



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Knowledge-based economy [S1IZarz1E>GOnW]

### Course

Field of study

Engineering Management

Year/Semester

3/6

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

English

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

30

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

3,00

### Coordinators

dr hab. Mariya Khmelyarchuk prof. PP  
mariya.khmelyarchuk@put.poznan.pl

### Lecturers

### Prerequisites

Knowledge: Can explain the basic issues of organizational science and management theory. Skills: Is able to identify and associate the basic problems of organization science and management theory.

Competences: Demonstrates readiness to develop their knowledge and skills. Is open to team work.

### Course objective

Celem przedmiotu jest zapoznanie studentów z warunkami, modelami oraz koncepcjami rozwoju współczesnych organizacji w warunkach gospodarki opartej na wiedzy.

### Course-related learning outcomes

Knowledge:

The student identifies and describes key elements of a knowledge-based economy, including its development in Europe and Poland, and characterizes the impact of information technology, innovation, and human capital on this development [P6S\_WG\_01].

The student analyzes and classifies methods of data collection, processing, and distribution in the context of a knowledge-based economy [P6S\_WG\_08].

The student determines and compares various methods and tools for modeling business processes,

taking into account market dynamics in a knowledge-based economy [P6S\_WG\_10].

#### Skills:

The student applies theoretical foundations to analyze and interpret specific processes and phenomena in the context of a knowledge-based economy, with particular emphasis on social, cultural, political, legal, and economic aspects [P6S\_UW\_01].

#### Social competences:

The student selects and uses educational and training centers to develop their skills and competencies in the area of a knowledge-based economy, and recognizes the need for continuous education in this area [P6S\_KK\_01].

The student analyzes and interprets the importance of a systemic approach to creating products and services in a knowledge-based economy, considering technical, economic, marketing, legal, organizational, and financial aspects [P6S\_KO\_02].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

#### Formative assessment:

- a) within the scope of the project: based on the assessment of the current progress of task implementation in the audit process of the state of the organization in the knowledge economy.
- b) in the scope of lectures: based on answers to questions about the material discussed in previous lectures,

#### Summative assessment:

- a) in the scope of the project based on: (1) public presentation of the audit results and assessment of the organization's level of adaptation to the conditions of the knowledge-based economy; (2) discussion after the presentation; (3) the form and quality of prepared materials,
- b) in the scope of lectures: exam in the form of a choice test, with answers among which at least one is correct; each question is scored on a scale of 0 to 1; the exam is passed after obtaining at least 55% of points. You can take the exam after passing the project.

### Programme content

Knowledge-based economy: conceptual foundations and determinants of development at the micro and macroeconomic levels.

Development of a knowledge-based economy in Europe and Poland.

Methods for analyzing and measuring the development of a knowledge-based economy.

Conditions for the development of enterprises in the knowledge-based economy (human capital, innovations, ICT, political and legal environment).

Business management models in the knowledge-based economy.

Tools and techniques supporting the development of the organization in the conditions of knowledge economy.

### Course topics

none

### Teaching methods

Lectures - monographic and conversational

Project - observation, demonstration and project method

### Bibliography

#### Basic:

Kałkowska J., Pawłowski E., Włodarkiewicz-Klimek H., Zarządzanie organizacjami w gospodarce opartej na wiedzy, Wydawnictwo Politechniki Poznańskiej, Poznań 2013.

Trzcieliński S., Kałkowska J., Pawłowski E., Włodarkiewicz-Klimek H., Dostosowanie stremów zarządzania przedsiębiorstwem do warunków gospodarki opartej na wiedzy, Wydawnictwo Politechniki Poznańskiej, Poznań 2016.

Mikuła B., Pietruszka-Ortyl A., Potocki A., Podstawy zarządzania przedsiębiorstwami w gospodarce opartej

na wiedzy, Difin Warszawa 2007.

Additional:

Włodarkiewicz-Klimek H., Kapitał ludzki w kształtowaniu zwinności organizacji opartych na wiedzy, Wydawnictwo Politechnik Poznańskiej, Poznań 2018.

Kotler P., Caslione J.A., Chaos, Zarządzanie i marketing w erze turbulencji, MT Biznes 2009.

Piech K., Wiedza i innowacje w rozwoju gospodarczym: w kierunku pomiaru i współczesnej roli państwa, Instytut Wiedzy i Innowacji Kraków 2008.

Khmelyarchuk M., Demko, N. Kozmuk, O. Balueva, The role of entrepreneurship in strategic management of the tourism industry. Journal of Entrepreneurship Education, Vol. 22, Issue 2, 2019

### 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