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STUDY MODULE DESCRIPTION FORM				
Name of the module/subject Diploma seminar		Code 1010321261010321021		
Field of study	Profile of study (general academic, practical)	Year /Semester		
Electrical Engineering	(brak)	3/6		
Elective path/specialty	Subject offered in:	Course (compulsory, elective)		
Electrical and Computer Systems in	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:	1 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:

Prof. dr hab. inż. Ryszard Nawrowski email: ryszard.nawrowski@put.poznan.pl tel. 616652788 Elektryczny

ul. Piotrowo 3A, 60-965 Poznań

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 electrical engineering and specialty of electric an information systems in industry and vehicles.
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 electrical engineering.
3	Social competencies	Verbal communication and team work, awareness of the need to expand their knowledge and skills.

Assumptions and objectives of the course:

Understanding the issues related to the collection of necessary materials for research and the principles of preparation of Engineer?s thesis.

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

Knowledge:

- 1. student knows the basic engineering technology, and versed in the latest developmental trends in the field of electrical engineering [K_W18+]
- $2. \ student \ knows \ the \ basics \ of \ copyright \ and \ intellectual \ property \ rights, \ know \ how \ to \ use \ patent \ information \ \ [K_W21+++]$

Skills:

- 1. student is able to use the resources available in paper and electronic literature, obtain information, and on the basis of them interpret and draw the conclusions [K_U05+++]
- 2. student is able to work individually and in a team, to estimate the time needed for the commissioned tasks and during this time to realize this task $-[K_U06+++]$
- 3. student has the skills of self-education in order to improve professional skills of the chosen academic field and specializations [K_U09+++]

Social competencies:

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+]

Assessment methods of study outcomes

Faculty of Electrical Engineering

Seminar:

- 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

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.

Basic bibliography:

1. Bibliography of Engineer?s thesis range recommended by the promoter.

Additional bibliography:

1. Bibliography of Engineer?s thesis searched by student.

Result of average student's workload

Activity	Time (working hours)
1. participation in seminar classes	15
2. participation in the consultation	15
3. preparation for seminar classes	3
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	3
6. search literature to engineering thesis	3
7. supply of technical facilities (equipment, software, components for research, etc.)	15
8. construction of the test stand	25

Student's workload

Source of workload	hours	ECTS
Total workload	89	3
Contact hours	40	2
Practical activities	40	2