



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Cost-effectiveness assessment of engineering activities

### Course

Field of study

Year/Semester

Closed-loop technology

1/2

Area of study (specialization)

Profile of study

-

general academic

Level of study

Course offered in

First-cycle studies

Polish

Form of study

Requirements

full-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

30

0

0

Tutorials

Projects/seminars

0

0

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

Rafał Mierzwiak, Ph.D. Eng.

Responsible for the course/lecturer:

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Faculty of Engineering Management

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### Prerequisites

The student has basic knowledge of economics and entrepreneurship in the field of closed-loop technologies.

### Course objective

The aim of this course is to transfer knowledge and skills in the field of assessing the economic efficiency of engineering projects and investments.

### Course-related learning outcomes

Knowledge

The student is familiar with the principles and methodology of economic evaluation of engineering activities undertaken (K\_W16).



The student knows the general principles for creating and developing various forms of individual entrepreneurship (K\_W025).

#### Skills

The student is able to estimate production costs in installations based on closed-loop technologies (K\_U23).

#### Social competences

The student thinks and acts in an entrepreneurial manner (K\_K06).

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

1. Written credit exam on tasks and theoretical issues - 50%.
2. Evaluation of activity on the Moodle platform - participation in quizzes and votes - 50%.

### Programme content

Cost, cost accounting, cost classification. Cost accounting systems. Cost calculation methods. Concepts of strategic cost management and strategic planning and controlling of engineering projects. Measures of economic efficiency of engineering investments. Use of cost information in selected decision-making areas related to engineering activities.

### Teaching methods

Classes will be conducted in the form of a lecture supplemented with examples and accounting tasks.

### Bibliography

#### Basic

1. Controlling operacyjny w przedsiębiorstwie, Sierpińska M., Niedbała B., PWN, Warszawa, 2003.
2. Matematyka finansowa w praktyce: wybrane zagadnienia z zakresu finansów przedsiębiorstw, Antonowicz A., Antonowicz P., Ośrodek Doradztwa i Doskonalenia Kadr, Gdańsk, 2009.

#### Additional

1. Rachunkowość zarządcza. Wprowadzenie, Mantura W., Bondarowska K., Branowski M., Goliński M., Miądowicz M., Szafrański M., Wyd. PP, Poznań, 2010.
2. Rachunkowość zarządcza, Gabrusewicz W., Kamela-Sowińska A., Poetschke H., PWE, Warszawa, 2000.
3. Podstawy rachunkowości zarządczej, Czubakowska K., Gabrusewicz W., Nowak E., PWE, Warszawa, 2006.
4. Rachunkowość zarządcza. Podręcznik ze zbiorem przykładów, Wermut J., Oddk, Warszawa, 2012.



### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	38	1,5
Student's own work (literature studies, preparation for classes, preparation for accounting tasks ) <sup>1</sup>	37	1,5

<sup>1</sup> delete or add other activities as appropriate