

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 Electronic circuits and measurement techniques	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 inż. Zbigniew Krawiecki email: zbigniew.krawiecki@put.poznan.pl tel. 61 665 2546 Wydział Elektryczny ul. Piotrowo 3A, 60-965 Poznań		Responsible for subject / lecturer: Prof. dr hab. Ryszard Płuciennik 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	Basic knowledge in the scope of the speciality modules. [K_W01(P6S_WG), K_W04(P6S_WG), K_W07(P6S_WG), K_W13(P6S_WK)]
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. [K_U07(P6S_UW), K_U15(P6S_UU)]
3	Social competencies	Ability to work as a team and awareness of the necessity of broadening of the knowledge and skills. [K_K02(P6S_KK)]
Assumptions and objectives of the course: Knowledge of the 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 mathematical methods and tools in technical sciences application [K_W01(P6S_WG)]		
2. Knowledge of technical sciences, especially electrical engineering and electronics [K_W04(P6S_WG)]		
3. 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(P6_WK)]		
Skills:		
1. Ability to use the printed and electronic bibliography sources, integrate the gathering information and interpret them as well as conclude [K_U06(P6S_UW)]		
2. Ability to prepare a short presentation about the engineering task [K_U12(P6S_UK)]		
Social competencies:		
1. Students awareness of the value of their knowledge and work, understands the importance of intellectual honesty and also the readiness of submitting to the principles of the work in the team cooperating in the range of realized tasks [K_K01(P6S_KK), K_K02(P6S_KK), K_K04 (P6S_KR)]		
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 science and technical engineering [K_K05 (P6S_KR)]		

Assessment methods of study outcomes		
<ul style="list-style-type: none"> - Continuous estimation of students activity and the increase of their knowledge, and the skills necessary to realize the diploma thesis - Evaluation based on the obtained results and ability of their presentation - Evaluation of efficient application of the knowledge acquired to solve the given tasks 		
Course description		
<ul style="list-style-type: none"> - Students realize diploma theses which subjects refer to Division research areas. - 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 of the engineer diploma theses 		
Basic bibliography:		
1. Bibliography 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	20	
3. Preparation to seminars	30	
4. Arrangement of the detailed tasks included in a scope of the diploma thesis	10	
5. Realization of the particular tasks	230	
6. Preparation of a multimedia presentation concerned with progress in the work realization	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	370	15
Contact hours	60	2
Practical activities	210	7