$\sim$	
_	
Q	
_	
_	
⊆	
_	
æ	
$\subset$	
_	
N	
1.4	
0	
v	
_	
Ω	
-	
_	
$\neg$	
_	
0	
_	
₹	
₹	
_	
_	
<	
-	
$\sim$	
$\overline{}$	
• •	
_	
0	
-	
÷	
_	
$\overline{}$	
_	

STUDY MODULE D	ESCRIPTION FORM	
Name of the module/subject IT Project Management	Code 1010332521010337154	
Field of study  Information Engineering	Profile of study (general academic, practical) (brak)	Year /Semester
Elective path/specialty	Subject offered in: Polish	Course (compulsory, elective)  obligatory
Cycle of study: Form of study (full-time,part-time)		
Second-cycle studies	full-time	
No. of hours		No. of credits
Lecture: 15 Classes: - Laboratory: 15	Project/seminars:	- 3
Status of the course in the study program (Basic, major, other)	(university-wide, from another fi	eld)
(brak)		(brak)
Education areas and fields of science and art		ECTS distribution (number and %)
technical sciences	2 70%	
Technical sciences	2 70%	
social sciences	1 30%	
Social sciences		1 30%
Responsible for subject / lecturer:		'
dr inż. Tomasz Piaścik		

# Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Knowledge in the field of software engineering (subjects learnt during first-cycle studies)
2	Skills	Student is able to find information from professional literature, databases and other sources. Student can write requirements concerning software product and then to plan its tests.
		Student understands a need to learn constantly.
3	Social competencies	Social competencies gained during the first-cycle studies.

### Assumptions and objectives of the course:

email: Tomasz.Piascik@put.poznan.pl

Faculty of Electrical Engineering ul. Piotrowo 3A 60-965 Poznań

tel. +48 61 665 28 77

The aim of the course is to discuss problems concerning management of software projects. In particular, the course is oriented to teach and popularize project management in agile methodologies. Subjects are related to management of human resources including required human competencies, customer relationships management, and risk management.

# Study outcomes and reference to the educational results for a field of study

#### Knowledge:

1. Student has a basic professional knowledge of the software project management, including team work. - [K\_W13]

#### Skills:

- 1. Student is able to work out the required documentation of a software project undertaken in an agile methodology. [K\_U04]
- 2. Student can analyze an existing software solution and to substantiate its improvements. [K\_U12]

#### Social competencies:

- 1. Student is aware of his/her social role in the future he/she understands the need to transfer information concerning development in computing in a comprehensive form which enables the cooperation with software users. [K\_K02]
- 2. Student is aware of an importance of ethical aspects of computing. The last include a respect of different opinions and cultures. In particular, he/she has knowledge about multi-cultural teams and different cultures in general. [K\_K03]

#### Assessment methods of study outcomes

# **Faculty of Electrical Engineering**

The final test (an open test) and student's activity in the class are the base to receive a credit for a course in software project management.

The final mark for the project is an average of partial marks assigned to several required artefacts developed by a student.

#### Course description

Lectures. Management of a software project in a chosen agile methodology (Scrum in the academic year 2017/18). Required artefacts. User stories (specification of requirements) and setting them out. Technical acceptance of results of every finished iteration. Impact of human factors on a software process. Management of human resources, required professional profiles in a software development organization, competency management. Risk management in a software process. Cooperation with a software product purchaser, customer relationships management. Software product assessment by its real users. Ethical aspects in a software process.

Project. Students work in four-person teams to develop a software project using the Scrum methodology. Student work out all required artefacts in 3 sprints.

### Basic bibliography:

- 1. Wysocki R. K., Effective Project Management: Traditional, Agile, Extreme, 6th Edition, John Wiley & Sons, Inc., 2013
- 2. Cobb C. G., Making Sense of Agile Project Management: Balancing Control and Agility, John Wiley & Sons, Inc., 2011
- 3. Rubin K. S., Essential SCRUM: A Practical Guide to the Most Popular Agile Process, Pearson Education, Inc., 2013

#### Additional bibliography:

- 1. Stellman A., Greene J., Agile: przewodnik po zwinnych metodykach programowania, Helion S.A., Gliwice 2015
- 2. Berkun S., Sztuka zarządzania projektami, One Press, Helion S.A., Gliwice 2006
- 3. Schwaber K., Sutherland J., Tworzenie oprogramowania w 30 dni. Programuj zwinnie i szybko, Helion S.A., Gliwice 2013
- 4. Marasco J., Zarządzanie projektami informatycznymi, Helion S.A., Gliwice 2006
- 5. Lacey M., Scrum: praktyczny przewodnik dla początkujących, Helion S.A., Gliwice 2014
- 6. DeMarco T., Zdażyć przed terminem, opowieść o zarządzaniu projektami, Studio Emka, Warszawa 2002

# Result of average student's workload

Activity	Time (working hours)
1. Participation in lectures	15
2. Participation in project labs	15
3. Project development including all required artefacts	25
4. Study for a test	20

# Student's workload

Source of workload	hours	ECTS
Total workload	75	3
Contact hours	30	2
Practical activities	45	1