



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar [S2ZE1E>SD2]

### Course

Field of study

Green Energy

Year/Semester

1/2

Area of study (specialization)

–

Profile of study

general academic

Level of study

second-cycle

Course offered in

English

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

1,00

### Coordinators

prof. dr hab. inż. Zbigniew Nadolny  
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### Lecturers

### Prerequisites

The student has knowledge in the field of generation, transmission and distribution of energy, as well as in the field of machines and energy devices. He can apply his knowledge to solve simple engineering and scientific problems in the field of energy and environmental protection. Is aware of the importance of the reliability of the energy system for the security of the country.

### Course objective

Presentation of the subject of master's thesis. Selection of promoters and topics of theses. Defining detailed tasks for the preparation of work topic cards. Presentation of the principles of editing the diploma thesis. Individual, reconnaissance literature research.

### Course-related learning outcomes

Knowledge:

1. The student has general knowledge of non-technical issues related to energy and environmental protection. Has knowledge of new achievements, development trends and dilemmas of modern energy.
2. The student knows the databases 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 energy and environmental protection.

#### Skills:

1. The student is able to formulate a research hypothesis and verify it. Can plan and conduct scientific research.
2. The student is able to present the results of his scientific research and take part in discussions on topics related to energy and environmental protection.

#### Social competences:

1. The student understands the importance of the country's energy security. Student is aware of the importance of making the public aware of the need to develop energy and its new trends.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

1. Assessment of the use of acquired knowledge in solving problem tasks.
2. Assessment of the method of presenting the results of the research carried out.
3. Current assessment at each seminar: student's activity, increase of his knowledge and skills necessary to implement the topic of the master's thesis.

### Programme content

Characteristics of the diploma thesis. Discussion of the proposed thematic areas of diploma theses. Discussion of the composition of the diploma thesis as well as editorial guidelines and recommendations (document formatting, graphic elements).

### Course topics

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 diploma thesis (during the course, students present one paper constituting a concept for solving the problems of the diploma thesis). Participation in scientific research conducted at the supervisor's institute related to the field of study (using the PUT library resources - database of scientific journals. Basics of copyright and related rights.

### Teaching methods

An interactive seminar with questions and discussion initiation. During the classes, information materials (in the form of multimedia presentations) prepared by the seminar leader 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. , Wycislik 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	1,00
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)	10	0,50