



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Entrepreneurship and innovation

Course

Field of study

Management and production engineering

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

part-time

Year/Semester

2/4

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

Number of hours

Lecture

10

Laboratory classes

Tutorials

Projects/seminars

10

Other (e.g. online)

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

PhD Eng. Łukasz Grudzień

Responsible for the course/lecturer:

email: lukasz.grudzien@put.poznan.pl

ph. +48 61 647 59 90

Faculty of Mechanical Engineering

Piotrowo 3 Str., 60-965 Poznań, room 304

Prerequisites

The student has knowledge of production management, as well as technical knowledge related to the discipline of machine construction and operation. He/she has knowledge in the field of matrix organisations. He/she is able to notice and make an initial analysis of problems occurring in the organisation. The student is able to analyse and evaluate and express his opinion on a specific subject. He/she is open to the views of others.

Course objective

To get to know the theoretical and practical issues related to the management of innovative projects and basic issues related to starting up a business.



Course-related learning outcomes

Knowledge

The student is able to define the tasks of the project manager necessary for implementation within the framework of particular stages of project implementation, he/she understands the essence of the matrix structure

The student is able to identify areas of technical and non-technical knowledge necessary to implement an innovative project

Skills

The student is able to analyse the factors necessary to determine the key tasks of a project, including through cooperation with a client/principal

Students will be able to identify tasks necessary to complete a project, develop a set of project tasks, milestones, timetable, project budget and resources (including staff) necessary to complete project tasks

The student is able to apply new methods and techniques to project tasks

Social competences

The student is creative, working in a team, is able to justify his decisions and is aware of the responsibility resulting from them

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture:

A credit on the basis of the exam consisting in solving a problematic task - 5 points. Number of points obtained: <3 - ndst, 3 - dst, 3.5 - dst+, 4 - db, 4.5 - db+, 5 - bdb

Project:

A credit is given on the basis of the student's reference work, work defence and work discussion

Programme content

Lecture:

Definition of an innovative project and its characteristics. The silhouette of a project manager and his role during the project implementation. Project phases: initiation (customer needs, setting milestones, responsibility matrices, risk analysis, quality assurance, TOC), development, implementation (reporting and documentation, implementation procedures), completion (customer satisfaction survey). Project management tools (network methods, scheduling, project budget management). The notion of innovation, creative and restoration activities. Innovative process (conceptual and application phase). Division of innovations. Innovation inhibitors and innovation integrators. Innovative company (specialisation and creativity) and innovation management, innovative potential and capabilities of an



organisation, sources of ideas, processes of preparation and implementation of innovations, innovation activity strategies. Evaluation of innovative projects (pair comparison techniques, scoring techniques).

Project:

Development of a project concerning any chosen area related to production or services. Defining customer needs, setting milestones, timetable, responsibility matrix, project budget, risk analysis. Preparation of the final report.

Teaching methods

Lecture: multimedia presentation, case study, discussion

Project: solving practical problems, searching for sources, teamwork, discussion.

Bibliography

Basic

W.Gabrusewicz, A.Kamela-Sowińska, H. Poetschke: Project management. WNT Warsaw 2008.

J. Łunarski (pr. Zbiorowa) : Innovation management. OW Rzeszów University of Technology. Rzeszów 2007

M.Dworczyk, R.Szlasa: Innovation management. OW Warsaw University of Technology. Warsaw 2000.

Additional

E. Pająk: Production management. Product, technology, organization. Wydawnictwo Naukowe PWN Warszawa 2006 r

K. Parsnip: Outline of production management. PWE Warsaw 2005

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	24	1,0
Student's own work (literature studies, preparation for tests/exam, project preparation) ¹	26	1,0

¹ delete or add other activities as appropriate