# POZNAN UNIVERSITY OF TECHNOLOGY



## EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

The practice of management [S1IBiJ1>PAZO]

Course				
Field of study		Year/Semester		
Safety and Quality Engineering		2/3		
Area of study (specialization)		Profile of study general academ	ic	
Level of study first-cycle		Course offered in Polish	n	
Form of study full-time		Requirements elective		
Number of hours				
Lecture	Laboratory classe	es	Other	
15	0		0	
Tutorials	Projects/seminars	6		
15	15			
Number of credit points 4,00				
Coordinators	Lecturers			
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## **Prerequisites**

Lack of precursor in earliest semesters. Student owns abilities of detection, associating (joining) and in social rates interpreting of phenomenon. Student understands and is prepared to take social responsibility for decisions in the area of organization management.

## Course objective

Familiarization of student with bases of problems of managements enterprises, in functions of managements it and manners of realization .

#### Course-related learning outcomes

Knowledge:

1. Student knows the issues of managemetnt and organisation as well as marketing and logistic in context of safery ingineering area [K1\_W08].

Skills:

1. Student is able to use various techniques in order to communicate in work environment and other, [K1\_U02].

2. Student is able to use analytical methods, simulation and experimental methods in order to form solutions of engineering tasks, as well as using methods, information and communication tools, [K1\_U04].

Social competences:

1. Student is able to recognise cause-and-effect dependencies in realisation of goals and rank importance of alternative or competitive tasks [K1\_K01].

2. Student is able to plan and manage business projects [K1\_K04].

3. Student is able to demonstrate professionalism and follow the principles of professional ethics, promoting respect for diversity and building a culture of safety and quality [K1\_K06].

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture - formative assessment: presentations prepared by all students on selected personalities from the field of management science (max 20 points), activity during classes (max 15 points per semester, added to the summative assessment)

Lecture - summary assessment: final exam (max 80 points) and possible points for activity Exercises - formative assessment: systematic work in accordance with the instructor's instructions (points for performing individual tasks), activity during classes

Exercises - summative assessment: the sum of points from the completed tasks and the final presentation

Project - formative assessment: assessment of the progress in the implementation of the project task (compliance with the adopted project task implementation schedule) and activity during the classes Project - summative assessment: assessment of the completed project, including the assessment of progress in the implementation of the project task and activity in classes during the implementation of the project task

The student receives a pass when he or she has 51% of the points

## Programme content

The student is familiarized with the issues of organization management in the context of maintaining safe working conditions.

## **Course topics**

Lecture:

Selected concepts and management methods in the context of maintaining safe working conditions. Analysis of the business environment and its impact on the functioning of companies. Setting the goals of functioning - vision, mission, strategic, tactical and operational goals. Methods of developing and implementing a strategy. Strategies of cooperation and creating added value. Business models of enterprises, with particular emphasis on maintaining work safety. Exercises:

Introduction to the practical aspect of using selected management methods and tools - e.g. Benchmarking, Kaizen, Six Sigma, 5S, Poka Yoke, Zero defects, FMEA, Muda, Kanban, Concurrent engineering, Partnership in the supply chain, Just in Time, Team forms of work organization, Management by goals, Time management. Development of environmental analyzes - eg PEST, scenario analysis, Porter's five forces analysis and strategic potential analyzes - eg SWOT, TOWS. Methods of analyzing customer segments. Develop a strategy tree. Project:

Case study developed in groups (max 4 people). Each of the cases concerns a different type of business. The development is based on the Canvas model, which uses the knowledge obtained during the exercises (customer segments, the process of developing the offered value, principles of cooperation with representatives of the environment, assessment of the potential of the environment, methods and tools for implementing specific goals of the activity).

## **Teaching methods**

- lecture classes: conversational lectures
- exercise classes: expert tables method interchangeably with cases method
- project: multi-stage cognitive task

#### Bibliography

Basic:

1. Brilman J., (2000), Nowoczesne koncepcje i metody zarządzania, Warszawa.

 2. Michalski E., (2020), Zarządzanie przedsiębiorstwem. Podręcznik akademicki, PWN, Warszawa. Stadler Ch.: The Four Principles of Enduring Success. "Harvard Business Review" 2007, No. 7-8.
3. Sławińska M., (2012), Niezawodność człowieka w interakcji z procesem przemysłowym, Wyd.

Politechniki Poznańskiej. Poznań 2012.

4. Osterwalder A. Pigneur Y. "Tworzenie modeli biznesowych - Podręcznik wizjonera", Helion 2012 5. Trzcieliński S., Włodarkiewicz-Klimek H., Pawłowski K., (2013), Współczesne koncepcje zarządzania, Poznań.

Additional:

 Butlewski M. Jasiulewicz-Kaczmarek M., Misztal A. & Sławińska M., (2014), Design methods of reducing human error in practice, p. 1101-1106, [in]: Safety and Reliability: Methodology and Applications, Edited by Nowakowski T. et al. (Eds), Taylor & Francis Group, London.
Mrugalska B., Sławińska M., (2014), Narzędzia makroergonomii w sterowaniu bezpieczeństwem procesów pracy, s. 131-139, Zeszyty Naukowe Politechniki Poznańskiej, Nr 63, Organizacja i Zarządzanie, Wydawnictwo Politechniki Poznańskiej, Poznań.

 Sławińska M., (2011), Reengineering ergonomiczny procesów eksploatacji zautomatyzowanych urządzeń technologicznych (ZUT), Rozprawy Nr 462, Wyd. Politechniki Poznańskiej, Poznań.
Motała D., Bystryakow A.Y., Pizengolts V.M., Level of specialization and management methods in small and medium enterprises of the gas industry, Management and Production Engineering Review -2018, vol. 9, no. 2

5. The Impact of the Covid-19 Pandemic on the Application of Management Methods by Industrial Goods Processing Enterprises / Daria Motała (WIZ) // European Research Studies Journal - 2021, vol. 24, spec. iss. 5

6. Cooperation factors in supply chains in industrial processing companies / Piotr Lubiński (WIZ), Katarzyna Ragin-Skorecka (WIZ), Daria Motała (WIZ) // W: Advances in mechanical engineering / red. Olaf Ciszak (WIM) - Poznań, Polska : Wydawnictwo Politechniki Poznańskiej, 2021

7. Tailor-Made Smart Sustainable City / Daria Motała (WIZ) // W: Advances in Creativity, Innovation, Entrepreneurship and Communication of Design. Proceedings of the AHFE 2021 Virtual Conferences on Creativity, Innovation and Entrepreneurship, and Human Factors in Communication of Design, July 25-29, 2021, USA / red. Evangelos Markopoulos, Ravindra S. Goonetilleke, Amic G. Ho, Yan Luximon: Springer, 2021

## Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	55	2,00