



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar

### Course

Field of study

Year/Semester

Green energy

2/3

Area of study (specialization)

Profile of study

-

general academic

Level of study

Course offered in

Second-cycle studies

polish

Form of study

Requirements

full-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

0

0

0

Tutorials

Projects/seminars

0

15

### Number of credit points

1

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

prof. dr hab. inż. Zbigniew Nadolny

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Instytut Elektroenergetyki

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### Prerequisites

The student has well-established knowledge gained during the studies in the field of power engineering and environmental protection. Student is able to independently acquire knowledge and technical information in the field of issues related to the power engineering and environmental protection, also in a foreign language. Student 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 engineering and environmental protection, 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:

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

Basic issues related to conducting scientific research. Presentation of research results and analyzes of a selected issue. Formulating logical conclusions resulting from the conducted research and analyzes.

Preparation of a list of specialist literature used in the thesis. Final editing of the 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/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](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	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, performing laboratory tests and analyzes, preparation of the presentation, work on the preparation and editing of the diploma thesis, preparing for the diploma exam, participating in the diploma exam)) <sup>1</sup>	10	0,5

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