Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF 536	Software Quality and Testing	1	3	0	0	3	6

Prerequisites	
Admission Requirements	

Language of Instruction	English
Course Type	Elective
Course Level	Masters Degree
Objective	The aim of the course is to understand the importance of the control if the software is designed in respect to user requirements. The main theories on quality and test processes of software engineering are represented and these theories are used for project development process. They involves software quality requirements, software test techniques, test flow and processes. An individual or group-based project is realized, which provides using all the theories learned during the semester.
Content	Week 1. Introduction to software quality Week 2. Introduction to quality control Week 3. Quality engineering Week 4. Introduction to software testing process Week 5. Software testing: Terms and techniques Week 6. Test automation and techniques Week 7. Partitioning the input domain and boundary testing Week 8. Software inspection Week 9. Midterm Week 10. Formal validation Week 11. Quality models and measurement Week 12. Risk analysis Week 13. Software reliability engineering Week 14. Project presentations
References	1. Jeff Tian, “Software Quality Engineering: Testing, Quality Assurance, and Quantifiable Improvement”, Wiley, 1 edition, 2005. 2. Christopher Fox, “Introduction to Software Engineering Design, Processes, Principles, and Patterns with UML2”, Addison-Wesley, 2006.

Theory Topics

Week	Weekly Contents
1	Introduction to software quality
2	Introduction to quality control
3	Quality engineering
4	Introduction to software testing process
5	Software testing: Terms and techniques
6	Test automation and techniques
7	Partitioning the input domain and boundary testing
8	Software inspection
9	Midterm
10	Formal validation
11	Quality models and measurement
12	Risk analysis
13	Software reliability engineering
14	Project presentations