Course title	Code	semester	T+U	credit	ECTS
Software Quality and Assurance		8	3+0	3	6

Prerequisite Courses	None
Language of the Course	English
Course Level	Undergraduate
Type of Course	Compulsory
Course Coordinator	
Instructors	
Course Assistants	
The aim of lesson	The aim of this course is to provide information about software quality, quality models and standards and methods used in the software industry and to make practical applications.
Course Content	Introduction to software quality and assurance; software quality measures; establishment of software quality assurance; configuration management; software validation and verification; criticism, review and control; software process improvement models; software testing strategies and testing techniques; bug reporting and debugging; software reliability
Course Learning Outcomes	Students who successfully complete this course; 1. Explain the software quality assurance (SQA) activities used in the development and maintenance of software systems. 2. Learns software quality assurance elements such as review, testing, and testing practices and practical concepts for them throughout the software lifecycle. 3. Comparatively learns software quality infrastructure components such as procedures, work instructions and configuration management. 4. Learns quality management components and quality management standards such as quality metrics, software quality costs.

Weeks	Topics
one	Introduction to software quality and assurance
2	Software quality factors
3	Overview of software quality assurance system elements
4	Software process improvement models
5	Software process improvement models
6	Review, audit, criticism and Procedures and work instructions
7	Testing strategies
8	Test applications
9	Test applications
10	Configuration management
11th	Software quality metrics
12	Software quality metrics
13	Software quality cost
14	SQA process standards and SQA unit
15	Project Presentations

General Competencies

To be able to research and learn about any given software engineering technical concept in the most accurate way.

resources

Software Quality Assurance: From Theory to Implementation by Daniel Galin, Addison-Wesley, 2004, ISBN: 0201709457

Software Quality: Producing Practical, Consistent Software, by Ben-Menachem M, and Marliss GS, Thompson Computer Press, ISBN: 1-85032-326-7, 1997.

Software Engineering by Ian Sommerville (7th and 8th Edition) ISBN: 0-321-21026-3, Pearson (Addison Wesley), 2004 and 2006.
Evaluation System
The dates, days and hours of the Midterm Exam, Quiz, Final Exam and Evaluations will be announced later, according to the decision of the Faculty Administrative Board.

	WITH PROGRAM LEARNING OUTCOMES **COURSE LEARNING OUTCOMES RELATIONSHIP TABLE**										
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**
LO1	4	3	3	5	4	4	4	5	5	4	4
LO2	4	3	3	4	4	3	3	3	5	4	4
LO3	4	4	3	4	5	3	3	3	3	3	3
LO4	4	3	3	4	5	3	3	3	3	3	3
LO: Learning Outcomes OP: Program Outcomes											
Contribution Level	**1 Very Low**		**2 Low**		**3 Medium**		**4 High**		**5 Very High**		

Relation of Program Outcomes and Related Course

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**
Software Quality and Assurance	4	3	3	4	4	4	4	4	5	3	3