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STUDY MODULE DESCRIPTION FORM					
		Code 1010321371010320081			
Field of study  Electrical Engineering	Profile of study (general academic, practical) (brak)	Year /Semester 4 / 7			
Elective path/specialty  Subject offered in:		Course (compulsory, elective)			
Measurement Systems in Industry and	,	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:	30 12			
Status of the course in the study program (Basic, major, other) (university-wide, from another field)					
(brak) (b		(brak)			
Education areas and fields of science and art		ECTS distribution (number and %)			
technical sciences	12 100%				
Technical sciences		12 100%			

### Responsible for subject / lecturer:

prof. dr hab. inż. Anna Cysewska-Sobusiak email: anna.cysewska@put.poznan.pl tel. 61 665 2633 Wydział Elektryczny ul. Piotrowo 3A, 60-965 Poznań

### Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Basic knowledge within the scope of subjects included in the programme of the speciality
2	Skills	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 speciality of studies
3	Social competencies	Ability to cooperate in a team and awareness of the necessity of broadening of the knowledge and skills in the field of electrical engineering

# Assumptions and objectives of the course:

Knowledge of selected problems related to gathering of the indispensable materials and knowledge of principles concerned diploma thesis preparation

## 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\_W21 +]

### Skills:

- 1. Ability to prepare a short presentation on a given task concerned with electrical engineering [K\_U08 ++++]
- 2. Ability to compare the different project solutions in the area of basic electrical engineering problems from the point of view the selected applications criteria [K\_U12+++]

## Social competencies:

- 1. Students awareness of the value of their work, and also ability to show the readiness of submitting to the principles of the work in the team  $-[K_K03 +]$
- 2. Awareness of the social part of a technical university graduate, with special focus on needs to formulate and propagate information and opinion relating the achievements in the area of electrical, measuring and biomedical engineering [K\_K05 +++]

### Assessment methods of study outcomes

# **Faculty of Electrical Engineering**

- Continuous estimation of students activity and the increase of their knowledge, and the skills necessary to realize the diploma theses
- Evaluation based on the obtained results and ability of their regular presentation
- Evaluation of efficient application of the knowledge acquired to solve the given tasks

## **Course description**

### Updating 2017:

- Selected information on the research conducted currently at the Division are given during seminars
- The selected problems related to the area of diploma theses
- Arrangement of the tasks included in the subject of a diploma thesis
- Principles of preparing the bibliography
- Editing and fomatting of diploma theses

## Basic bibliography:

1. Bibliography recommended by the diploma thesis supervisor

### Additional bibliography:

1. Bibliography searched by a student from printed and electronic sources in the scope of the subject matter of a given diploma thesis

## Result of average student's workload

Activity	Time (working hours)
1. Participation in seminars	30
2. Participation in consulting with supervisors	50
3. Preparation to seminars	20
4. Arrangement of the detailed tasks included in the area of a diploma thesis	20
5. Realization of the work	160
6. Preparation of presentations realting the the progress in the realization of the work	30
7. Preparation of the final multimedia presentation and preparation to the diploma exam	15

### Student's workload

Source of workload	hours	ECTS
Total workload	325	12
Contact hours	122	4
Practical activities	160	6