

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Innovations Management [N2IZarz1>ZI]

Course

Field of study Year/Semester

**Engineering Management** 2/3

Area of study (specialization) Profile of study

Managing Enterprise of the Future general academic

Course offered in Level of study

second-cycle Polish

Form of study Requirements part-time compulsory

Number of hours

Lecture Laboratory classes Other 0

10

**Tutorials** Projects/seminars

12

Number of credit points

2.00

Coordinators Lecturers

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## **Prerequisites**

Knowledge: Can explain the basic issues of organizational science and management theory. Skills: Is able to identify and associate basic problems of organizational 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 issues of innovation management and in particular the relationships between the development of the economy and its innovation, concepts of innovation models, creativity in shaping innovation, sources of financing innovation and the shaping and development of innovative enterprises.

### Course-related learning outcomes

#### Knowledge:

The student describes the legal aspects of innovation management, including the impact of business law on the innovation process in organizations [P7S WG 01].

The student lists contextual sciences and their relevance to the innovation process, including research methods used in innovation management [P7S WG 04].

The student characterizes the role of modern technologies and devices in shaping innovation, including their application in different types of industrial innovation [P7S WG 10].

The student lists the ethical standards for bringing innovations to the market [P7S WK 01].

The student defines the principles of intellectual property and copyright protection in the context of innovation management [P7S WK 02].

#### Skills:

The student evaluates and analyzes different types of innovations, including product, process, organizational and marketing innovations [P7S\_UW\_03].

The student designs innovation processes in organizations, using appropriate decision-making methods [P7S\_UW\_04].

The student analyzes the stages of innovation implementation and evaluates their effectiveness using research methods [P7S UW 05].

The student analyzes existing technological solutions in organizations and proposes innovative improvements [P7S UW 09].

#### Social competences:

The student develops the interdisciplinary skills necessary to effectively manage innovation in complex organizational environments [P7S KK 01].

The student identifies key factors influencing innovation success and manages them to achieve organizational goals [P7S KK 02].

The student initiates and manages innovation projects, combining theoretical knowledge with practical aspects of innovation implementation [P7S\_KO\_02, P7S\_KO\_03].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows: Formative assessment:

- a) in the scope of exercises: based on the assessment of current progress of task implementation in the simulation process of creating and implementing innovations
- 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 exercises based on: (1) public presentation of the results of simulation of creating and implementing innovations,
- (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 exercises.

#### Programme content

The concept and types of innovation in industry. Organizational and marketing innovations. Product and process innovations. Open and closed innovations. Stages of implementing innovation. An example of using innovation in practice.

#### Course topics

none

#### **Teaching methods**

Lectures - monographic and conversational Exercises - observation, demonstration and project method

### **Bibliography**

Basic:

Knosala R. [red.] (2014). Zarzadzanie innowacjami, Polskie Wydawnictwo Ekonomiczne.

Kałkowska J., Pawłowski E., Włodarkiewicz-Klimek H. (2013). Zarządzanie organizacjami w gospodarce

opartej na wiedzy, Wydawnictwo Politechniki Poznańskiej, Poznań.

Karlik M (2013). Zarządzanie innowacjami w przedsiębiorstwie: poszukiwanie i realizacja nowatorskich projektów, Wydawnictwo Poltext.

### Additional:

Tidd J., Bessant J. (2011). Zarządzanie innowacjami: integracja zmian technologicznych, rynkowych i organizacyjnych, Oficyna Wolters Kluwer Business.

Żebrowski M., Waćkowski K. (2011). Strategiczne zarządzanie innowacjami: strategie małych i średnich przedsiębiorstw IT, Difin.

Durlik I., Santarek K. (2016). Inżynieria Zarządzania III. naukowe, techniczne i inwestycyjne przygotowanie produkcji wyrobów wysokiej techniki. C.H. Beck.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	25	1,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	25	1,00