COURSE DESCRIPTION CARD - SYLLABUS

Course name
Industrial Project [S1IZarz1E>PP]

Course

Field of study
Engineering Management

Year/Semester
4/7

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
English

Form of study
full-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
205

Number of credit points

4,00

Coordinators

prof. dr hab. inż. Stefan Trzcieliński
stefan.trzcielinski@put.poznan.pl

Lecturers

Prerequisites

Knowledge: Has knowledge of the subjects covered by the first cycle studies in management engineering
Skills: Is able to identify and associate processes in the field of organization and management
Competences: Demonstrates readiness to develop their knowledge and skills. Is open to team work

Course objective

The aim of the course is to valorize knowledge from studies to conduct an analysis of processes in the main functional subsystems of an enterprise / institution and to design necessary changes to these processes.

Course-related learning outcomes

Knowledge:
The student defines and explains key concepts related to managing organizations, including methods, techniques, and tools used in executing engineering tasks [P6S_WG_01, P6S_WG_16].
The student identifies and characterizes non-technical conditions of engineering activities, including safety and hygiene principles at work [P6S_WG_18].
The student explains basic concepts and principles in the field of industrial property protection and

copyright law [P6S_WK_03].

Skills:
The student analyzes data and social phenomena, using acquired theoretical knowledge, in the context of managing industrial projects [P6S_UW_01].
The student interprets social phenomena, including economic ones, in the context of industrial project implementation [P6S_UW_06].
The student analyzes the causes and course of processes in the context of project management, including organizational consulting [P6S_UW_07].
The student designs the structure and technology of simple parts and subassemblies of machines, taking into account systemic and non-technical aspects [P6S_UW_11, P6S_UW_16].
The student conducts a preliminary economic analysis of engineering activities, using basic methods and tools [P6S_UW_12].
The student identifies and implements project tasks in the field of engineering activities, using appropriate methods and tools [P6S_UW_14].
The student uses typical methods to solve simple technical and engineering problems [P6S_UW_15].
The student prepares written documents and oral presentations on project issues, using various sources and theoretical approaches, in Polish and a foreign language [P6S_UK_01, P6S_UK_02].
The student takes responsibility for individual and team work, effectively collaborating in a group and adhering to team work principles [P6S_UO_01].

Social competences:
The student formulates and implements project tasks, considering technical, economic, marketing, legal, and organizational aspects [P6S_KO_02].
The student prepares and implements business ventures related to industrial projects, maintaining professionalism and professional ethics [P6S_KO_03, P6S_KR_01].
The student analyzes and identifies cause-and-effect relationships in project implementation, ranking the importance of tasks and challenges [P6S_KK_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:
Ongoing assessment of organizational changes proposed by the promoter of engineering work
Summative assessment:
Assessment of the presentation prepared by the graduate, state of progress of the thesis research and discussion about it.

Programme content

Analysis of processes / systems: product development and market introduction, marketing and sales, operation control, economic control of an enterprise, human resource management. Human issues - work environment. Design changes of selected processes / systems. The concept of process-oriented organizational structure.

Course topics

Analysis of processes / systems: product development and market introduction, marketing and sales, operation control, economic control of an enterprise, human resource management. Human issues - work environment. Design changes of selected processes / systems. The concept of process-oriented organizational structure.

Teaching methods

Seminars, discussions, critical literature analysis.

Bibliography

Basic:
In accordance with the topic of engineering thesis.

Additional:
In accordance with the topic of engineering thesis.

Breakdown of average student's workload

	Hours	ECTS
Total workload	205	4,00
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)	180	3,00