## POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

#### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Preparation of the thesis work

**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 studies polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

0 0

Tutorials Projects/seminars

0 60

**Number of credit points** 

10

**Lecturers** 

Responsible for the course/lecturer: Responsible for the course/lecturer:

dr hab. inż. Krzysztof Walczak, prof. PP dr hab. inż. Jarosław Gielniak, prof. PP

Wydział Inżynierii Środowiska i Energetyki Wydział Inżynierii Środowiska i Energetyki

Instytut Elektroenergetyki Instytut Elektroenergetyki

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tel. 61 665 2797 tel. 61 665 20 24

## **Prerequisites**

The student should have basic knowledge, skills and competences acquired in the previous years of studies, enabling him to carry out a team MA thesis.

#### **Course objective**

The aim of the diploma process is to deepen theoretical knowledge related to the selected topic of work, acquire the ability to solve practical engineering problems, including the team implementation of the application that is the subject of the work.

The main goal is the student (students) to carry out independently (in a team) complex curriculum content in accordance with the detailed tasks specified in the subject card of the master's thesis.

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#### **Course-related learning outcomes**

Knowledge

Knows specialized vocabulary in a foreign language, which allows for the analysis of technical and scientific documents relevant to the field of power engineering

Knowledge of the connection of the electric power engineering profession with various non-technical fields, such as: economy, law or ethics

Skills

Can pose hypotheses and test them in simple research systems

He can independently plan and implement his development as well as motivate and direct others

### Social competences

Correctly identifies and resolves dilemmas related to broadly understood energy security; can think and act in a creative and entrepreneurial manner; understands the need for actions to make the society aware of the development of the power industry, but also to reduce the risks it carries

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

- 1. continuous assessment through systematic consultations checking the content correctness and the degree of advancement of the thesis
- 2. assessment of the increase in the ability to use the learned principles and methods
- 3. evaluation of the results of the implementation of the master's thesis

#### **Programme content**

The subject of the master's thesis is the implementation of the program content in accordance with the detailed tasks specified in the topic card of the master's thesis, defined by the thesis promoter or business entity cooperating with the University. The work is carried out individually or in groups (usually 2 people) under the supervision of the supervisor or supervisor and a supervisor appointed by the supervisor. The final result is the submission of the master's thesis to the Dean's Office. If required by the purpose of the work, it must have working software or a prototype as well as technical and operational documentation.

#### **Teaching methods**

Consultations on the subject of thesis with the supervisor, workshops / trainings, discussions within the team implementing the thesis, regarding the presented diploma theses

#### **Bibliography**

Basic

Scientific and technical literature: textbooks, monographs, articles, catalogs, websites, documentation, guidelines and standards provided by those managing theses.

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# Breakdown of average student's workload

	Hours	ECTS
Total workload	250	10,0
Classes requiring direct contact with the teacher	60	2,5
Student's own work (literature studies, diploma thesis preparation) <sup>1</sup>	190	7,5

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 $<sup>^{\</sup>mbox{\scriptsize 1}}$  delete or add other activities as appropriate