



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar I

### Course

Field of study

Mathematics in Technology

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3 / 6

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

15

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

dr hab. Maciej Ciesielski

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tel. 616652839

Faculty of Control, Robotics and Electrical

Engineering

ul. Piotrowo 3A, 60-965 Poznań

Responsible for the course/lecturer:

### Prerequisites

Student has basic knowledge within the scope of subjects included in the programme of the specialization [K\_W03 (P6S\_WG)]

Student has basic knowledge accumulated during studies in the field of Mathematics in technology [K\_W08 (P6S\_WG), K\_W15 (P6S\_WK)]

Student has ability to carry out measurements of basic electrical and non-electrical values and effective self-study in the field of the chosen field of study and chosen specialization [K\_U05 (P6S\_UW), K\_U11 (P6S\_UW)]



Is able to perceive and specify the technical problems [K\_U05 (P6S\_UW)]

Student is aware of the consequences of the results of his own work [K\_K04 (P6S\_KR)]

Ability to work in a team and awareness of the necessity to broaden their knowledge and skills [K\_K02 (P6S\_KK), K\_K03 (P6S\_KO)]

### Course objective

Learning about selected issues regarding the collection of the necessary materials and rules for the preparation of engineering thesis. Learning the rules of conducting research and editing the diploma thesis.

### Course-related learning outcomes

#### Knowledge

1. Student has knowledge in the field of measurement methodology and conducted analyzes of a selected technical problem [K\_W04 (P6S\_WG)]
2. The student knows the latest development trends in technology based on professional literature [K\_W11 (P6S\_WG)]
3. Student has knowledge of the principles of writing studies and editing text, knows and understands the basic concepts and principles in the field of intellectual property protection, among others of copyright. [K\_W15 (P6S\_WK)]

#### Skills

1. Is able to use printed and electronic literature sources, integrate the acquired information and make their interpretation and draw conclusions [K\_U06 (P6S\_UW)], K\_U10 (P6S\_UW), K\_U13 (P6S\_UK)
2. Can work individually and in a team, can estimate the time needed to accomplish the tasks provided for in the diploma thesis [K\_U12 (P6S\_UK)]
3. Has the skills of self-education to improve professional competence in the field of the chosen field of study and specialization [K\_U15 (P6S\_UU)]

#### Social competences

1. Student is aware of the value of his work, and also shows willingness to comply with the principles of working in a team in the field of jointly carried out tasks [K\_K01 (P6S\_KK), K\_K05 (P6S\_KR)]
2. The student is aware of the need to deepen and broaden knowledge in order to solve technical problems [K\_K02 (P6S\_KK), K\_K04 (P6S\_KR)]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

1. Continuous evaluation of seminar activities of the student's activity and increase of his knowledge and skills needed to implement the diploma thesis
2. Evaluation based on the results obtained and the method of their systematic presentation



3. Assessment of the effectiveness of applying knowledge to the needs of solving the tasks

### Programme content

1. In time of the diploma seminars, selected information about research carried out at the Institute is presented
2. Selected topics in the field of the subject of diploma thesis preparation
3. Setting tasks covered by the subject of work
4. Principles of bibliography preparation
5. Editing and formatting of the electrical engineering diploma thesis

### Teaching methods

Analysis/discussion, multimedia presentation, work in team

### Bibliography

Basic

1. Bibliography on the subject of the diploma thesis recommended by the supervisor
2. Author's vademecum, recommendations for the preparation of publications prepared by IE and the Poznan University of Technology Publishing House
3. Specialist literature (books, articles, conference materials, technical brochures)
4. Lexicons, encyclopedias, technical guides, dictionaries

Additional

1. Bibliography found by the student in printed and electronic form
2. Sample, master diploma thesis

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	25	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	75	3,0

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