



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Project management [S2Eltech2>POE-ZP]

### Course

Field of study

Electrical Engineering

Year/Semester

2/3

Area of study (specialization)

Lighting Engineering

Profile of study

general academic

Level of study

second-cycle

Course offered in

polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

30

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

2,00

### Coordinators

dr inż. Marcin Nowak

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### Lecturers

### Prerequisites

The student has basic knowledge of management. The student has the ability to analyze and synthesize information, communicate effectively and express his/her own opinions and has the ability to work in a group.

### Course objective

To impart knowledge of the rationale for implementing pro-development changes and project management skills and competencies. Preparation for the role of a project manager.

### Course-related learning outcomes

Knowledge:

1. The student has the basic knowledge necessary to understand the social, economic, legal and other non-technical conditions of engineering activities, including the principles of sustainable development within the framework of the conducted subject, especially in relation to management science.
2. The student has basic knowledge of management, including quality management and business in the field of environmental engineering within the scope of the course.
3. The student knows the general principles of creation and development of forms of individual

entrepreneurship, using the knowledge of environmental engineering within the framework of the conducted subject, especially in relation to the problem of project management.

#### Skills:

1. The student is able to acquire information from the literature, databases and other sources, including in English or another foreign language recognized as the language of international communication in the field of electrical engineering; he/she is able to integrate information obtained, interpret it, as well as draw conclusions and formulate and justify opinions.
2. The student is able to interact and work in a group, assuming different roles in it, and is able to appropriately determine the priorities for the implementation of a task defined by him/herself or others; especially in relation to project management issues.
3. The student has the ability of self-education; understands the need for lifelong learning.

#### Social competences:

- 1 The student is aware of the responsibility for making decisions on the problems of the subject being taught.
2. The Student is prepared to think and act in an entrepreneurial manner.
3. The student is aware of the social role of a graduate of a technical university, is prepared to formulate and communicate, information and opinions on the achievements of technology and other aspects of engineering activity in a commonly understood manner.
4. The student is aware of the need to maintain ethical standards arising from the social role of a graduate of a technical university.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Conditions for passing this course are as follows:

- 1) preparation of final essay concerning project management- 50 points are possible to obtain.
- 2) test consisting of closed and open questions - 50 points are possible to obtain.

The passing threshold: obtaining at least 50 points including the final essay and the test.

### Programme content

The essence of project management. Methods of project planning. Typology of projects. Analysis of the project environment. Management in a project. Methods of project management. Profitability analysis of projects. Obtaining sources of financing for projects. Elements of strategic analysis for a project. Elements of marketing analysis for a project. Methods of estimating the duration and cost of project tasks. Network methods in project management. Calculation of costs for a project. Scheduling of the project. Project execution and control. Risk management in a project. Personnel aspects in project management. Motivation in the project.

### Teaching methods

Lecture: informative lecture - multimedia presentation illustrated with examples given on the board.

### Bibliography

Basic:

1. Wysocki R., Efektywne zarządzanie projektami. Tradycyjne, zwinne, ekstremalne, Wyd. Helion, Gliwice 2013
2. Robert K. Wysocki, 2014, Effective Project Management: Traditional, Adaptive, Extreme, Seventh Edition, Wiley, Indianapolis; <http://index-of.co.uk/Project%20Management/Effective%20Project%20Management%20Traditional,%20Agile,%20Extreme%20by%20Robert%20K.%20Wysocki%207th%20Edition.pdf>
3. PMBOK® Guide – Sixth Edition, Pennsylvania, 2017
4. Wyrwicka M., Zarządzanie projektami, Wyd. Politechniki Poznańskiej, Poznań 2011.

Additional:

1. Głodzieński E., Efektywność w zarządzaniu projektami. Wymiary, koncepcje, zależności, PWE Warszawa 2017
2. Koszłajda A., Zarządzanie projektami IT. Przewodnik po metodykach, Wyd. Helion 2010

3. Kozarkiewicz A., Zarządzanie portfelami projektów, PWN, Warszawa 2012

4. Nowak, M.; Ziomek, J.; Intuitive and Rational Cognition in the Theory and Practice of Management Sciences, Problemy Zarządzania,,2/2019 (82),142-154,2019

### 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