COURSE DESCRIPTION CARD - SYLLABUS

Course name
Theoretical basics of quality [S1IZarz1E>TPJ]

Course

Field of study
Engineering Management

Year/Semester
3/5

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
english

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
0

Other (e.g. online)
0

Tutorials
0

Projects/seminars
0

Number of credit points

1,00

Coordinators

dr hab. inż. Maciej Szafrański
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Lecturers

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:
The student discusses the history and pioneers of quality, basic quality terminology, and the concept of a qualitological approach to reality [P6S_WG_01].
The student describes the quality features of a product, including goods, services, non-conformities, defects, and components of comprehensive product quality [P6S_WG_03].
The student analyzes processes for determining and specifying quality requirements, basic quality operations, and the principles of standardization and standardization of quality requirements [P6S_WG_07].

Skills:
The student applies theoretical knowledge of quality to analyze and assess quality management processes in organizations [P6S_UW_01].
The student analyzes the causes and processes of quality management, using analytical, simulation, and experimental methods [P6S_UW_07].
The student correctly uses normative systems and selected standards and rules in the context of quality management [P6S_UW_08].

Social competences:
The student identifies cause-and-effect relationships in quality management and applies this knowledge to managerial decision-making [P6S_KK_02].
The student utilizes theoretical knowledge about quality in the practical context of managing organizations, integrating different aspects of quality [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 duringdiscussion
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.
5. Mantura W., Overview of qualitology, Publishing House of Poznan University of Technology, Poznan 2020.

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.
4. Majchrzak J., Qualitology: The Issue of Quality and its Assessment, European Research Studies Journal, 24 (5), 2021 (https://www.ersj.eu/journal/2733).

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,50