



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Preparation and Implementation of Integrated Management Systems

Course

Field of study

Safety Engineering

Area of study (specialization)

Integrated Management of Safety in Organization

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

Polish

Requirements

elective

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

15

15

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

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Faculty of Engineering Management

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Responsible for the course/lecturer:

Ph.D., Eng. Milena Drzewiecka-Dahlke,

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Prerequisites

The student has knowledge of the basic concepts of quality management, environmental and health and



safety management as well as the basics of organization and management. The student is able to verify and evaluate phenomena occurring during the implementation of processes carried out in organizations and interpret and describe observations and observations. The student is aware of the importance of work safety, its impact on the environment and the quality of processes, products and systems.

Course objective

Presentation of the knowledge necessary for the theoretical and application skills of designing and implementing an integrated management system in a production or service organization.

Course-related learning outcomes

Knowledge

The student knows the principles of risk analysis in quality, work safety and environmental management systems and understands the differences [P7S_WG_05]

The student knows the principles of designing processes used in quality management systems, work safety and the environment [P7S_WG_07]

The student knows the basic management methods necessary to apply during the integration of quality, environmental and work safety management systems [P7S_WK_03]

Skills

The student is able to take into account technical, social, economic and organizational aspects during the integration of management systems [P7S_UW_03]

The student is able to simulate the integration of management systems at the level of policy, objectives and documentation [P7S_UW_04]

Social competences

The student notices the cause and effect relationships, can define priorities in actions taken at various stages of management systems integration [P7S_KK_01]

The student is aware of the impact of engineering activities and all non-technical aspects related to the integration of quality management systems, environment and occupational safety and health on the environment of the organization and its stakeholders [P7S_KK_03]

The student is aware of the impact of management systems integration on business process planning in organizations [P7S_KO_01]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Tutorials:

Formative assessment: Assessment of the current progress in the implementation of tasks, for each task the student receives a certain number of points. Each task must be completed with a minimum of 51%.

Summative assessment: the assessment is the sum of the points obtained for all exercises. Passing threshold 51%



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% - project classes: grade for the completed project task, taking into account the progress in its implementation.

Programme content

Tutorials:

Integration of management systems: opportunities and barriers. Integration connected with policy and objectives. Documented information in quality management systems. Documented information in environmental management systems. Documented information in occupational health and safety management systems. The difference in maintaining and maintaining documented information. Document management in integrated management systems.

Projects:

A risk-based thinking as one of the pillars of quality, environment and safety management systems. Impact of a risk-based approach on an organization's business processes. Risk management in quality, environment and work safety management systems.

Teaching methods

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

Project: case study, brainstorming, project method.

Bibliography

Basic

1. Drzewiecka-Dahlke M., (2020) Identyfikacja i ocena niezgodności w systemie zarządzania jakością. Politechnika Poznańska. ISBN: 978-83-7775-593-8
2. Gołaś H., Mazur A., Misztal A. (2016), Model doskonalenia przedsiębiorstwa przez zarządzanie ryzykiem zgodnie z ISO 9001:2015, Problemy Jakości 10, 9-14.
3. Jasiulewicz-Kaczmarek M., Misztal A. (2014), Projektowanie i integracja systemów zarządzania projakościowego, Wydawnictwo Politechniki Poznańskiej, Poznań.
4. PN-ISO 45001:2018-06, Systemy zarządzania bezpieczeństwem i higieną pracy. Wymagania i wytyczne stosowania, PKN, Warszawa.
5. PN-EN ISO 14001:2015-09/Ap1:2018-11, Systemy zarządzania środowiskowego. Wymagania i wytyczne stosowania, PKN, Warszawa.



6. PN-EN ISO 9001:2015-10/Ap1:2017-08, Systemy zarządzania jakością. Wymagania, PKN, Warszawa.

Additional

1. Gołaś H., Mazur A. (2010), Wdrażanie systemów zarządzania jakością, Wydawnictwo Politechniki Poznańskiej, Poznań.
2. Golas H., Mazur A., Gruszka J. (2015), Improving an organization functioning in risk conditions in accordance with ISO 9001: 2015, In: Advances in Computer Science Research (p. 257 - 261), Springer, Cham.

Breakdown of average student's workload

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

¹ delete or add other activities as appropriate