>- What is engineering design process</li> <li>- How select project and how to do needs identification</li> <li>- How to do requirements specification and concept generation and evaluation</li> <li>- And how to use design tools and how to test, learning about professional skills</li> </ul>							
<b>Textbook and/or References</b>	<b>1- "Design for Electrical and Computer Engineers ", 2nd ed, RalphM. Ford, Chris S. Coulston, McGraw-Hill, 2008</b>							
<b>Assessment Criteria</b>				<b>If any, mark as (X)</b>	<b>Percentage (%)</b>			
	Midterm Exams			X	15			
	Quizzes							
	Homeworks			X	20			
	Projects			X	15			
	Term Paper							
	Laboratory work							
	Other(Class Participation)							
Final Exam			X	50				
<b>Instructors</b>	Prof Dr Fatih V. Çelebi							
<b>Week</b>	<b>Subject</b>							
1	Introduction to Engineering Design Process							
2	Project Selection and Needs Identification							
3	The Requirements Specification							
4	Concept Generation and Evaluation							
5	Functional Decomposition							
6	Behavior Models							
7	Testing							
8	System Reliability							
9	Teams and Teamwork							
10	Project Management							
11	Student Presentations							
12	Student Presentations							