Course Name : Software Engineering

Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 315	B	Fall	2.00	0.00	2.00	3.00	6.00

Lecturer	Andi Goro, Msc
Assistant	Ejona Bodo, Msc
Course language	Albanian
Course level	Bachelor
Description	This course introduces contemporary issues related to the field of software engineering. It addresses in-depth software lifecycle models, including software phase specifications, design, development, testing, and storage. Object Oriented design methods and practices, their applications in the development of computer-based systems.
Objectives	Students will recognize the importance and need of software engineering to cope with modern trends in the software industry.
Core Concepts	The semester project will enable students to implement software engineering concepts in a disciplinary way, to compete in the local and international market.

Course Outline

Week	Topic
1	Introduction to Software Engineering
2	Software Life Cycles Development
3	Software Process Models
4	Software Project Management
5	Software Project Planning
6	Software Requirements
7	Concepts and principles of Object Oriented Engineering
8	Midterm Exam
9	Software analysis models
10	Principles of graphical user interface (GUI) design.
11	Risk Management
12	Software Quality Assurance
13	Use Case Diagram
14	UML Project Examples
15	Project
16	Final Exam

Prerequisites	The student must attend the course at a minimum rate of 75%.
Literature	• Software Engineering A practitioner’s approach, Mc-Graw Hill 6th Edition 2005 by Roger S Pressman
References	• Object Oriented Software Engineering using UML Patterns and JAVA. 2004, by Bernd Bruegge, Pearson Edition.

Course Outcome

1	Students will recognize the importance and need of software engineering to cope with modern trends in the software industry.
2	Students will have knowledge of all stages of the software lifecycle including the artifacts that have been produced.
3	Students will be proficient enough to analyze, evaluate and apply a range of case tools.
4	The semester project will enable students to implement software engineering concepts in a disciplinary way, to compete in the local and international market.

Course Evaluation

In-term Studies	Quantity	Percentage
Midterms	1	20
Quizzes	0	0
Projects	1	20
Term Projects	0	0
Laboratory	0	0
Class Participation	1	10
Total in-term evaluation percent		**50**
Final exam percent		**50**
Total		**100**

ECTS Workload (Based on Student Workload)

Activities	Quantity	Duration (hours)	Total (hours)
Course duration (Including the exam week: 16x Total hours of the course)	16	4	64
Study hours outside the classroom (Preparation, Practice, etc.)	14	6	84
Duties	1	0	0
Midterms	1	1	1
Final Exam	1	1	1
Other	0	0	0
Total Work Load			**150**
Total Work Load / 25 (hours)			**6.00**
ECTS			**6.00**