# **Course Syllabus**

#### I. General Information

Course name	Practice of programming
Programme	Informatics
Level of studies (BA, BSc, MA, MSc, long-cycle	BA
MA)	
Form of studies (full-time, part-time)	full-time
Discipline	Informatics
Language of instruction	english

Course coordinator	mgr inż. Kamil Zieliński

Type of class (use only the types mentioned below)	Number of teaching hours	Semester	ECTS Points
lecture			3
tutorial			
classes			
laboratory classes	30	VI	
workshops			
seminar			
introductory seminar			
foreign language			
classes			
practical placement			
field work			
diploma laboratory			
translation classes			
study visit			

Course pre-requisites	Fundamentals of algorithms and programming	
	Object-oriented programming	

## II. Course Objectives

Getting to know SCRUM and meaning SCRUM in software development process
Recognizing methodology for working with IT development projects
Getting to know tools for team work

	1	
Symbol		Reference to
Description of course learning outcome		programme learning
		outcome
	KNOWLEDGE	
W_01	Students have knowledge of software development with	K_W04, K_W06
	Scrum	
W_02	Students have knowledge of rules of teamwork	K_W04, K_W06
W_03	Students have knowledge of tools for software development	K_W04, K_W06
in teams		
	SKILLS	
U_01	Students are able to use SCRUM in software development	K_U04
	process	
U_02	Students are able to make decomposition of IT system	K_U02, K_U04
U_03	Students are able to use tools for teamwork (IDE, Version Con-	K_U13
trol System)		
	SOCIAL COMPETENCIES	
K_01	Student is able to work both individually and as a team, prop-	K_K01, K_K06
	erly planning his and the team's work in the context of the set	
	goals	

### III. Course learning outcomes with reference to programme learning outcomes

#### IV. Course Content

Scrum as methodology for software development
Tools for teamwork
Software implementation in teams
Preparing clean code

## V. Didactic methods used and forms of assessment of learning outcomes

Symbol	Didactic methods (choose from the list)	Forms of assessment (choose from the list)	Documentation type (choose from the list)
		KNOWLEDGE	
W_01	Guided practice	Preparation / implementa- tion of the project	Project rating card
W_02	Guided practice	Preparation / implementa- tion of the project	Project rating card
W_03	Guided practice	Preparation / implementa- tion of the project	Project rating card
		SKILLS	
U_01	Project - based learning design thinking	Preparation / implementa- tion of the project	Project rating card

U_02	Project - based learning design thinking	Preparation / implementa- tion of the project	Project rating card
U_03	Project - based learning design thinking	Preparation / implementa- tion of the project	Project rating card
	SO	CIAL COMPETENCIES	
K_01	Discussion, PBL design thinking	Preparation / implementa- tion of the project	Project rating card

## VI. Grading criteria, weighting factors.....

Based on software project implentation.

#### VII. Student workload

Form of activity	Number of hours
Number of contact hours (with the teacher)	50
Number of hours of individual student work	40

### VIII. Literature

Basic literature
Sutherland J., Schwaber Ken, Scrum Guide
Martin R.C., A Handbook of Agile Software Craftsmanship
Martin R.C., The Clean Coder: A Code of Conduct for Professional Programmers
Additional literature
Hunt A., Thomas D., The Pragmatic Programmer: From Journeyman to Master
Martin R.C., Agile Software Development, Principles, Patterns, and Practices