



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Power engineering project management [S2ZE1E>ZPeW]

Course

Field of study

Green Energy

Year/Semester

1/1

Area of study (specialization)

–

Profile of study

general academic

Level of study

second-cycle

Course offered in

English

Form of study

full-time

Requirements

elective

Number of hours

Lecture

15

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

Number of credit points

2,00

Coordinators

dr inż. Paweł Czyżewski

pawel.czyzewski@put.poznan.pl

Lecturers

Prerequisites

The student has basic knowledge of specialized subjects in the field of industrial power sector. The student is able to solve basic engineering tasks in the field of time management and design of power industry equipment. The student has the necessary interpersonal communication skills to enable free communication in the professional environment and has the ability to determine the time needed to perform a specific task.

Course objective

The aim of the course is to provide students with the necessary knowledge and skills in the management of industrial projects in the field of renewable and industrial energy, which can be used in other areas of economic and social life.

Course-related learning outcomes

Knowledge:

The student knows basic processes taking place in the life cycle of devices, objects and technical systems used in power engineering. The student knows rules of industrial property protection (including intellectual property) and economic, legal and ethical conditions of activities related to the power

engineering industry in the field of project management The student has knowledge about structures and typical processes of project management and power engineering companies.

Skills:

The student is able to formulate and test hypotheses connected with simple implementation of ideas in project management

The student is able to conduct and participate in debates

The student is able to plan and implement his own lifelong learning and guide others in it

Social competences:

The student is ready to acknowledge the significance of knowledge in solving cognitive and practical problems and to consult experts when solving problems on his own.

The student is ready to responsibly perform professional roles, taking into account changing social needs, including:

- developing professional achievements,
- Maintain the ethos of the profession,
- Readiness to perform his professional duties responsibly, taking into account changing social needs.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture - written assessment. Obtaining credits from at least 51% of points possible to obtain.

There is a possibility of oral questioning or realization of additional task in order to increase the obtained grade.

Project - in order to pass the project classes the student is required to submit a project based on the guidelines provided earlier and answer the questions asked about the project. In addition, each student will present the results of their work in the form of a multimedia presentation.

Programme content

Lecture:

1. Projects and project management
- 2 The role of the project manager
3. defining a project
- 4 Building and maintaining a team
- 5 Planning and Estimating
- 6 Project plan
- 7 Dealing with risk and uncertainty
- 8 Exercising control over time
- 9 Managing contact points with the environment
- 10 Communicating and documenting
- 11 Terminating a project

The lecture will be conducted using a multimedia presentation. It will be combined with elements of debate.

Project

Project activities will take place at the blackboard (chalk or white). Students will determine the preliminary assumptions of their projects and discuss them with the instructor. The class will also include multimedia presentations given by course participants.

Course topics

The topics provided in this course relate to the field of project management in the energy industry with a focus on the introduction and operation of RES technologies. The challenges of the energy transition include not only the construction of new installations and research and development processes, but also tasks related to legal, personnel and social issues, etc. All this reinforces the need to develop and shape an appropriate approach to project implementation in these areas. The current subject matter is as follows:

- Building and maintaining a team
- and Dealing with risk and uncertainty in the context of unpredictable events (war, pandemic)
- Designing public perception of RES technologies

Teaching methods

1. Lecture: Conversational lecture, multimedia presentation,
2. Project: project, multimedia presentation,

Bibliography

Basic:

J.M. Nickolas, H. Steyn, Project Management for Business, Engineering and Technology, Butterworth - Heinemann 2008

Sutherland J., Scrum: The Art of Doing Twice the Work in Half the Time, Penguin Lcc Us 2010

Taylor P, The Lazy Project Manager: How to be twice as productive and still leave the office early, Infinite Ideas 2012

Additional:

A Guide to the Project Management Body of Knowledge, Third Edition, PMI, USA, 2004

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00