

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Diploma seminar		Code
Field of study Mathematics in Technology	Profile of study (general academic, practical) general academic	Year /Semester 4 / 7
Elective path/specialty Electric Power Device Diagnostics	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies (Polish Qualifications Framework level six)	Form of study (full-time, part-time) full-time	
No. of hours Lecture: - Classes: - Laboratory: - Project/seminars: 30		No. of credits 15
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art Technical sciences Technical sciences		ECTS distribution (number and %) 15 100% 15 100%
Responsible for subject / lecturer: dr hab. eng. Jarosław Gielniak email: jaroslaw.gielniak@put.poznan.pl tel. 61 665 2024, 61 665 2622 Faculty of Electrical Engineering ul. Piotrowo 3A 60-965 Poznań		Responsible for subject / lecturer: Prof. dr hab. Ryszard Pluciennik email: ryszard.pluciennik@put.poznan.pl tel. 61 665 2320 Faculty of Electrical Engineering ul. Piotrowo 3A 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has basic knowledge within the scope of subjects included in the program of the specialization [K_W03 (P6S_WG)] Student has knowledge of the methodology of measurements and analyzes of a selected issue in high voltage engineering [K1_W18 (P6S_WG)]
2	Skills	Student can use printed and electronic literature sources, integrate the acquired information and make their interpretation and draw conclusions [K_U06 (P6S_UW)] Student has ability to realize measurements of basic electrical and nonelectrical quantities and realize the efficient self-education in the area related to the chosen field and specialization of studies [K_U05 (P6S_UW), K_U11 (P6S_UW)]
3	Social competencies	Student is aware of the value of his work, and also shows willingness to comply with the principles of working in a team in the field of jointly carried out tasks [K_K04 (P6S_KR)] She/he is aware of the need to expand his knowledge and skills [K_K02 (P6S_KK)]
Assumptions and objectives of the course: Presentation of the results of research, analyzes and conclusions of the issue undertaken in the diploma thesis. Learning about selected issues regarding the collection of the necessary materials and rules for the preparation of engineering thesis		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Knowledge of the bases of applying copyright and the protection of the intellectual property, students know how to use the supplies of patents information [K_W15 (P6S_WK)]		
2. Student has knowledge in the field of methodology, measurements and conducted analyzes of a selected technical issue [K_W04 (P6S_WG)]		
3. Knows the latest development trends in technology based on professional literature [K_W11 (P6S_WG)]		
Skills:		
1. Ability to prepare a short presentation on a given task concerned with electrical engineering [K_U06 (P6S_UW), K_U12 (P6S_UK)]		
2. Ability to compare the different project solutions in the area of basic electrical engineering problems from the point of view the selected application and economic criteria [K_U10 (P6S_UW), K_U13 (P6S_UK), K_U15 (P6S_UU)]		
Social competencies:		

<ol style="list-style-type: none"> 1. Student is aware of the value of his work, and also shows willingness to comply with the principles of working in a team in the field of jointly carried out tasks [K_K01 (P6S_KK), K_K04 (P6S_KR)] 2. Is aware of the social role of a technical university graduate, and especially understands the need to formulate and communicate to the public information and opinions on the achievements of technology in the field of high voltage engineering [K_K02 (P6S_KK), K_K05 (P6S_KR)]
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Assessment methods of study outcomes		
<ol style="list-style-type: none"> 1. Continuous evaluation of seminar activities of the student's activity and increase of his knowledge and skills needed to implement the diploma thesis 2. Evaluation based on the results obtained and the method of their systematic presentation 3. Assessment of the effectiveness of applying knowledge to the needs of solving the tasks 		
Course description		
Update 2018:		
<ol style="list-style-type: none"> 1. Presentation of the results of research and analysis of the selected issue 2. Formulation of logical conclusions resulting from the undertaken research and analysis 3. Editing and formatting of the engineering diploma thesis 		
Basic bibliography:		
<ol style="list-style-type: none"> 1. Bibliography on the subject of the diploma thesis recommended by the supervisor 2. Author's vademecum, recommendations for the preparation of publications prepared by IE and the Poznan University of Technology Publishing House 3. Specialist literature (books, articles, conference materials, technical brochures) 4. Lexicons, encyclopedias, technical guides, dictionaries 		
Additional bibliography:		
<ol style="list-style-type: none"> 1. Bibliography found by the student in printed and electronic form 2. Sample, master diploma thesis 		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in seminars	30	
2. Participation in consulting with supervisors	72	
3. Preparation to seminars	30	
4. Arrangement of the detailed tasks included in the area of diploma thesis	25	
5. Realization of the work	160	
6. Preparation of presentations relating to the progress in the realization of the work	30	
7. Preparation of the final multimedia presentation and preparation to the diploma exam	30	
Student's workload		
Source of workload	hours	ECTS
Total workload	377	15
Contact with teacher hours	127	5
Practical activities	160	6