#### **Faculty of Engineering Management**

STUDY MODULE DI	ES	CRIPTION FORM		
Name of the module/subject			Code	9
Requirements Engineering			101	1105311011160345
Field of study		Profile of study		Year /Semester
Engineering Management - Dort time studies		(general academic, practical)		4.14
Engineering Management - Part-time studies -	'	general academic		1/1
Elective path/specialty		Subject offered in:		Course (compulsory, elective)
Production and Operations Managemen	nt	Polish		elective
Cycle of study:	For	m of study (full-time,part-time)		
Second-cycle studies	part-time			
No. of hours				No. of credits
Lecture: 12 Classes: - Laboratory: -		Project/seminars:	-	2
Status of the course in the study program (Basic, major, other)	(	(university-wide, from another f	ield)	
other	university-wide			
Education areas and fields of science and art				ECTS distribution (number and %)
technical sciences				2 100%
Technical sciences				2 100%
Responsible for subject / lecturer:				
dr inż. Katarzyna Ragin-Skorecka				

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

1	Knowledge	Basic knowledge in the field of computer science and programming		
2	Skills	The ability to use the terms of programming and computer science		
3	Social competencies	Awareness of the need to broaden your knowledge		

## Assumptions and objectives of the course:

The aim of the course is to present basic information about general requirements engineering

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

## Knowledge:

- 1. has knowledge about the subject of contextual sciences in relation to management sciences and ergological sciences and applied research methods, as well as common and specific conceptual apparatus in relation to management sciences in relation to requirements engineering [K2A\_W01]
- 2. knows deeply the methods and tools for modeling information processes in the aspect of requirements engineering [K2A\_W08]
- 3. knows and understands the basic concepts and principles in the field of protection of industrial property and copyright and the need to manage intellectual property resources [K2A\_W17]

# Skills:

- 1. has the ability to use the acquired knowledge in various fields and forms, extended by a critical analysis of the effectiveness and usefulness of the applied knowledge in requirements engineering [K2A\_U06]
- 2. is able to predict and model complex social processes involving phenomena from various areas of social life with the use of advanced methods and tools in the field of requirements engineering [K2A\_U04]

#### Social competencies:

- 1. is able to see cause-and-effect relationships in achieving the set goals and to rank the importance of alternative or competitive tasks [K2A\_K03]
- 2. is aware of the interdisciplinary knowledge and skills needed to solve complex organizational problems and the need to create interdisciplinary teams [S2A\_K06]

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### Assessment methods of study outcomes

lecture: forming evaluation - activity cards, summary evaluation - written exam

exercises: formative assessment - current work on classes, summary evaluation - design of the requirements system

#### **Course description**

The subject includes the following topics: Introduction to the XPrince methodology. Functional requirements and use cases. Non-functional requirements. Project initiation and planning. Acceptance tests and their automation.

#### Teaching methods:

Lecture - informative and conversational lecture

Exercises - project method, case study, brainstorming, demonstration method

#### Basic bibliography:

- 1. Ragin-Skorecka K. (2005). UML język opisu wymagań klientów. Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie, nr 41, s. 83-91
- 2. Chrabski B., Zmitrowicz K. (2015). Inżynieria wymagań w praktyce. Wydawnictwo Naukowe PWN.
- 3. Wiegers K.E., Beatty J. (2014). Specyfikacja oprogramowania: inżynieria wymagań. Helion.
- 4. Zmitrowicz K. (2015). Analityk systemów: przygotowanie do egzaminu z inżynierii wymagań. Wydawnictwo Naukowe PWN

#### Additional bibliography:

- 1. Ragin-Skorecka K., Nowak F. (2016). Information Is The Key In Optimization of Transport Processes. Information Systems In Management. Vol. 5, no. 2, p. 227-236
- 2. http://itcareer.pl/images/inzynieriawymagan.pdf
- 3. http://www.ptzp.org.pl/files/konferencje/kzz/artyk\_pdf\_2016/T2/t2\_0812.pdf

## Result of average student's workload

Activity	Time (working hours)
1. lectures	12
2. test	2
3. preparation for passing	12
4. consultations	10

#### Student's workload

Source of workload	hours	ECTS
Total workload	36	2
Contact hours	24	1
Practical activities	14	1