

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Seminar		Code 1010325331010324073
Field of study Power Engineering	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Ecological Source of Electrical Energy	Subject offered in: polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) part-time	
No. of hours Lecture: - Classes: - Laboratory: - Project/seminars: 9		No. of credits 5
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 5 100% 5 100%
Responsible for subject / lecturer: Prof. dr hab. inż. Władysław Opydo email: wladyslaw.opydo@put.poznan.pl tel. 616652685 Elektryczny ul. Piotrowo 3A, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The knowledge gained during the current education process, especially on the subject of the thesis
2	Skills	Logical thinking, the use of literature and the Internet, computer skills, effective self education.
3	Social competencies	Understand the needs of learning and acquiring new knowledge. Is aware of the need to broaden their skills and willingness to work together as a team.
Assumptions and objectives of the course: Knowing the rules of writing scientific and technical studies, and in particular the principles of preparing a thesis. Understanding the principles of editorial thesis and methods of preparing and delivering scientific and technical presentations		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Formulate goals and dissertation thesis and to recognize and identify the problem in question, pointing to the current trends of energy development on the basis of the collected data and literature studies. - [K_W17+, K_W18+]		
Skills: 1. Search the said literature and use it and formulate objectives and thesis work and future directions of self-education. - [K_U11+] 2. Review the present problems and carry out the analysis and prepare a report of the research task. - [K_U14+]		
Social competencies: 1. Students should be active and determined to write a very good job, which is a summary and showcase their knowledge and understand the need to transfer knowledge in an understandable way. - [K_K01+]		
Assessment methods of study outcomes		
Seminars: Rating prepared presentation; bonus points for the substantive activity in the classroom		
Course description		

<p>Issues relating to a proceeding in accordance with the principles of ethics, rules editing theses, requirements concerning the form, scope of work and the timeframe for the preparation work. Discussion of substantive issues on the topic of thesis. and periodic assessment of progress in the writing work.</p>		
<p>Basic bibliography:</p> <ol style="list-style-type: none"> Literature related to the work being prepared. Notes from classes. Komisja Dydaktyczna Samorządu Studentów Politechniki Warszawskiej &#34;Poradnik pisania pracy dyplomowej&#34;; Samorząd Studentów Politechniki Warszawskiej, Warszawa 2009. 		
<p>Additional bibliography:</p> <ol style="list-style-type: none"> Gambarelli G., Łucki Z. &#34;Jak przygotować pracę dyplomową: wybór tematu, pisanie, prezentacja, publikowanie&#34;; Wyd. Universitas, Kraków 1998. Rawa T. &#34;Metodyka wykonywania inżynierskich i magisterskich prac dyplomowych&#34;; Akademia Rolniczo-Techniczna w Olsztynie, Olsztyn 1999 Internet 		
<p>Result of average student's workload</p>		
<p>Activity</p>	<p>Time (working hours)</p>	
1. participation in seminar classes	9	
2. participating in consultations	18	
3. determine the tasks within the scope of thesis	18	
4. development of the test / simulation models	25	
5. provision of technical facilities (equipment, software, components for research, etc.)	35	
6. prepare a presentation on the progress made in the implementation of thesis	4	
7. search literature to thesis	15	
<p>Student's workload</p>		
<p>Source of workload</p>	<p>hours</p>	<p>ECTS</p>
Total workload	124	5
Contact hours	45	3
Practical activities	60	2