

FACULTY OF ELECTRICAL  
ENGINEERING**SUBJECT CARD**

Name in Polish: **Seminarium dyplomowe**  
 Name in English: **Diploma seminar**  
 Main field of study (if applicable): **Electrical Engineering**  
 Specialization (if applicable): **Renewable Energy Systems**  
 Level and form of studies: **2nd level, full-time**  
 Kind of subject: **optional**  
 Subject code: **ELR045108**  
 Group of courses: **NO**

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU):					30
Number of hours of total student workload (CNPS):					90
Form of crediting:					crediting with grade
For group of courses mark (X) final course:					
Number of ECTS points:					3
including number of ECTS points for practical (P) classes :					3
including number of ECTS points for direct teacher-student contact (BK) classes:					2.10

**PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES**

1. Student has the well-ordered theoretical knowledge to meet requirements of MSc work concerning renewable energy sources.
2. Student is capable of using the learned knowledge for the realization of MSc work concerning renewable energy sources.
3. Student can work in a team and understand the need to improve one's skill all the time.

**SUBJECT OBJECTIVES**

- C1. To assimilate ability to present the results of computations, experiments and analysis made in the frame of MSc work.  
 C2. To become skillful at the critical assessment of the results of computations, experiments and analysis made in the frame of MSc work.  
 C3. To be able to take part in group discussion on the problems considered in MSc works.

**SUBJECT EDUCATIONAL EFFECTS***relating to knowledge:**relating to skills:*

- PEK\_U01 Student can acquire information from literature and data base concerning the theme associated with the realization of the MSc work.  
 PEK\_U02 Has the ability of synthetic and effective presentation of research results and their interpretation, drawing conclusions, and preparing and delivering presentations on the realized thesis.  
 PEK\_U03 Student can reliably evaluate the results of the other student, formulate questions and take active participation in discussion on the subjects related to the completed master's theses.

*relating to social competences:*

- PEK\_K01 Student has a sense of responsibility of their own work and is open to the exchange of ideas and new challenges.

**PROGRAMME CONTENT**

Form of classes - seminar		Number of hours:
Sem 1	To make oneself acquainted with program, requirements and way of receiving a credit for a class.	2
Sem 2	Presentation of investigation results related to MSc works.	28
Total hours:		<b>30</b>

### TEACHING TOOLS USED

- N1. Seminar with using the audio-video technique and multimedia presentation.  
N2. Relevant problem's discussion of presented materials.

### EVALUATION OF SUBJECT EDUCATIONAL EFFECTS ACHIEVEMENT

<b>Evaluation</b> <i>F - forming (during semester) P - concluding (at semester end)</i>	<b>Educational effect number</b>	<b>Way of evaluating educational effect achievement</b>
F1(s)	PEK_U01 PEK_U02 PEK_K01	Mark for individual presentation.
F2(s)	PEK_U03 PEK_K01	Mark for class activity
P(s)	$P=0,7F1+0,3F2$	

### PRIMARY AND SECONDARY LITERATURE

#### **PRIMARY LITERATURE:**

Literature recommended by MSc thesis supervisor.

#### **SECONDARY LITERATURE:**

MSc related literature collected by student.

### SUBJECT SUPERVISOR

Ryszard Kacprzyk, ryszard.kacprzyk@pwr.edu.pl

### MATRIX OF CORRELATION BETWEEN EDUCATIONAL EFFECTS FOR SUBJECT **ELR045108 - Diploma seminar** AND EDUCATIONAL EFFECTS FOR MAIN FIELD OF STUDY **Electrical Engineering** AND SPECIALIZATION **Renewable Energy Systems**

<b>Subject educational effect</b>	<b>Correlation between subject educational effect and educational effects defined for main field of study and specialization (if applicable)</b>	<b>Subject objectives</b>	<b>Programme content</b>	<b>Teaching tool number</b>
PEK_U01	S2RES_U23	C.1	Sem1 Sem2	N.1
PEK_U02	S2RES_U23	C.1	Sem1 Sem2	N.1
PEK_U03	S2RES_U23	C.2	Sem1 Sem2	N.2
PEK_K01	K2ETK_K06	C.3	Sem1 Sem2	N.1 N.2