



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar I

### Course

Field of study

Mathematics in technology

Area of study (specialization)

Modeling in technology

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

Tutorials

0

Projects/seminars

15

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

dr hab. Karol ANDRZEJCZAK, prof. PP

Responsible for the course/lecturer:

### Prerequisites

Student has knowledge in accordance with the program of studies in the field of mathematics in technology,

has the ability to acquire knowledge from the indicated sources and to prepare a multimedia presentation,

has experience related to the implementation of an engineering diploma thesis,

is aware of the need to expand his knowledge. He is ready to work in a team.

### Course objective

Acquainting students with the methodology of preparing a thesis.

Defining topics and scope of master's theses.

### Course-related learning outcomes

Knowledge

He/she has in-depth knowledge related to the subject of the master's thesis.



Is aware of the latest development trends in the area of science related to the topic of the thesis.

Has elementary knowledge of intellectual property protection.

Understands the impact of technical and non-technical factors on engineering activities.

#### Skills

Student is able to obtain information from various sources.

When formulating and solving research problems, is able to see their systemic and non-technical aspects.

Can use various methods to formulate and solve research problems.

He can prepare a well-documented technical study in Polish and English and give a presentation.

He is able to develop a plan for writing a thesis to keep the deadline.

Can independently plan his own learning path; can inspire and organize the learning process of other people.

#### Social competences

Is aware of the need to supplement knowledge and skills along with the development of science and technology.

Is aware of the importance of professional behavior, adherence to the rules of professional ethics and respect for the diversity of views and cultures when conducting research in an organization for the preparation of a master's thesis.

Is aware of the social role of a technology university graduate.

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment - based on participation in the discussion during the presentation of topics by other members of the seminar group.

Final assessment - on the basis of forming assessments and a presentation on the detailed plan of the thesis, the aim of the thesis, the concept of problem solving and the analysis of the current state of knowledge.

#### Programme content

Updated on 09/09/2020

The structure of the thesis. Purpose and rules of its preparation. Approaches and methods for conducting research and preparing the text of the work. The main parts of the master's thesis and the relations between them. The most common mistakes when writing a thesis.



Presentation by students and discussion in the seminar group of the results of literature research related to the topic of the thesis. Discussing the scope of diploma theses and methods of their execution. Discussion of specific solutions and their analysis in various respects.

### Teaching methods

- analysis / discussion of various methods (including unconventional methods) to solve the problem,
- multimedia show,
- case study,
- teamwork.

### Bibliography

Basic

1. Boć J.: Jak pisać pracę magisterską, Wrocław: Kolonia Limited, 2009, wyd 7.
2. Szkutnik Z., Metodyka pisania pracy dyplomowej, Wyd. Poznańskie, Poznań 2005.
3. Majchrzak J., Mendel T., Metodyka pisania prac magisterskich i dyplomowych. Wydawnictwo AE w Poznaniu, Poznań 2005.
4. Węglińska M. - Jak pisać pracę magisterską ? : Poradnik dla studentów. Kraków : Oficyna Wydawnicza Impuls, 2002.

Additional

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	15	1,0
Student's own work (literature studies, preparation for seminars, preparation of presentations) <sup>1</sup>	85	3,0

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