



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Knowledge-based economy

### Course

Field of study

Engineering Management

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/6

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

30

Laboratory classes

Tutorials

Projects/seminars

15

Other (e.g. online)

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

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University Professor

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Responsible for the course/lecturer:

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### 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

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.

### 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.

Trzecieliński 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	3,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests, project preparation) <sup>1</sup>	30	1,0

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