



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma Seminar with introduction to scientific research [S1IZar1>SDzEBN]

### 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 Polish
Form of study full-time	Requirements compulsory

### Number of hours

Lecture 0	Laboratory classes 0	Other 0
Tutorials 0	Projects/seminars 15	

### Number of credit points

2,00

### Coordinators

dr hab. inż. Magdalena Wyrwicka prof. PP  
magdalena.wyrwicka@put.poznan.pl

### Lecturers

### 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 defines and classifies methods of data collection in the context of management [P6S\_WG\_08].

The student describes the research methodology and tools for modeling market processes [P6S\_WG\_10].

The student lists and characterizes ethical norms and their impact on organizations [P6S\_WK\_01].

The student identifies and illustrates basic concepts in the field of industrial property protection and copyright law [P6S\_WK\_03].

The student defines methods of collecting, processing, selecting, and distributing information used in scientific research [P6S\_WG\_08].

The student classifies different methodological approaches to management problems [P6S\_WG\_03].

The student identifies the main principles of scientific ethics and copyright law in the context of scientific work [P6S\_WK\_01, P6S\_WK\_03].

The student explains the importance of organizational and social ties in creating organizations [P6S\_WG\_03].

#### Skills:

The student interprets and applies theoretical knowledge to analyze social processes in management [P6S\_UW\_01].

The student prepares a written scientific paper using appropriate methods of data collection and analysis [P6S\_UW\_01].

The student presents research results using effective communication techniques in Polish and foreign languages [P6S\_UK\_01, P6S\_UK\_02].

The student plans and prepares typical written works and oral presentations in Polish and foreign languages [P6S\_UK\_01, P6S\_UK\_02].

The student demonstrates teamwork skills and responsibility for joint tasks [P6S\_UO\_01].

The student analyzes needs and plans continuous education in professional, personal, and social competencies [P6S\_UU\_01].

#### Social competences:

The student contributes substantively to the preparation of social projects, taking into account legal, economic, and organizational aspects [P6S\_KO\_01].

The student recognizes and adheres to professional ethics and respect for diversity of views and cultures [P6S\_KR\_02].

The student designs and conducts scientific research, taking into account ethical and legal aspects related to conducting research and writing scientific papers [P6S\_KO\_01, P6S\_KR\_02].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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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 problems (descriptive, diagnostic, prognostic, functional-patterning) and related rules for formulating topics. Discussion of basic research methods used in particular methodological approaches. Familiarization with the methodology of writing a diploma thesis in the formal sense (regulations for writing diploma theses at WIZ PP) and substantive. Formulating the problem, goal and scope of work. Indication of the rules for describing the research object.

Discussing the framework layout of the work and developing a working table of contents. Exercises in quoting and referring to sources while respecting copyrights. Discussion of problems covered by the work during individual presentations in the seminar group.

### Course topics

Methodological approaches to management problems. Acquaintance with the methodology of writing an master thesis. Framework of diploma arrangement. Respect of copyrights. Discussion of

organizational problems covered by research.

## Teaching methods

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

## Bibliography

Basic:

1. Regulations for diploma theses and diploma exam process, [www.fem.put.poznan.pl](http://www.fem.put.poznan.pl)
2. Źródła literaturowe dobrane odpowiednio do problematyki pracy inżynierskiej
3. Borcz L., Vademecum pracy dyplomowej, Wydawnictwo WSEiA, Bytom 2001
4. Wójcik K., Piszę akademicką pracę promocyjną, Placet, Warszawa 2005
5. Szkutnik Z., Metodyka pisania pracy dyplomowej, Wydawnictwo Poznańskie, Poznań 2005

Additional:

1. Podstawy metodologii badań w naukach o zarządzaniu(2015), W. Czakon (red.) wyd. 3. rozszerzone, Oficyna a Wolters Kluwer business, Warszawa
2. Majchrzak J., Mendel T., Metodyka pisania prac magisterskich i dyplomowych, Uniwersytet Ekonomiczny, Poznań, 2009
3. Rozpondek M., Poradnik dyplomanta i absolwenta, Wydawnictwo Politechniki Śląskiej, Gliwice 2003

## Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	15	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	35	1,00