Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF481	Software Engineering and Object Oriented Design	8	4	0	0	4	5

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	The aim of the course is to equip student with knowledge of object oriented design models and make them use these techniques in real life software projects. Besides, the course introduces a detailed knowledge on the software life cycle.
Content	Week 1: Introduction to software engineering and project management. Week 2: Socio-technique systems, critical systems, problem definition. Week 3: Object oriented system analysis. Week 4: Object oriented system design: UML (I). Week 5: Object oriented system design: UML (II). Week 6: Software development process models. Week 7: Requirement analysis, requirement engineering models. Week 8: Midterm. Week 9: Software quality and test techniques. Week 10: Agile software development techniques. Week 11: Software cost models. Week 12: Software quality models. Week 13: Term project presentations. Week 14: Term project presentations.
References	1. Software Engineering, Ian Sommerville, Addison-Wesley, 8th veya 9th Edition, 2010. 2. Introduction to Software Engineering Design, Processes, Principles, and Patterns with UML2, Christophe Fox, Addison-Wesley, 2006.

Theory Topics

Week	Weekly Contents
1	Introduction to software engineering and project management.
2	Socio-technique systems, critical systems, problem definition.
3	Object oriented system analysis.
4	Object oriented system design: UML (I).
5	Object oriented system design: UML (II).
6	Software development process models.
7	Requirement analysis, requirement engineering models.
8	Midterm.
9	Software quality and test techniques.
10	Agile software development techniques.
11	Software cost models.
12	Software quality models.
13	Term project presentations.
14	Term project presentations