## POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

## **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

0

#### **Number of hours**

Lecture Laboratory classes Other (e.g. online)

0

0

Tutorials Projects/seminars

15 15

**Number of credit points** 

2

#### **Lecturers**

Responsible for the course/lecturer:

Anna Mazur, Ph.D., Eng.

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phon: 61 6653364

Faculty of Engineering Management

Institute of Safety and Quality Engineering

ul. Rychlewskiego 2, 60-965 Poznań

Responsible for the course/lecturer:

Agnieszka Misztal, Ph.D., D.Sc., Eng.

Professor at Poznan University of Technology

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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

- knows the principles of conducting risk analysis in quality management systems, occupational safety and the environment; understands the differences (P7S\_WG\_05),
- knows the principles of process design used in quality management systems, occupational safety and the environment (P7S\_WG\_07),
- knows the basic methods, tools, information technologies that allow them to be applied when integrating quality, environmental and occupational safety management systems (P7S\_WK\_03),

#### Skills

- can take into account technical, social, economic and organizational aspects when integrating management systems (P7S\_UW\_03),
- can simulate the integration of management systems at the policy, objectives and documentation levels (P7S\_UW\_04),

#### Social competences

- recognizes cause-and-effect relationships, is able to set priorities in actions undertaken to carry out tasks and projects (P7S\_KK\_01),
- is aware of the impact of management system 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:

#### Formative assessment:

- classes: evaluation of current progress in the implementation of tasks, for each task the student receives a partial assessment,
- project classes: assessment of current progress in the implementation of the project, for each stage the student receives a partial grade.

#### Summative rating:

- classes: arithmetic average of the partial grades obtained for the performance of individual tasks,

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- project classes: assessment for the project task carried out, taking into account the progress in its implementation.

## **Programme content**

#### **Tutorials:**

Integration of management systems: opportunities and barriers. Integration conected 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**

Case study, exercise method, situational method, demonstration method, project task.

## **Bibliography**

#### Basic

- 1. Gołaś H., Mazur A., Misztal A. (2016), Model doskonalenia przedsiębiorstwa przez zarządzanie ryzykiem zgodnie z ISO 9001:2015, Problemy Jakości 10, 9-14.
- 2. Jasiulewicz-Kaczmarek M., Misztal A. (2014), Projektowanie i integracja systemów zarządzania projakościowego, Wydawnictwo Politechniki Poznańskiej, Poznań.
- 3. PN-ISO 45001:2018-06, Systemy zarządzania bezpieczeństwem i higieną pracy. Wymagania i wytyczne stosowania, PKN, Warszawa.
- 4. PN-EN ISO 14001:2015-09/Ap1:2018-11, Systemy zarządzania środowiskowego. Wymagania i wytyczne stosowania, PKN, Warszawa.
- 5. 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.





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# Breakdown of average student's workload

|   | Hours | ECTS |
|---|-------|------|
| Total workload  | 60    | 2,0  |
| Classes requiring direct contact with the teacher                 | 30    | 1,0  |
| Student's own work (literature studies, preparation for           | 30    | 1,0  |
| laboratory classes/tutorials, preparation for tests/exam, project |       |      |
| preparation) <sup>1</sup>   |       |      |

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