

School of Engineering and Natural Sciences / Computer Engineering (English)

2022 - 2023 Academic Year

SOFTWARE ENGINEERING

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
SOFTWARE ENGINEERING	COE4112505	Fall Semester	3+0	3	8
Prerequisites Courses	VERİ YAPILARI				
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Prof.Dr. Selim AKYOKUŞ				
Name of Lecturer(s)	Assist.Prof. Muhsin Zahid UĞUR				
Assistant(s)					
Aim	This course introduces an engineering approach to building software systems. Students will work in teams towards building a software product while going through certain phases including a feasibility study, requirements analysis, object-oriented design, implementation, testing, and delivery to the client. The course will also provide advanced topics such as project management and risk analysis.				
Course Content	This course contains; The Product and Process,Project Planning and Organization,Software Engineering Practice,Requirements Engineering,Analysis Methods,Elements of software design,Midterm,Design Methods - I,Design Methods - II,Testing Strategies,Testing Methods,Umbrella Activities,Advanced topics,Project Final Presentation.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Understand the software development process.					
Understand the advantages and disadvantages of current software life cycle models					
Use the best methods to plan, analyze, design, test, measure, and manage software projects					
Understand that good people are one of, if not the most important, requirements for successful projects					
Learn how to work on a team project.					
Teaching Methods					
Assessment Methods					
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	The Product and Process				
2	Project Planning and Organization				
3	Software Engineering Practice				
4	Requirements Engineering				
5	Analysis Methods				
6	Elements of software design				
7	Midterm				
8	Design Methods - I				
9	Design Methods - II				
10	Testing Strategies				
11	Testing Methods				
12	Umbrella Activities				
13	Advanced topics				
14	Project Final Presentation				
Evaluation Methods		Weight(%)			
Midterm Exam		30			
General Exam		70			
Resources					
Software Engineering: A practitioner's Approach by Roger S. Pressman and Bruce Maxim, 8th edition, Mc Graw Hill, 2015.Lecture notes that will be delivered during the classes.					