



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Risk management [S2ZiIP2>ZRwP]

### Course

Field of study

Management and Production Engineering

Year/Semester

2/3

Area of study (specialization)

Quality Engineering and Management

Profile of study

general academic

Level of study

second-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

dr inż. Łukasz Grudzień

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### Lecturers

### Prerequisites

The student has knowledge of the attitudes of enterprise management, understands the need to learn and acquire new knowledge; recognizing the possibility of continuous improvement in various areas of life, including the activities of organizations, with particular emphasis on manufacturing enterprises. Knowledge of the principles of the process approach in the enterprise.

### Course objective

Gain knowledge of holistic risk management in organizations and especially in manufacturing companies. Ability to recognize risks and estimate and deal with them.

### Course-related learning outcomes

Knowledge:

1. has theoretically grounded detailed knowledge of business management and production processes
2. has knowledge of the general principles of creation and development of forms of individual entrepreneurship
3. knows the concept of risk and its components
4. knows theoretical and practical aspects of risk management based on ISO 31000 standard

5. has knowledge of risk assessment methodologies and ways to manage them
6. knows the basics and assumptions of decision support systems, including risk assessment

#### Skills:

1. is able to identify risks in processes
2. is able to recognize risks and take advantage of opportunities in the functioning of the organization
2. is able to independently assess risks
3. is able to deal with risks (propose preventive actions)
4. is able to conduct a risk analysis of the production system, the processes implemented in it and the equipment used

#### Social competences:

1. is able to independently develop knowledge in the area of the subject.
- 2 The student is open to new ideas and concepts, making changes and striving for improvement.
3. Is aware of the consequences of decisions made as well as the responsibility for decisions made.
4. Understands the need to make changes in production processes and in the enterprise. Understands the need for continuous learning; can inspire and organize the learning process of team members.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Credit in written form on the basis of general questions or a test (credit in case of obtaining more than 50% of the points) conducted at the end of the semester.

Project: Credit on the basis of the project of the developed problem. The form and quality of the prepared materials are evaluated.

Assignment of grades to percentage ranges of results: <90–100> very good; <80–90) good plus; <70–80) good; <60–70) satisfactory plus; <50–60) satisfactory; <0–50) unsatisfactory.

### Programme content

Lecture: The concept of enterprise risk management in terms of. Familiarization with the requirements of ISO 31000 and ISO 27005 for risk management. Getting acquainted with methods of identifying, estimating, countering, reporting and minimizing and avoiding risks. Consideration of risk in the project management process. Crisis management. Business continuity management.

Project: development of a risk management concept for a selected process.

### Course topics

Lecture: The concept of enterprise risk management in terms of. Familiarization with the requirements of ISO 31000 and ISO 27005 for risk management. Getting acquainted with methods of identifying, estimating, countering, reporting and minimizing and avoiding risks. Consideration of risk in the project management process. Crisis management. Business continuity management.

Project: development of a risk management concept for a selected process.

### Teaching methods

Lecture: lecture / problem lecture / lecture with multimedia presentation.

The content presented in the lecture is conveyed in the form of a multimedia presentation in combination with a classic blackboard lecture enriched with demonstrations relating to the presented issues. Lecture conducted remotely using the synchronous access method.

Project: project method solving tasks, solving practical problems, finding sources, working in a team, discussion.

Classes conducted in stationary or remote form.

### Bibliography

#### Basic:

Kaczmarek T. "Ryzyko i zarządzanie ryzykiem. Ujęcie interdyscyplinarne", Difin, Warszawa 2010

Norma ISO 31000 Zarządzanie ryzykiem. Wytyczne

Norma ISO 31010 Zarządzanie ryzykiem. Techniki oceny ryzyka

Norma ISO 27005 Ocena ryzyka w bezpieczeństwie Informacji

Jajuga K. "Zarządzanie ryzykiem", PWN, Warszawa, 2018

Tarczyński W, Mojsiewicz M. Zarządzanie ryzykiem. Podstawowe zagadnienia , PWE, Warszawa 2001

Additional:

Hubbard D.W., The Failure of Risk Management, John Wiley and Sons Ltd New Jersey, 2009

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	32	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	18	0,50