# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Project Management [S2Inf1E-IO>ZP]

Course				
Field of study Computing		Year/Semester 1/1		
Area of study (specialization) Software Engineering		Profile of study general academic	с	
Level of study second-cycle		Course offered in English	1	
Form of study full-time		Requirements compulsory		
Number of hours				
Lecture 20	Laboratory classe 30	es	Other 0	
Tutorials 10	Projects/seminar 0	S		
Number of credit points 4,00				
Coordinators prof. dr hab. inż. Jerzy Nawrocki jerzy.nawrocki@put.poznan.pl		Lecturers		

## **Prerequisites**

Student starting this module should have a basic knowledge regarding software engineering and basic knowledge regading IT tools.

## **Course objective**

The aim of the course is to support sutdents in the preparation to play the role of a leader/manager in small software projects and IT ventures. The course focuses on the syncretic approach to project management methodologies and approaches.

# Course-related learning outcomes

Knowledge:

1. has advanced and detailed knowledge related to selected approches used for project management especially prince2 and scrum,

2. has advanced and detailed knowledge about the processes of software development projects,

3. knows the organizational and economic conidions in which the it organizations operate.

Skills:

1. is able to use the it tools for software project management,

2. is able to - when formulating and solving engineering tasks - integrate it knowledge with selected elements of management sciences (risk management) and psychology (theories of motivation),

3. is able to correctly apply a software effort estimation method,

4. is able to assess the relevancy of the methods and tools used to manage projects and see the limitation of those methods and tools,

5. is able to plan a software development project (according to the provided requirements and assumptions which include also non-technical aspects) using the proper methods, techniques and tools, including the adjustment of the software development and maintainane practices,

6. is able to work in a group, performing various roles, including project manager.

Social competences:

1. understands that knowledge and skills related to computer science quickly become obsolete,

2. knows how new development technologies and tools could be helpful to solve practical problems like developing a web application.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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1. Formative assessment:

a) lectures and tutorials: based on the discussions and the test

b) laboratory classes : based on the assessment of the tasks and of the tests

2. Summative assessment:

a) lectures and tutorials: Student can gain 0-100 points in total. The final grade, one for lectures and tutorials, is determined using the following scale: more than 90 points -> 5.0 (A), (80, 90] points -> 4.5 (B), (70, 80] points -> 4.0 (C), (60, 70] points -> 3.5 (D), (50, 60] -> 3.0 (E), 50points or less -> 2.0 (F). b) laboratories: Student can gain 0-100 points in total. The final grade for laboratories is determined using the following scale: more than 90 points -> 4.5 (B), (70, 80] points -> 3.5 (D), (50, 60] -> 3.0 (E), 50points or less -> 2.0 (F). b) laboratories: Student can gain 0-100 points in total. The final grade for laboratories is determined using the following scale: more than 90 points -> 5.0 (A), (80, 90] points -> 4.5 (B), (70, 80] points -> 4.0 (C), (60, 70] points -> 3.5 (D), (50, 60] -> 3.0 (E), 50points or less -> 2.0 (F).

# Programme content

Classical methodologies and agile approaches Formulating the goal of the project Risk management Team management in programming projects Requirements managments Quality and change management in an IT project Planning in software development projects

# **Course topics**

none

# **Teaching methods**

Lectures: multimedia presentations Tutorials and laboratory classes: multimedia presentation, examples presented on a whiteboard, tasks given by the tutor to the students, discussions

# Bibliography

Basic

1. OGC, Managing Sucessful Projects with PRINCE2, 2009

2. Ken Schwaber, Jeff Sutherland, The Scrum Guide, 2020 (online) Additional

1. S. Covey, 7 habits of highly effective people

2. PMI, Project Management Body of Knowledge

## Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	40	1,50