COURSE DESCRIPTION CARD - SYLLABUS

Course name
Quality management systems [S1IBiJ1>SZJ]

Course

Field of study
Safety and Quality Engineering

Year/Semester
2/4

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
15

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
15

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Knowledge and skills related to organization management. Knowledge of the basics of quality management, knowledge of the basics of standardization in the area of quality.

Course objective

Providing students with knowledge and skills related to the quality management system compliant with the ISO 9001:2015 standard. To familiarize students with the foundations of the quality management system, its basic assumptions and the requirements that the organization must meet to implement this management model.

Course-related learning outcomes

Knowledge:
1. The student has advanced knowledge of issues related to the identification, analysis and assessment

of risk in the context of quality [K1_W03].
2. The student knows how the quality management system can influence the optimization of processes and products [K1_W07].

Skills:
1. The student is able to use appropriate methods and techniques to design selected processes in the organization in accordance with the requirements of ISO 9001:2015, as well as assess the economic aspects related to the certification of the quality management system [K1_U07].
2. The student is able to interpret and apply the requirements of the ISO 9001:2015 standard to design selected elements of the quality management system [K1_U08].

Social competences:
1. The student notices cause-and-effect relationships, is able to define priorities in pursuit of goals in tasks and projects [K1_K01].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Project:
Formative assessment: assessment of the current progress of the project stages. For each stage of the project, the Student receives a certain number of points. Each stage must be passed at a minimum of 51%.
Summative assessment: the assessment is the sum of the points obtained for all stages of the project. Passing threshold 51%. 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.
Lecture:
Formative assessment: answers to questions about the content of previous lectures,
Summative assessment: Test of the knowledge provided during the lectures, scored on a two-point scale 0, 1. Passing point: 51% of points.

Programme content

The program content includes topics related to the quality management system in accordance with the ISO 9001:2015 standard, covering the fundamentals of the quality management system, its basic principles, and the requirements an organization must meet to implement this management model.

Course topics

Lecture: 7 principles of quality management. Foundations of the quality management system: process approach, organizational context, risk-based approach. The essence of the quality management system. Documented information in the quality management system. Requirements of the ISO 9001:2015 standard.
Project: Meeting selected requirements of the quality management system in a manufacturing company. Practical application of quality management principles. Organizational context. Analysis of the enterprise's environment and design of quality policy. Determining the scope of the quality management system. Enterprise process map. Templates for documenting processes. Standardization of activities.

Teaching methods

Lecture: information lecture, problem lecture, work with a book, lecture.
Project: case study, brainstorming, project method

Bibliography

Basic:
Mazur A., Quality management, Wydawnictwo Politechniki Poznańskiej, Poznań, 2023
Gołaś H., Mazur A., Wdrażanie systemów zarządzania jakością, Wydawnictwo Politechniki Poznańskiej, Poznań, 2010.
Jasiulewicz-Kaczmarek M., Misztal A., Projektowanie i integracja systemów zarządzania projakościowego, Wydawnictwo PP, Poznań 2014.
Zymonik Z., Hamrol A., Grudowski P., Zarządzanie jakością i bezpieczeństwem Polskie Wydawnictwo Ekonomiczne, 2013.

PN-EN ISO 9001:2015 Quality management systems. Requirements., ISO, 2015.
PN-EN ISO 9000:2015. Quality management systems. Fundamentals and vocabulary., ISO, 2016.

Additional:
Gołaś H., Mazur A., Piasek P., Czajkowski P., Zastosowanie standaryzacji w procesie kontroli jakości wyrobów, Problemy Jakości 2/2017, s. 10-14.
Prussak W., Jasiulewicz-Kaczmarek M., Elementy inżynierii systemów zarządzania jakością, Wydawnictwo Politechniki Poznańskiej, Poznań 2010 .

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	0,50