



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Concepts and tools of modern enterprise management [S2Bioinf1>ZPRZED]

### Course

Field of study  
Bioinformatics

Year/Semester  
2/4

Area of study (specialization)  
–

Profile of study  
general academic

Level of study  
second-cycle

Course offered in  
polish

Form of study  
full-time

Requirements  
elective

### Number of hours

Lecture  
30

Laboratory classes  
0

Other (e.g. online)  
0

Tutorials  
15

Projects/seminars  
0

### Number of credit points

3,00

### Coordinators

prof. dr hab. inż. Leszek Pacholski  
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### Lecturers

### Prerequisites

The student has knowledge of the basics of organization and management. In addition, he should also be able to use the acquired knowledge in practice and is ready to work within team structures.

### Course objective

The aim of the course is: to familiarize students with the paradigms of enterprise management and the factors triggering their change, metaconceptions of a lean and agile enterprise, as well as the concepts and methods of management that comprise them, as well as to develop the skills of situational selection and application of management concepts and methods in practice.

### Course-related learning outcomes

Knowledge:

1. Student knows the economic, legal and other conditions of IT companies' operations
2. Student has basic knowledge regarding management /running a business and individual entrepreneurship

Skills:

1. Student is able - when formulating and solving engineering tasks - to integrate knowledge from various areas of computer science (and if necessary also knowledge from other disciplines of knowledge)
2. The student is able to determine the directions of further learning and implement the process of self-education, including other people

Social competences:

1. Student understands the importance of popularizing and improving existing competences in the field of the latest achievements of IT and management engineering

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Knowledge acquired during the lecture is verified by a test carried out after the last lecture. The test consists of 20 closed questions. Assessment threshold: 50% of the points (satisfactory).

Knowledge acquired under the project is verified on the basis of solving individual tasks covered by the project curriculum. The student receives points for each task. Assessment threshold: 50% of the points (satisfactory).

### Programme content

Lecture: The essence and functions of management. Enterprise goals. Classic concepts and tools for management of modern business. New Wave and concept of "intelligent" enterprise management. Concept and tools for Business Intelligence System in enterprise management. Agile Management as (rooted in Lean Management and in World Class Manufacturing Practices) response to the inadequacy of the waste elimination paradigm. Economy based on intelligent digital technologies. Concepts and tools of Industry 4.0. A modern enterprise as an object of cyber-attacks. Concepts of contemporary corporate enterprises. Concepts of basic models for decision-making in business management. Specialization, differentiation and diversification as strategic development paths for a modern enterprise. Concepts and tools for enterprise strategies. Concepts and tools of managing (leading) people as a basic managerial function. Leadership as a management innovation. Concepts and tools of organizational innovations of the enterprise. Business Process Reengineering. Project: Designing the organizational structure of the enterprise: methodology and procedure for designing the organizational structure. Creating market advantage (cost, differential, specialization and diversification paths of enterprise development).

Project: The concept of implementing selected methods and tools of enterprise management for a selected enterprise

### Teaching methods

Monographic lecture in the form of a multimedia presentation, with elements of a seminar lecture.

Project: solving project tasks based on the case study method.

### Bibliography

Basic

1. Pawłowski E., Trzcieleński S., Zarządzanie Przedsiębiorstwem. Funkcje i struktury. Wydawnictwo Politechniki Poznańskiej, Poznań 2011
2. Trzcieleński S., Przedsiębiorstwo zwinne, Wydawnictwo Politechniki Poznańskiej, Poznań 2011
3. Trzcieleński S. Włodarkiewicz-Klimek H., Pawłowski K. Współczesne koncepcje zarządzania, Wydawnictwo Politechniki Poznańskiej, Poznań 2013
4. Zimniewicz K., Współczesne koncepcje i metody zarządzania, PWE, Warszawa, 2008

Additional

1. Pacholski L., Malinowski B., Niedźwiedz S., Kierowanie, Wydawnictwo Politechniki Poznańskiej, Poznań 2012
2. Sudoł S., Przedsiębiorstwo. Podstawy nauki o przedsiębiorstwie. Zarządzanie przedsiębiorstwem, PWE, Warszawa 2006
3. Business Process Management. Practical Guidelines to Successful Implementations, Jeston J., Nelis J., Elsevier, Hungary 2008

## Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
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)	30	1,00