



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Basics of quality management [S1IBiJ1>PZJ]

### Course

Field of study

Safety and Quality Engineering

Year/Semester

1/2

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

15

Projects/seminars

0

### Number of credit points

2,00

### Coordinators

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### Lecturers

### Prerequisites

The student should have basic information about managing organizations. He should know the issues of management and organization as well as marketing and logistics. He should properly select information sources, analyze them critically and formulate conclusions synthetically. The student should properly select and use simulation and experimental analytical methods to solve basic problems in organizations.

### Course objective

The aim of the course is to familiarize students with the basic elements of quality management in organizations. Introduction to the issues of quality and quality management in enterprises of various industries.

### Course-related learning outcomes

Knowledge:

1. Defines the concept of quality, analyzing its interpretations in various contexts: philosophical, legal,

sociological, humanities, and technical, demonstrating advanced knowledge on issues related to quality engineering [K1\_W07].

2. Describes different areas of quality management in organizations and differences in approaches to quality management at the European, American, and Japanese levels [K1\_W07].

Skills:

1. Applies quality standards and norms to solving practical engineering tasks, using acquired knowledge to optimize processes and products [K1\_U08].

2. Identifies changes in requirements, standards, regulations, and technological progress and labor market realities, analyzing their impact on quality management and determining based on them the needs for supplementing knowledge [K1\_U12].

Social competences:

1. Understands causal relationships in achieving set goals in the context of quality management, applying knowledge to identify and prioritize tasks [K1\_K01].

2. Is aware of the importance of continuous improvement in the field of quality engineering, recognizing its impact on safety and quality in design and production [K1\_K02].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: ongoing assessment of the tasks performed. For each task the student receives the number of points specified in the conditions for passing the task. It is possible to complete the task with a minimum of 51% of the points.

Summative assessment: each task must be passed for a minimum of 51%, the sum of points obtained for each task is converted into a grade. The grade is entered according to the following rules: 96 - 100 points - Very Good; 84 - 95 points - Good plus; 73 - 83 points - Good; 61 - 72 points - Satisfactory plus; 51- 60 points - Satisfactory; 00 - 50 points - Unsatisfactory.

### Programme content

The program content includes the basic elements of quality management in organizations and serves as an introduction to the issues of quality and quality management in enterprises across various industries.

### Course topics

The concept of quality. Interpretation of the concept of quality in philosophical, legal, sociological, humanistic, technical, and legal terms. Different approaches to quality management: European, American, Japanese. Areas of quality management in organizations.

Case study: "Quality Management in Practice": process approach, fundamentals of process management, basics of quality assurance, basic aspects of process improvement.

### Teaching methods

Tutorials: problem lecture, lecture with explanation and explanation, case study, brainstorming

### Bibliography

Podstawowa:

Gołaś H., Mazur A., Zarządzanie jakością, Wydawnictwo Politechniki Poznańskiej, Poznań 2011.

Hamrol A., Zarządzanie i inżynieria jakości, Wydawnictwo Naukowe PWN, Warszawa, 2022.

Mazur A., Siedem tradycyjnych i siedem nowych narzędzi zarządzania jakością, Wydawnictwo Politechniki Poznańskiej, Poznań, 2023, s. 112.

Mazur A., Quality management, Wydawnictwo Politechniki Poznańskiej, Poznań, 2022.

Uzupełniająca:

Jasiulewicz-Kaczmarek m., Prussak W., Elementy inżynierii systemów zarządzania jakością, Wydawnictwo Politechniki Poznańskiej, Poznań 2010.

Mazur A., Misztal A., Sobańska A., Kopeć M., Szrejter D., Metoda identyfikacji i rozpoznania wymagań interesariuszy uczelni wyższej, Problemy Jakości 08,2018, s. 12-18.

Zymonik Z., Hamrol A., Grudowski P., Zarządzanie jakością i bezpieczeństwem Polskie Wydawnictwo

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
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)	35	1,50