POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Knowledge-based economy [N1IZarz1>GOnW]

| Course | | | | | | |
|---|------------------------|----------------------------------|------------|--|--|--|
| Field of study Engineering Management | | Year/Semester 3/6 | | | | |
| Area of study (specialization) | | Profile of study general academi | ic | | | |
| Level of study first-cycle | | Course offered in Polish | n | | | |
| Form of study part-time | | Requirements compulsory | | | | |
| Number of hours | | | | | | |
| Lecture 10 | Laboratory class 0 | es | Other 0 | | | |
| Tutorials 0 | Projects/seminar 10 | S | | | | |
| Number of credit points 3,00 | | | | | | |
| Coordinators | | Lecturers | | | | |
| dr hab. Mariya Khmelyarchuk prof. PP mariya.khmelyarchuk@put.poznan.pl | | | | | | |

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

The aim of the course is to familiarize students with the conditions, models and concepts of development of the national economy and contemporary organizations in the conditions of a knowledge-based economy.

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 national economy and 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

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.

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 stsremów zarządzania przedsiebiorstwem 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 | 20 | 1,00 |
| Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation) | 55 | 2,00 |