

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Diploma Seminar		Code 1010612231010640467
Field of study Mechanika i budowa maszyn	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Product engineering (Inżynieria produktu)	Subject offered in: English	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: 1		No. of credits 20
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 %) 20 100% 20 100%
Responsible for subject / lecturer: Prof. dr hab. inż. Zbigniew Kłos email: zbigniew.klos@put.poznan.pl tel. 61 665 2231 Machines and Transport Piotrowo 3, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Development and management of industrial products and service systems in the life cycle perspective, including environmental, economical and social aspects.
2	Skills	Effective acquisition of the information from various sources including datasheets, literature and webpages
3	Social competencies	Realized restrictions of knowledge and skills; understanding the need for lifelong education, consciousness and understanding of the extratechnical aspects and results of the engineer's activity.
Assumptions and objectives of the course: To acquaint students with the schedule of writing of master thesis and its proper drafting.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Has a general understanding of the types of tests and test methods for working machines using modern measurement techniques and data acquisition - [K2A_W20] 2. Has general knowledge in the field of standardization, recommendations and EU directives, national, international and industry standards - [K2A_W09]		
Skills: 1. Is able to plan and carry out experimental studies of specific processes taking place in machines. - [K2A_U09] 2. Is able to develop technical description, market offer and design documentation for a complex machine from the selected equipment group - [K2A_U16]		
Social competencies: 1. Is aware of and understands the importance and impact of non-technical aspects of mechanical engineering activities and its impact on the environment and responsibility for own decisions. - [K2A_K02] 2. 2. Is able to interact in a group taking on the different roles. - [K2A_K03] 3. 3. Is aware of social role of mechanical engineer, understands the need for and is able to deliver opinions and knowledge in the field of machine design, particularly through the media. - [K2A_K06]		
Assessment methods of study outcomes		

Evaluation on the basis of information about the prepared stages of the Master thesis		
Course description		
Master thesis writing process (the genesis of topic, data sources, preparatory activities), development of master thesis (basic principles, editing principles, ethical problem), theory of the experiment (test planning, building of research models, analysis of results), the role of the promoter in the process of creating the work, principles for the evaluation of engineering thesis.		
Basic bibliography:		
1. Leszek W., Badania empiryczne, wyd. ITE, Radom 1997.		
2. Majchrzak J., Mendel T., Metodyka pisania prac magisterskich i dyplomowych. Wydawnictwo Akademii Ekonomicznej w Poznaniu, Poznań 2005.		
3. Pułto A., Prace magisterskie i licencjackie. PWN, Warszawa 2000.		
4. Korzyński M., Metodyka eksperymentu. Wydawnictwo NT, Warszawa 2006.		
5. Szkutnik Z., Metodyka pisania pracy dyplomowej. Wyd. Poznańskie, ISBN 8371773714, 2005		
Additional bibliography:		
1. Leszek W. Nieempiryczne procedury badawcze w naukach przyrodniczych i technicznych. Wydawnictwo ITE, Radom 1999.		
2. Polański Z., Planowanie doświadczeń w technice. PWN, Warszawa		
Result of average student's workload		
Activity	Time (working hours)	
1. Preparation for the lecture	6	
2. Participation in the lecture	15	
3. Fixing the lecture	15	
4. Consultation for the lecture	5	
5. Preparing the Master Thesis	450	
6. Preparing to pass the lecture	30	
7. Participation in the completion of the lecture	1	
Student's workload		
Source of workload	hours	ECTS
Total workload	522	20
Contact hours	27	0
Practical activities	495	20