



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Theoretical basics of quality

### Course

Field of study

Engineering Management

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/5

Profile of study

general academic

Course offered in

English

Requirements

compulsory

### Number of hours

Lecture

15

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

### Number of credit points

1

### Lecturers

Responsible for the course/lecturer:

dr hab. inż. Agnieszka Misztal prof. PP

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tel. 61 665 34 37

Faculty of Engineering Management

ul. Jacka Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:

dr inż. Maciej Szafrąński

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### Prerequisites

Student has basic knowledge of set theory, has ability to translate numerical data into imaging of real processes, and conversely understands importance of saving product quality

### Course objective

Getting to know methodology of qualitative approach in researching and shaping reality.

### Course-related learning outcomes

Knowledge

1. has expanded and in-depth knowledge of quality, product quality characteristics and components [P6S\_WG\_01]



2. has ordered and theoretically founded knowledge in field of standardization and standardization of quality requirements [P6S\_WG\_03]
3. knows methods and tools for data collection, processing, and selection and distribution of information in order to specify and specify requirements [P6S\_WG\_08]
4. knows research methodology and methods of qualitative operations [P6S\_WG\_10]

#### Skills

1. is able to use theoretical foundations of quality to analyze specific social processes and phenomena [P6S\_UW\_01]
2. is able to properly analyze causes and course of specific social processes and phenomena in relation to product quality [P6S\_UW\_07]
3. correctly uses normative systems and selected norms and rules regarding quality leveling [P6S\_UW\_08]

#### Social competences

1. is able to recognize cause-effect relationships in relation to product quality and rank importance of alternative or competitive solutions [P6S\_KK\_02]

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: current assessment in class, partial points for participating during discussion

Collective assessment: oral form (end of semester) from material processed during lectures, 4-5 open questions, positive assessment 51%; partial points increase final grade

#### Programme content

Precursors of quality. Basic quality terminology. Qualitological approach to reality. Product quality features (product, service, incompatibilities and defects). Components of comprehensive product quality. Specifying and specifying requirements. Basic qualitative operations. Normalization and standardization of quality requirements.

#### Teaching methods

Didactic methods - problem lecture with multimedia presentation, video presentation, discussion, case study

#### Bibliography

Basic

1. Mantura W., Zarys kwalitologii, Wydawnictwo Politechniki Poznańskiej, Poznań 2010.
2. Kolman R., Kwalitologia : wiedza o różnych dziedzinach jakości, Wydawnictwo Placet, Warszawa 2009.



3. Prussak W., Jasiulewicz-Kaczmarek M., Elementy inżynierii systemów zarządzania jakością, Wyd. PP, Poznań 2010.

4. Kolman R., Inżynieria jakości, PWE, Warszawa 1992.

#### Additional

1. Gołaś H., Mazur A., Piasek P., Czajkowski P., Zastosowanie standaryzacji w procesie kontroli jakości wyrobów, Problemy Jakości 2/2017, s. 10-14.

2. Lisiecka K., Kreowanie jakości, Wyd. Akademii Ekonomicznej w Katowicach, Katowice 2002.

3. Kindlarski E., Jakość wyrobów, PWN, Warszawa 1988.

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for tests) <sup>1</sup>	10	0,5

<sup>1</sup> delete or add other activities as appropriate