

GAU, Faculty of Engineering

Course Unit Title	Graduation Project I	
Course Unit Code	SEN401	
Type of Course Unit	Compulsory, Software Engineering Students	
Level of Course Unit	4 th Year BSc	
National Credits	3	
Number of ECTS Credits Allocated	6 ECTS	
Theoretical (hour/week)	-	
Practice (hour/week)	-	
Laboratory (hour/week)	-	
Year of Study	4	
Semester when the course unit is delivered	7/8	
Mode of Delivery	Project Follow-up Meetings	
Language of Instruction	English	
Prerequisites and co-requisites	Please refer to the Graduation project guideline for the track descriptions and pre-requisites	
Recommended Optional Programme Components	Please refer to the Graduation project guideline for the track descriptions and pre-requisites	
Objectives of the Course:		
<p>4th academic year students in Software Engineering are required to prepare and present two projects under the supervision of a faculty member of the Department. The purpose of the projects is to develop an understanding of independent research by studying a particular Software Engineering topic.</p> <p>SEN401 Graduation Project I gives the students the chance of demonstrating their skills and engineering judgement, based upon previous and current course and laboratory experience. The projects are selected in areas of current interest in software engineering.</p> <p>During their projects the students are expected to show their abilities on designing, developing, orally presenting and documenting a project, just like they will need to in their professional lives. That is to say, the students are expected to display their social and communication skills as well as their technical abilities.</p>		
Learning Outcomes		
When this course has been completed the student should be able to		Assesment.
1	Formulate and analyze a problem/system by examining the current status of problem/system dealt with, considering theoretical knowledge	3,4
2	Develop applicable suggestions and/or solution methods for the problem formulated	3,4
3	Gain the ability to implement a solution method to an existing problem and will be able to evaluate the results	3,4
4	Learn to express himself/herself by reporting and presenting the work	3,4
5	Learn to defend the idea that underlines the results of the study	3,4
Assesment Methods: 1. Written Exam, 2. Assignment 3. Project/Report, 4.Presentation, 5 Lab. Work		
Course's Contribution to Program		
		CL
1	Ability to understand and apply knowledge of mathematics, science, and engineering	3
2	Ability to design and conduct experiments as well as to analyze and interpret data	4
3	Ability to work in multidisciplinary teams while exhibiting professional responsibility and ethical conduct	3
4	Ability to apply systems thinking in problem solving and system design	4
5	Knowledge of contemporary issues while continuing to engage in lifelong learning	4
6	Ability to use the techniques, skills and modern engineering tools necessary for engineering practice	4
7	Ability to express their ideas and findings, in written and oral form	5
8	Ability to design and integrate systems, components or processes to meet desired needs within realistic constraints	4
9	Ability to approach engineering problems and effects of their possible solutions within a well structured, ethically responsible and professional manner	5
10	To apply fundamental concepts of software design, database design, data processing and artificial intelligence in the modeling, designing, implementing, testing and deploying software solutions.	4
11	Ability to analyse and design hardware systems by applying the principles of embedded systems, microprocessors, computer networks, distributed systems and data communication.	5
CL: Contribution Level (1: Very Low, 2: Low, 3: Moderate 4: High, 5:Very High)		

Course Contents			
Week			Exams
1			
2		Proposal Submission	
3			
4			
5			
6			Midterm Exams
7		Progress Report Submission	
8			
9			
10			
11			
12			
13		Presentation to the jury members	
14			
15		Final Report Submission	Final Exams
Recommended Sources			
Will be required depending on the recommendation of the project supervisor and according to the needs of the specific project topics.			
Supplementary Material:			
Guidelines on proposal/report writing available at GAU e-learning site on Graduation projects			
Assessment			
Project Proposal	5%		
Progress Report	20%		
Evaluation Jury	40%	Cumulative grade of four jury members (presentation)	
Project Supervisor's Assessment	25%		
Final Report	10%		
Total	100%		
ECTS Allocated Based on the Student Workload			
Activities	Number	Duration (hour)	Total Workload(hour)
Course duration in class (including the Exam week)	-	-	-
Labs and Tutorials	-	-	-
Assignments	14	5	70
Project/Presentation/Report Writing	3	7	21
E-learning Activities	-	-	-
Quizzes	-	-	-
Midterm Examination	-	-	-
Final Examination (Presentation to Jury)	1	5	5
Self Study	14	5	70
Total Workload			166
Total Workload/30 (h)			5.53
ECTS Credit of the Course			6