UNIVERSITÀ DI PAVIA

Anno Accademico 2019/2020

SOFTWARE ENGINEERING	
Enrollment year	2019/2020
Academic year	2019/2020
Regulations	DM270
Academic discipline	ING-INF/05 (DATA PROCESSING SYSTEMS)
Department	DEPARTMENT OF ELECTRICAL,COMPUTER AND BIOMEDICAL ENGINEERING
Course	COMPUTER ENGINEERING
Curriculum	Embedded and Control Systems
Year of study	1°
Period	1st semester (30/09/2019 - 20/01/2020)
ECTS	6
Lesson hours	45 lesson hours
Language	English
Activity type	WRITTEN TEST
Teacher	MERLINI SIMONE (titolare) - 4 ECTS MARCHESI NICOLO' - 2 ECTS
Prerequisites	Fundamentals of web-based programming. Fundamentals of distributed systems.
Learning outcomes	- Software requirements management and analysis processes - Software Design techniques - Enterprise Software Architectures - Software Metrics and Software Quality Processes
Course contents	- Software processes - Requirements engineering - Architectural design - Design and implementation - Software testing - Distributed software engineering

	- Service-oriented architectures
Teaching methods	Lectures (hours/year in lecture theatre): 19 Practical class (hours/year in lecture theatre): 20 Practicals / Workshops (hours/year in lecture theatre): 6
Reccomended or required readings	Steve McConnell (ISBN-10: 0735619670)?Code Complete: A Practical Handbook of Software Construction Roger Pressman (ISBN-10: 0073375977)?Software Engineering: A Practitioner's Approach Ian Sommerville (ISBN-10: 0137035152)?Software Engineering Robert C.Martin (ISBN-10: 0134494164) Clean Architecture: A Craftsman's Guide to Software Structure and Design Robert C.Martin (ISBN-10: 9780132350884) ? The Clean Coder: A Code of Conduct for Professional Programmers Kent Beck (ISBN-10: 9780321146533)? Test Driven Development: By Example? Martin Fowler's Blog - https://martinfowler.com Robert C.Martin's Blog - https://blog.cleancoder.com/
Assessment methods	Each student is required to prepare a group web-based distributed project. The project will show a strong command of object orientation and design principles covered during the course. The project will be carried out along the course and finally discussed during the exam.
Further information	Course web page: http://www.simonemerlini.it
Sustainable development goals - Agenda 2030	$lbl_legenda_sviluppo_sostenibile