# POZNARO POZNAR

# POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Diploma seminar [N2Elenerg1-ISD>SD1]

Course

Field of study Year/Semester

Electrical Power Engineering 2/3

Area of study (specialization) Profile of study

Smart Grids general academic

Level of study Course offered in

second-cycle Polish

Form of study Requirements compulsory

Number of hours

Lecture Laboratory classes Other (e.g. online)

0 0

Tutorials Projects/seminars

0 10

Number of credit points

1,00

Coordinators Lecturers

dr hab. inż. Jarosław Gielniak prof. PP jaroslaw.gielniak@put.poznan.pl

# **Prerequisites**

The student has knowledge in the field of generation, transmission and distribution of electricity, as well as in the field of electrical equipment and installations. He can apply his knowledge to solve simple engineering and scientific problems in the field of power engineering. He is aware of the importance of the reliability of the power system for the security of the country.

# Course objective

Presentation of the subject of MSc theses. Selection of promoters and topics of theses. Defining specific tasks for the preparation of worksheet cards. Presentation of the principles of editing the diploma thesis. Individual, reconnaissance literature research. Presentation of the subjects of master's theses.

# Course-related learning outcomes

# Knowledge:

- 1. has general knowledge in the field of non-technical issues related to electrical power engineering. has knowledge of the new achievements, development trends, and dilemmas of modern electrical power engineering.
- 2. he knows the bases of scientific and technical literature containing both polish and english-language

resources, which allows him to search for materials necessary to solve engineering and scientific problems in the field of electrical power engineering.

### Skills:

- 1. is able to formulate a research hypothesis and verify it. is able to plan and conduct scientific research.
- 2. he can present the results of his research and take part in discussions related to the power industry.

## Social competences:

1. understands the importance of the country"s energy security.. is aware of the importance of making the public aware of the need to develop electrical power engineering and its new trends.

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

- 1. Assessment of the use of acquired knowledge in solving problem tasks.
- 2. Assessment of the presentation containing the results of master"s thesis research.
- 3. Ongoing assessment in each seminar: student"s activity, increase of his knowledge and skills necessary to implement the topic of master"s thesis.

# Programme content

Discussion of the subject of master"s thesis, preparation of the scope of work, presentation of the principles of work implementation, cooperation with the supervisor and the use of scientific literature. Principles for preparing presentation of scientific research results and preliminary discussion on how to implement the tasks set out in the work topic card. Preparing the student to participate in scientific research.

# Course topics

none

# **Teaching methods**

Interactive seminars with questions and initiating discussions. During seminars, materials (in the form of multimedia presentations) prepared by the seminar teacher and students are used. The discussion at the forum of the group aims to critically evaluate the obtained research results and to indicate the directions of further work.

# **Bibliography**

### Basic

- 1. Vademecum autora, Wydawnictwo Politechniki Poznańskiej, http://www.ed.put.poznan.pl/files/Vademecum-dla-autorow.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.
- 5. Zenderowski R., Pawlik K., Dyplom z Internetu. Jak korzystać z Internetu pisząc prace dyplomowe, Warszawa CeDeWu, 2015.

# Additional

- 1. Przykładowe, wzorcowo wykonane prace dyplomowe nagradzane na różnych konkursach.
- 2. Regulamin studiów stacjonarnych i niestacjonarnych pierwszego i drugiego stopnia uchwalony przez Senat Akademicki Politechniki Poznańskiej, uchwała nr 154/2016-2020 z dnia 24 kwietnia 2019, https://www.put.poznan.pl/sites/default/files/attachments/uchwala\_nr\_154\_-\_2019\_-\_zalacznik\_regulamin\_studiow.pdf § 31,§ 32,§ 33.
- 3. Cempel C., Nowoczesne zagadnienia metodologii i filozofii badań : wybrane zagadnienia dla studiów magisterskich, podyplomowych i doktoranckich, Poznań ; Radom : Instytut Technologii Eksploatacji, 2005.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	10	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	0,50