STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Diploma seminar		**1010311461010320081**

Field of study	Profile of study (general academic, practical)	Year /Semester
Power Engineering	**(brak)**	**3 / 6**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Ecological Source of Electrical Energy	**Polish**	**obligatory**

Cycle of study:	Form of study (full-time,part-time)
First-cycle studies	**full-time**

No. of hours					No. of credits
Lecture: **-**	Classes: **-**	Laboratory: **-**	Project/seminars:	**15**	**3**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
(brak)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**3 100%**
Technical sciences	**3 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic information of subjects taught for first degree of full-time studies, majoring in power engineering and specialty of ecological source of electrical energy.
2	**Skills**	Measurements and calculations of basic electrical and non-electrical quantities, writing simple computer programs, designing and construction of simple circuits or electrical installations and effective self-study in chosen specialty and academic field.
3	**Social competencies**	Verbal communication and team work, awareness of the need to expand their knowledge and skills.

Assumptions and objectives of the course:

Knowledge about proposed issues in Engineering Thesis. Preliminary selection of the thesis subject. Understanding rules of the thesis editing and carry out research. Preparatory recognition of literature and possibility of carrying out the research by simulations and experimentally.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. He/she has knowledge in the design and conduct research in the area of engineering thesis topic - [K_W28+]
2. He/she knows the newest trends according to development trends in frame of electric power system on the basis of technical literature - [K_W20+]
3. He/she knows fundamental of author rights during preparation of diploma thesis in frame of electric power system - [K_W26+]

Skills:

1. He/she can use literature sources and broaden expertise. Able to prepare and show a presentation about the thesis engineering - [-]

Social competencies:

1. He/she understands the need for training and improving professional competence - [K_K01+]
2. He/she is able to establish and carry out specialized research related to the topic of the thesis - [K_K06+]

Assessment methods of study outcomes

- assess the knowledge and skills needed to carry out the Engineer?s thesis topic,
- an assessment based on the presentation of the results of realized works,
- evaluate the effectiveness of the application of knowledge in problem solving,
- continuous evaluation for each class: student activities, increase their knowledge and skills.

Course description

Presentation of proposed Engineering Thesis subjects. Rules of: the thesis realization, individual consultations, literature resources using. Issue of copyright policy in the thesis.

Updated 2017: elements of research methodology, preparation for scientific research, an overview of current research at the institute related to renewable energy sources.

Applied methods of education:

The project - multimedia presentation; analysis / discussion of various methods (including nonconventional) solving problem; analysis / discussion of various aspects (including: economic, environmental, legal and social) of solving problems.

Basic bibliography:

1. Vademecum autora (in Polish) Wydawnictwo Politechniki Poznańskiej
2. Books and papers

Additional bibliography:

1. Another Diploma Thesis

Result of average student's workload

Activity	Time (working hours)
1. Participation in seminar classes	15
2. Participation in the consultation	30
3. Preparation for seminar classes	5
4. Determine the tasks within the scope of Engineer?s thesis	10
5. Prepare a presentation on the progress made in the implementation of Engineer?s thesis	5
6. Preliminary review of the literature on engineering thesis	10
7. Execution of preliminary research and analysis	10

Student’s workload

Source of workload	hours	ECTS
Total workload	85	3
Contact hours	45	2
Practical activities	60	2