

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

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

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Assessment of the implementation effects of Integrated Management Systems

Course

Field of study Year/Semester

Safety Engineering 2/3

Area of study (specialization) Profile of study

Integrated Management of Safety in Organization general academic Level of study Course offered in

Polish

Second-cycle studies

Form of study Requirements

Number of hours

full-time

Lecture Laboratory classes Other (e.g. online)

elective

**Tutorials** Projects/seminars

15 15

**Number of credit points** 

2

#### **Lecturers**

Responsible for the course/lecturer: Responsible for the course/lecturer:

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

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Faculty of Engineering Management

Faculty of Engineering Management ul. J.Rychlewskiego 2, 60-965 Poznań ul. J.Rychlewskiego 2, 60-965 Poznań

### **Prerequisites**

Phone: 61 6653437

Student should have basic knowledge in field of quality management, environmental management as



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well as systemic ensuring work safety, be able to interpret the basic concepts and rules associated with these systems, and be aware of the importance of their integration and the importance of work safety, environmental impact and quality of processes and products for its participants and recipients.

### **Course objective**

Presentation of knowledge necessary for theoretical and application skills of preparing and conducting an assessment of effectiveness of implementation an integrated management system in a production or service organization, and as a result of which indicate the directions of improvement of this system.

# **Course-related learning outcomes**

Knowledge

The student knows the issues related to the area of occupational safety management [P7S WG 03]

The student knows how to analyze the risk and knows the issues related to the identification of hazards and their effects in the work environment. Knows the impact of identified risks on the assessment of the effects of implementing integrated management systems [P7S WG 05]

The student knows the issues of designing quality management processes, environment and OHS, knows how to design the process of assessment of an integrated management system [P7S\_WG\_07]

The student knows what are the managerial functions necessary to evaluate the effects of integration of management systems [P7S\_WG\_08]

The student knows the basic methods of testing the effectiveness and adequacy of the implemented system solutions [P7S\_WK\_03]

#### Skills

The student is able to see system and non-technical aspects, as well as socio-technical, organizational and economic, which affect the results achieved by the integrated management system [P7S UW 03]

The student is able to make a critical analysis of the functioning of the integrated management system and evaluate the existing solutions and system elements, including the infrastructure [P7S UW 06]

#### Social competences

The student is aware of the perception of cause-and-effect relationships within the assessed integrated management system and ranking the significance of the solutions adopted [P7S\_KK\_01]

The student is aware of the impact of engineering activities on the integrated management system and the related responsibility for decisions [P7S\_KK\_03]

The student is able to plan and manage the process of assessing the implementation of an integrated management system [P7S KO 01]

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

**Tutorials:** 



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Formative assessment: Assessment of 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 least 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: Identification of common requirements for components an integrated system (ISO 9001, ISO 45001, ISO 14001). Types of testing effects of integrated system implementation (documentation analysis, cross-analysis, audit). Stakeholders, process and system approach in relation to the relationship between individual integrated system standards. Use of resources to achieve goals and meet requirements (for individual areas of the integrated system).

Project: Measuring processes in context of requirements individual integrated system standards. Information flow within integrated system.

### **Teaching methods**

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

Project: case study, brainstorming, project method

## **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. Lisiecka K. (2009), Systemy zarządzania jakością produktów: metody analizy i oceny, Wydawnictwo Akademii Ekonomicznej im. Karola Adamieckiego, Katowice
- 4. Górny A. (2017), Zarządzanie bezpieczeństwem i higieną pracy w doskonaleniu warunków produkcji implikacyjne aspekty wymagań normy ISO 45001, Problemy Jakości, 5, 2-8



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5. Kowal E., Kucińska-Landwójtowicz A., Misiołek A. (2013), Zarządzanie środowiskowe, Polskie Wydawnictwo Ekonomiczne, 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.
- 3. Misztal A. (2015), Kryteria brzegowe implementacji systemów zarządzania jakością w przedsiębiorstwach branży motoryzacyjnej, 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.

### 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 tutorials,	20	1,0
data collection, project preparation) <sup>1</sup>		

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