Faculty of Fundamental Problems of Technology

**COURSE CARD** 

Name in polish : Grupowy Projekt Programistyczny
Name in english : Group Programming Project

Field of study : Computer Science

Specialty (if applicable)

Undergraduate degree and form of : masters, stationary

Type of course : optional Course code :  $E2_W27$  Group rate : Yes

	Lectures	Exercides	Laboratory	Project	Seminar
Number of classes held in schools (ZZU)		30	30		
The total number of hours of student wor-		60	120		
kload (CNPS)					
Assesment	pass				
For a group of courses final course mark	X				
Number of ECTS credits		3	3		
including the number of points correspon-		3	3		
ding to the classes of practical (P)					
including the number of points correspon-		2	2		
ding occupations requiring direct contact					
(BK)					

#### PREREQUISITES FOR KNOWLEDGE, SKILLS AND OTHER POWERS

Knowledge of data structures and algorithms. Programming ability in a chosen programming language

#### COURSE OBJECTIVES

- C1 The acquisition of skills related to project management: resource assessment / cost and risk of the project. The feasibility study of the project. Documentation in the project group.
- **C2** Software prototype according to the documentation. The use of task management platform. The use of the platform for managing versions of the code.

#### **COURSE LEARNING OUTCOMES**

The scope of the student's knowledge:

- W1 Student knows tools for project management.
- W2 Student knows methods of creating projects in UML.
- W3 Student knows basics of prototyping.

The student skills:

- **U1** Student use tools for project management.
- U2 Student specifies system, use UML for describing system functionality and components.
- U3 Student implements system components according to system specification.

The student's social competence:

- **K1** Student realizes tasks assigned by the project leader.
- **K2** Student can divide the given project into tasks and dispatch them to group members.

#### COURSE CONTENT

Type of classes - exercises			
Ćw1	Subject definition	2h	
Ćw2	Definition of functionality.	2h	
Ćw3	Project management.	2h	
Ćw4	Project - early stage	3h	
Ćw5	Project - main stage	6h	
Type of classes - laboratory			
Lab1	Project - intro stage.	4h	
Lab2	Prototyping - intro stage.	10h	
Lab3	Prototyping - main stage.	10h	
Lab4	Testing.	6h	

#### Applied learning tools

- 1. Solving tasks and problems
- 2. Solving programming tasks
- 3. Creating programming projects
- 4. Consultation
- 5. Self-study students

#### EVALUATION OF THE EFFECTS OF EDUCATION ACHIEVEMENTS

Value	Number of training effect	Way to evaluate the effect of educa-
		tion
F1	W1-W3, U1-U3, K1-K2	
F2	W1-W3, U1-U3, K1-K2	
P=%*F1+%*F2		

#### BASIC AND ADDITIONAL READING

- 1. UML documentation.
- 2. Documentation of a chosen computer language.
- 3. Zarządzanie projektem informatycznym, Kazimierz Frączkowski, Oficyna Wydawnicza Politechniki Wrocławskiej, Wrocław 2003.
- 4. SVN and Redmine documentation.

# SUPERVISOR OF COURSE dr inż. Łukasz Krzywiecki

### RELATIONSHIP MATRIX EFFECTS OF EDUCATION FOR THE COURSE

## Group Programming Project WITH EFFECTS OF EDUCATION ON THE DIRECTION OF COMPUTER SCIENCE

Course tra-	Reference to the effect of the learning out-	Objectives of	The con-	Number of
ining effect	comes defined for the field of study and	the course**	tents of the	teaching
	specialization (if applicable)		course**	tools**
W1	K2_W06 K2_W07 K2_W08 K2_W09	C1	Ćw1-Ćw5	4 5
	K2_W11		Lab1-Lab4	
W2	K2_W02 K2_W05 K2_W06 K2_W07	C1	Ćw1-Ćw5	4 5
	K2_W09		Lab1-Lab4	
W3	K2_W06K2_W07	C1	Ćw1-Ćw5	4 5
			Lab1-Lab4	
U1	K2_U05 K2_U06 K2_U09 K2_U13	C2 C3	Ćw1-Ćw5	1 2 3 4 5
			Lab1-Lab4	
U2	K2_U03 K2_U05 K2_U06 K2_U12	C2 C3	Ćw1-Ćw5	1 2 3 4 5
	K2_U13		Lab1-Lab4	
U3	K2_U01 K2_U02 K2_U03 K2_U05	C2 C3	Ćw1-Ćw5	1 2 3 4 5
	K2_U06 K2_U12 K2_U13		Lab1-Lab4	
K1	K2_K04 K2_K07 K2_K08 K2_K09	C1 C2	Ćw1-Ćw5	1 2 3 4 5
	K2_K10 K2_K12		Lab1-Lab4	
K2	K2_K02 K2_K03 K2_K04 K2_K05	C1 C2	Ćw1-Ćw5	1 2 3 4 5
	K2_K07 K2_K08 K2_K09 K2_K10		Lab1-Lab4	