STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Diploma seminar**		Code **1010322331010320081**
Field of study **Electrical Engineering**	Profile of study (general academic, practical) **(brak)**	Year /Semester **2 / 3**
Elective path/specialty **Measurement Systems in Industry and**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **Second-cycle studies**	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) **(brak)**	(university-wide, from another field) **(brak)**	
Education areas and fields of science and art **technical sciences** **Technical sciences**		ECTS distribution (number and %) **15 100%** **15 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge in the scope of the speciality modules
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 work as a team and awareness of the necessity of broadening of the knowledge and skills

Assumptions and objectives of the course:

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

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

Knowledge:

1. Knowledge of trends to development and the most important new achievements in electrical engineering and - a bit less - in electronics, computer science, power industry - [K_W04 ++]

Skills:

1. Ability to collect information from the literature, data bases and other sources; ability to integrate, interpret and critically evaluate the obtained information as well as properly conclude, formulate and sufficiently justify opinions - [K_U01+]
2. Ability to work independently and as a team, and ability to estimate time needed to realize the tasks provided for in the range of the diploma thesis; ability to manage a small team in a way making possible to accomplish the tasks in due time - [K_U02 +]
3. Ability to prepare and show a presentation on the subject of a given design or research and to have a discussion on this presentation - [K_U04 ++]
4. Ability to plan the process of testing the complex electrical devices and systems - [K_U10 +]
5. Ability to integrate the knowledge in the scope of electrotechnics, electronics, computer science and automation, when to formulate and solve the tasks of modeling and design of the electrical elements, devices and systems - [K_U15 ++, K_U16 +]
6. Ability to estimate an usefulness and possibility of application of the new technical and technological achievements for design and producing of the electrical systems and devices that include the innovative solutions - [K_U19+]

Social competencies:

1. Understanding a need to formulate and propagate information and opinions relating the achievements made in the area of electrical engineering and other aspects of electrical engineer activity - [K_K02 +]

Assessment methods of study outcomes
- 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 presentations - Evaluation of efficient application of the knowledge acquired to solve the given tasks

Course description
Updating 2017: - Students realize diploma theses which subjects refer to Division research areas. Students present reports referring to their MSc theses as well as research works conducted in the Division, taking into account a review and analysis of scientific literature - The selected problems related to the area of diploma theses - Arrangement of the tasks included in the subject of a given diploma thesis - Principles of preparing the bibliography - Editing and formatting graduate's work

Basic bibliography:

1. Bibliograhy recommended by a diploma thesis supervisor

Additional bibliography:

1. Bibliography searched by a student in the range of a given diploma thesis subject matter

Result of average student's workload

Activity	**Time (working hours)**
1. Participation in seminars	30
2. Participation in consulting with the teachers	30
3. Participation to seminars	20
4. Arrangement of the detailed tasks included in the range of diploma thesis	20
5. Realization of the particular tasks	150
6. Preparation of presentations concerning the progress in the work	30
7. Preparation of the final multimedia presentation and preparation to the diploma exam	20

Student's workload

Source of workload	**hours**	**ECTS**
Total workload	300	15
Contact hours	150	5
Practical activities	170	6