



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma Seminar with introduction to scientific research

### Course

Field of study

Engineering Management

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

4/7

Profile of study

general academic

Course offered in

English

Requirements

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

15

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

PhD DSc Eng, Magdalena K. Wyrwicka, PUT Prof.

e-mail: magdalena.wyrwicka@put.poznan.pl

Responsible for the course/lecturer:

Faculty of Engineering Management

ul. Jacka Rychlewskiego 2, 60-965 Poznań

### Prerequisites

The student has knowledge of subjects covered by the learning standards of the first cycle of studies in Engineering Management,

The student knows the basic principles of editing scientific papers and the use of selected research methods and techniques, has the ability to perceive, associate and interpret phenomena occurring in organizations and use them to write an engineering thesis, knows the principles of the correct use of the Polish language and cares for improving language skills.

### Course objective

A substantive and formal preparation for writing an engineering thesis by familiarizing with the methodology of preparing an engineering thesis and the ability to present and discuss management problems



## Course-related learning outcomes

### Knowledge

The student has ordered and theoretically founded knowledge of behavior, organizational norms, understands the importance of organizational and social ties in creating an organization. He knows the methods and tools for data collection, their processing, selection and distribution of information as well as research methodology as well as methods and tools for modeling processes between market participants.

The student has knowledge of ethical standards, their sources, nature, changes and ways of influencing organizations, as well as knows and understands the basic concepts and principles of industrial property protection and copyright.

### Skills

The student is able to use basic theoretical knowledge and obtain data to analyze specific social processes and phenomena (cultural, political, legal, economic) in the field of management, and also has the ability to prepare typical written essays in Polish and a foreign language, considered as basic for the fields of science and scientific disciplines specific to management engineering regarding specific issues, using basic theoretical approaches, as well as various sources. Has the ability to prepare oral presentations, in Polish and in a foreign language, in the field of management, specific to management engineering, regarding specific issues, using basic theoretical approaches, as well as various sources.

### Social competences

The student is able to make substantive contributions to the preparation of social projects, including legal, economic and organizational aspects, and is aware of the importance of professional behavior, compliance with the principles of professional ethics and respect for the diversity of views and cultures, as well as care for the traditions of the managerial profession.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

- on the basis of current progress in the formulation of the research problem and work objectives as well as methods of problem solving and work documentation
- demonstrating the ability to recall literature sources

Summative rating:

- Diploma thesis card (form) confirmed by the promoter, table of contents at the diploma thesis

Summary:

- presentation of a list of literature and other sources
- assessment of the presentation of the thesis concept prepared by the graduate student and its discussion.



## Programme content

Methodological approaches to management problems. Acquaintance with the methodology of writing an engineering thesis. Framework of diploma arrangement. Respect of copyrights. Discussion of organizational problems covered by engineering work.

## Teaching methods

Instruction combined with demonstration and explanation, method of expert tables (in groups implementing the topic), presentations, discussion.

## Bibliography

Basic

Regulations for diploma theses and diploma exam process,  
<http://www.fem.put.poznan.pl/en/node/889>

Additional

Betz F., Managing Science. Methodology and Organization of Research. Springer 2011

Santos R., Pereira L.F., Scientific Management Methods,  
[https://www.researchgate.net/publication/324602390\\_Scientific\\_Management\\_Methods](https://www.researchgate.net/publication/324602390_Scientific_Management_Methods)

## Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	15	1,0
Student's own work (literature studies, project preparation) <sup>1</sup>	35	1,0

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