# **Faculty of Engineering Management**

		STUDY MODULE D	FS	CRIPTION FORM			
	the module/subject	f quality - Qualitology		Code 1011102211011145286			
Field of study				Profile of study (general academic, practical)		Year /Semester	
Engineering Management - Full-time studies -				(brak)		1/1	
Elective path/specialty  Quality Systems and Ergonomics				Subject offered in:  Polish		Course (compulsory, elective) elective	
Cycle of	study:		Forr	m of study (full-time,part-time)			
Second-cycle studies				full-time			
No. of h	ours					No. of credits	
Lectur	e: <b>15</b> Clas	ses: 15 Laboratory: -	l	Project/seminars:	-	2	
Status o	f the course in the st	dy program (Basic, major, other)	(	university-wide, from another f	ield)		
(brak) (brak)						ak)	
Education areas and fields of science and art						ECTS distribution (number and %)	
social sciences						2 100%	
prof. ema tel. Faci	. dr hab. inż. Wład	ura@put.poznan.pl Management					
Prerequisites in terms of knowledge, skills and social competencies:							
1	Knowledge	Basis of the set theory					
2	Skills	The application of the numerical data for the real processes modelling					
3	Social competencie	The understanding of the importance of the qualitative approach for solving the managerial problems					
Assu	mptions and o	bjectives of the course:					
-Knowle	edge of the gualita	ive approach to research, for cogniti	ve ar	nd prospectina modellina o	of the	e reality	

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

# Knowledge:

- 1. The student has a knowledge of human impact on creating the organization culture and management ethics [[K2A\_W06]]
- 2. The student knows the methods and tools of decision processes modelling [[K2A\_W09]]

#### Skills:

- 1. The student appropriately interprets the social, cultural, political, legal and economic issues and relations among them [[K2A\_U01]]
- 2. The student adopts the theoretical knowledge to describe and analyse the business environment and formulates own opinion, select the critical data and methods of analysis [ [K2A\_U02]]
- 3. The student applies the normative systems, standards and rules for particular problems solving, especially in terms of the standards related with the social issues [[K2A\_U05]]
- 4. The student utilizes the theoretical knowledge for different practical issues and critically analyses the effectiveness and efficacy of the applied [[K2A\_U06]]

#### Social competencies:

- 1. The student applies the cause and effect relations for particular purposes and ranks the alternative or completive tasks [[K2A\_K03]]
- 2. The student is aware of the knowledge and competencies interdisciplinary which are required for the complex problem solving and realize the necessity for creating the interdisciplinary working groups [ [S2A\_K06]]

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# Assessment methods of study outcomes

### Forming rating:

- lecture short discussions checking the effectiveness of the educational process,
- exercises checking the correctness of task performance.

#### Summary rating:

- exercises written colloquium on the last classes lasting about 60 minutes.
- lectures written exam at the end of the semester, lasting approx. 60 minutes.

### Course description

- The fundamentals and subject of qualitology, the science of quality. The terminology basis. The characteristics and classification of the universal attributes. The main qualitative operations. The main qualitative approach laws. The methods and tools of qualitative modelling, for cognitive and creative, practical objectives.

Ilościowe określanie jakości, Kolman R, PWE, Warszawa, 1973

Teaching methods: informative lecture, practice method.

## Basic bibliography:

- 1. Ilościowe określanie jakości, Kolman R, PWE, Warszawa, 1973
- 2. Teoretyczne podstawy projektowania produkcyjnych systemów sterowania jakością, Mantura W, Wyd. Ucz. Politechniki Poznańskiej, Poznań, 1990
- 3. Zarys kwalitologii, Mantura W., Wydawnictwo Politechniki Poznańskiej, Poznań, 2010.
- 4. Zarądzanie jakością. Teoria i praktyka, Hamrol A., Mantura W., PWN, Warszawa 2006.
- 5. Kwalitologia. Wiedza o różnych dziedzinach jakości, Kolman R., Placet, Warszawa 2009.
- 6. Inżynieria jakości w przedsiębiorstwach produkcyjnych, usługowych i sektorze publicznym. Praca zbiorowa pod red. P. Grudowskiego, M. Dobrzyńskiego, J. Preihs, P. Waszczura, Politechnika Gdańska, Gdańsk 2009.

## Additional bibliography:

- 1. Inżynieria jakości, R. Kolman, PWE, Warszawa 1992.
- 2. Ilościowe określanie jakości, PWE, Warszawa 1973.

### Result of average student's workload

Activity	Time (working hours)
1. Lectures	15
2. Classes	15
3. Preparation for the exam	10
4. Preparation for passing the exercises	10
5. Consultation	5

### Student's workload

Source of workload	hours	ECTS
Total workload	55	2
Contact hours	35	1
Practical activities	15	1