



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar [N2Elenerg1-UEE>SD1]

### Course

|                                |                   |
|--------------------------------|-------------------|
| Field of study                 | Year/Semester     |
| Electrical Power Engineering   | 2/3               |
| Area of study (specialization) | Profile of study  |
| Electric Energy Exploitation   | general academic  |
| Level of study                 | Course offered in |
| second-cycle                   | Polish            |
| Form of study                  | Requirements      |
| part-time                      | compulsory        |

### Number of hours

|           |                    |                     |
|-----------|--------------------|---------------------|
| Lecture   | Laboratory classes | Other (e.g. online) |
| 0         | 0                  | 0                   |
| Tutorials | Projects/seminars  |                     |
| 0         | 10                 |                     |

### Number of credit points

1,00

### Coordinators

dr hab. inż. Krzysztof Walczak prof. PP  
krzysztof.walczak@put.poznan.pl

### Lecturers

### Prerequisites

The student has well-established knowledge gained during the studies in the field of Electrical Power Engineering. Is able to independently acquire knowledge and technical information in the field of issues related to the power industry, also in a foreign language. He understands the need for continuous training and knows the basic possibilities of acquiring knowledge from literature sources in the field of energy.

### Course objective

Acquiring knowledge and skills related to conducting scientific research, presenting the obtained research results, analyzes and conclusions on the issue discussed in the diploma thesis. Getting to know the issues related to the collection of the necessary materials and rules for the preparation of the Master's thesis.

### Course-related learning outcomes

Knowledge:

student knows how to use literature sources, knows the issues related to copyright  
the student has a knowledge of the correct construction of scientific work, applied research methods and scientific analysis

## Skills:

the student is able to formulate and test scientific hypotheses. the student is able to search, compare, analyze and interpret information obtained from scientific sources and use technical documentation related to issues related to the power industry, prepared both in polish and in english. the student is able to plan, conduct, document a scientific experiment and present the obtained results during a scientific debate

## Social competences:

the student understands the contemporary problems of energy security and the resulting necessity to educate the society in the field of the latest power technologies

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Assessment of activity in the process of developing tasks related to the thesis being prepared

Assessment of the prepared presentations, the quality of discussions, the ability to argue their views on the subject of basic tasks and elements of the prepared thesis

## Programme content

The Diploma Seminar covers issues related to the general principles of writing scientific papers, conducting research and analyzing the results, and available scientific knowledge bases.

## Course topics

During the classes, the characteristics of a master's thesis are discussed, including differences from engineering thesis. Discussion of the proposed thematic areas of diploma theses. Discussion of the composition of the master's thesis as well as editorial guidelines and recommendations (document formatting, graphic elements). Rules for preparing a general presentation regarding the topic of the work. Methods of searching for literature in modern databases and principles of its citation. Discussion of the elements of scientific research methodology and the principles of carrying out research conducted for the purposes of a master's thesis (during the course, students present one paper constituting a concept for solving the problems of the master's thesis).

## Teaching methods

An interactive seminar with questions and discussion initiation. During the classes, information materials (in the form of multimedia presentation) prepared by the seminar leader and students are used. The discussion at the forum of the group aims to critically evaluate the research results obtained and to indicate the directions of further work.

## Bibliography

### Basic

- [1] Vademecum autora, Wydawnictwo Politechniki Poznańskiej, <http://www.ed.put.poznan.pl/sites/default/files/Instrukcja%20dla%20autor%C3%B3w.pdf>
- [2] Urban S., Ładoński W. , Jak napisać dobrą pracę magisterską, Wrocław: Akademia Ekonomiczna, 2003
- [3] Prawo autorskie. Ustawa z 4 lutego 1994 r. ze zmianami z 2015 r.
- [4] Rozpondek M. , Wyciślik A. , Seminarium dyplomowe: praca dyplomowa magisterska i inżynierska: pierwsza praca – know how, Wydawnictwo Politechniki Śląskiej, 2007 r.
- [5] Zenderowski R., Pawlik K. , Dyplom z Internetu. Jak korzystać z Internetu pisząc prace dyplomowe, Warszawa CeDeWu, 2015 r.

### Additional

- [1] Przykładowe, wzorcowo wykonane prace dyplomowe.
- [2] Regulamin Studiów pierwszego i drugiego stopnia uchwalony przez Senat Akademicki Politechniki Poznańskiej, Uchwała Nr 42/2020-2024 z dnia 31 maja 2021 r.
- [3] Cempel C., Nowoczesne zagadnienia metodologii i filozofii badań: wybrane zagadnienia dla studiów magisterskich, podyplomowych i doktoranckich, Poznań, Radom : Instytut Technologii Eksploatacji, 2005 r.

## Breakdown of average student's workload

|   | Hours | ECTS |
|---|-------|------|
| Total workload  | 33    | 1,00 |
| Classes requiring direct contact with the teacher   | 15    | 0,50 |
| Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation) | 18    | 0,50 |