

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Diploma seminar</b>		Code <b>1010321371010320081</b>
Field of study <b>Electrical Engineering</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>4 / 7</b>
Elective path/specialty <b>Electrical and Computer Systems in</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: - Classes: - Laboratory: - Project/seminars: <b>30</b>		No. of credits <b>12</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>12 100%</b> <b>12 100%</b>
<b>Responsible for subject / lecturer:</b>  Prof. dr hab. inż. Ryszard Nawrowski email: ryszard.nawrowski@put.poznan.pl tel. 616652788 Elektryczny ul. Piotrowo 3A, 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic information of subjects taught for first degree of full-time studies, majoring in electrical engineering and specialty of electric an information systems in industry and vehicles.
2	<b>Skills</b>	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	<b>Social competencies</b>	Verbal communication and team work, awareness of the need to expand their knowledge and skills.
<b>Assumptions and objectives of the course:</b> Understanding the issues related to the collection of necessary materials for research and the principles of preparation of Engineer?s thesis.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. student knows the basics of copyright and intellectual property rights, know how to use patent information resources - [K_W21+++]		
<b>Skills:</b> 1. student is able to prepare and present a short presentation on the tasks associated with electrical engineering - [K_U08+++] 2. student is able to compare different design solutions in the field of basic issues in the field of electrical engineering due to selected performance and economic criteria - [K_U12+++]		
<b>Social competencies:</b> 1. student is aware of his own work, he can obey the rules of work in a team, is able to prepare a report of the results of own work and teamwork - [K_K03+] 2. student is aware of the social role of the university of technology graduate, and especially understands the need for the formulation and communication to the public, information and opinions on technical achievements and other aspects of electrical engineering - [K_U05+++]		
<b>Assessment methods of study outcomes</b>		

<p>Seminar:</p> <ul style="list-style-type: none"> <li>- assess the knowledge and skills needed to carry out the Engineer?s thesis topic,</li> <li>- an assessment based on the presentation of the results of realized works,</li> <li>- evaluate the effectiveness of the application of knowledge in problem solving,</li> <li>- continuous evaluation for each class: student activities, increase their knowledge and skills.</li> </ul>		
<b>Course description</b>		
<p>The initial term diploma theses topics. Determine the objectives of the Engineer?s theses topics. Discussion of selected issues of the diploma theses. Discussion of the principles of editing and formatting of the Engineer?s thesis. Discussion of the principles related with the preparation of a bibliography, formatting, drawings, diagrams, photographs and tables.</p> <p>Update 2017: Enabling students to take part in presentations on current scientific research by the Institute staff. Presenting papers on current progress in the implementation of their dissertation theses related to research conducted at the Institute.</p>		
<b>Basic bibliography:</b>		
1. Bibliography of Engineer?s thesis range recommended by the promoter.		
<b>Additional bibliography:</b>		
1. Bibliography of Engineer?s thesis searched by student.		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. participation in seminar classes	30	
2. participation in the consultation	45	
3. preparation for seminar classes	8	
4. determine the tasks within the scope of Engineer?s thesis	47	
5. prepare a presentation on the progress made in the implementation of Engineer?s thesis	10	
6. perform research for Engineer?s thesis	80	
7. Engineer?s thesis writing	80	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	300	12
Contact hours	122	4
Practical activities	177	6