



COURSE UNIT DESCRIPTION

Course Unit Title	Project Management in Information Technology	
Course Unit Code	AT800	
Type of Unit	Core	
Level of Course Unit	Second cycle	
Year of Study	First	
Number of ECTS Credits	6	
Course Unit Objectives	The objective of this course is to teach the students the fundamentals of software development. The course has a strong focus on understanding the core principles of designing software solutions, and managing software projects using methodologies like SCRUM. There is a minor focus on coding the actual solutions.	
Learning Outcomes	On completion of this course students are expected to:	
	CILO 1	Understand object oriented design and unit testing
	CILO 2	Understand the basics of functional programming and the differences to object oriented programming
	CILO 3	Learn how to use UML to design software
	CILO 4	Learn and know how to use service oriented architectures in software
	CILO 5	Learn about software development methodologies like agile, and SCRUM which can be used to lead software development teams
Name of Lecturer(s)	Dr. Ioannis Kourouklides	
Mode of delivery	Face to Face	
Prerequisites or corequisites	None	
Course Content	Introduction to object oriented design and UML	CILO 1,3
	Introduction to functional programming	CILO 1
	Testing code and quality assurance	CILO 1
	The model-view-controller paradigm and software development frameworks	CILO 4
	Introduction to service oriented architecture: SOAP and REST	CILO 4
	Software development methodologies	CILO 5
Recommended or required reading	<p><u>Textbooks:</u></p> <p>Martin Fowler, UML Distilled: A Brief Guide to the Standard Object Modeling Language, Addison Wesley, 2002</p> <p>Alex Campbell, Agile and Scrum: Complete Guide. What is Agile and What is Scrum?, 2020</p> <p><u>Optional textbooks:</u></p> <p>Martin Fowler, Patterns of Enterprise Application Architecture, Addison Wesley, 2002</p> <p>Vladimir Khorikov, Unit Testing:Principles, Practices and Patterns,Manning Publications, 2020</p> <p><u>Articles & Journals:</u></p> <p><u>Online sources:</u></p> <p>https://www.geeksforgeeks.org/software-engineering-introduction-to-software-engineering</p> <p>https://www.javatpoint.com/software-engineering-tutorial</p>	
Planned learning activities and teaching methods	Lectures; in-class discussion and debates; in-class exercises; problem sets; team work; video case studies, team presentations, interactive online learning via Moodle (quizzes, assignments, forums)	
Assessment methods and criteria	10% class participation, 50% exam, 40% individual project	

Language of Instruction	English
Work Placement(s)	Not applicable