Course title	Software Engineering
Institute/Division	Faculty of Computer Science and Mathematics/ Department of Computer Science
Course code	F-1.SE
Erasmus subject code*	11.3
Number of contact hours**	45h
Course duration	1 semester (Fall)
ECTS credits	6
Course description (max 100 words)	The course is divided into two parts: 1) Theoretical part that includes – UML, Design Patterns; 2) Practical part – work in groups methodologies, automatic compiling with Make, version-control systems in git, automatic documentation with doxygen, refactotring, testing. You will learn all necessary methods to fit yourself well in a group realizing real-world computer projects.
Literature	The Scrum guide https://www.scrum.org/resources/scrum-guide R. Miles, K. Hamilton, 'Learning UML', O'Reilly 2006 Gang of Four, 'Design Patterns: Elements of Reusable Object-Oriented Software' AW 1996 M. Fowler, 'Refactoring: Improving the Design of Existing Code', AW 2018
Course type/organization	Lectures + Computer laboratory
Assessment method	Group projects
Prerequisites	Programming in C/C++ and Python. Other programming languages will be advantage.
Primary target group	Engineers and computer scientists who are interested in practical use of computers and how to work in large IT/scientific projects.
Contact person	Radosław Kycia
Remarks	

*please insert one of the following codes:
11.0 Mathematics, Informatics
11.1 Mathematics
11.2 Statistics
11.3 Informatics, Computer Science
11.4 Artificial Intelligence
11.5 Actuarial Science
11.9 Others Mathematics, Informatics

**1 lecture hour=45 minutes