

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Diploma Seminar		Code 1010642231010640467
Field of study Mechanical Engineering	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Mechatronics	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: 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: dr hab. inż. Ireneusz Malujda, prof. PP email: ireneusz.malujda@put.poznan.pl tel. 61 665 2244 Maszyn Roboczych i Transportu ul. Piotrowo 3, 60-965 Poznań		Responsible for subject / lecturer: dr inż. Krzysztof Talaśka email: krzysztof.talaska@put.poznan.pl tel. 61 224-4512 Wydział Maszyn Roboczych i Transportu ul. Piotrowo 3, 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	General knowledge and knowledge and skills in the field of studying a specialty.
2	Skills	Computer and MS Office skills.
3	Social competencies	The student understands the need to expand their competences, shows a willingness to cooperate within the team.
Assumptions and objectives of the course: To familiarize students with the assumptions of the methodology of science. Preparing to execute the thesis. Complementary knowledge and skills in the field to conduct research and present their results.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has knowledge about safety and ergonomics in the design and operation of the machines and the risks that machines create for the environment. - [K2A_W08]		
2. Has general knowledge in the field of standardization, recommendations and EU directives, national, international and industry standards. - [K2A_W09]		
3. Has an extended knowledge of modern production technologies used in the design of the production process of machine parts and their assembly with the use of CAM tools. - [K2A_W11]		
Skills:		
1. Is able to prepare a scientific paper in a foreign language in the chosen field of study based on literature and other sources of information, including online sources and submit an oral presentation. - [K2A_U02]		
2. Is able to perform a fairly complex design project of an average working machine or a subsystem using modern CAD tools, including tools for spatial modeling machines and finite elements calculation method. - [K2A_U07]		
3. Is able to perform basic measurements of mechanical properties on a selected machine using modern measurement systems. - [K2A_U08]		
Social competencies:		

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| <p>1. Understands the need for lifelong learning; is able to inspire and organize the learning process of others. - [K2A_K01]
 2. Is able to interact in a group taking on the different roles. - [K2A_K03]
 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]</p> |
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Assessment methods of study outcomes		
Evaluation on the basis of the speeches and activities.		
Course description		
Origins of these topics, the role of the promoter. Sources of scientific and technical information and ways to use them. Formulating hypotheses. Models and modeling. Elements of scientific language: regularities, laws, theories, principles. The structure of the thesis. The technique of writing scientific papers: the rules of publishing. Preparation for the final exam.		
Basic bibliography:		
<p>1. Boć J., Jak pisać pracę magisterską, Wyd. Kolonia, Wrocław 2003 2. Dietrich J., System i konstrukcja, WNT, Warszawa 1978 3. Oliver P., Jak pisać prace uniwersyteckie, Wyd. Literackie, Kraków 1999 4. Orczyk J., Zarys metodyki pracy umysłowej, PWN, Warszawa 1988 5. Pieter J., Ogólna metodologia pracy naukowej, Ossolineum, Wrocław 1967 6. Szkutnik Z., Metodyka pisania pracy dyplomowej, Wyd. Poznańskie, Poznań 2005 7. Tarnowski W., Podstawy projektowania technicznego, WNT, Warszawa 1997 8. Żółtowski B., Seminarium dyplomowe; zasady pisania prac dyplomowych, Wyd. ATR, Bydgoszcz 1997</p>		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
1. Preparation to the classes	30	
2. Participation in the classes	15	
3. Preparation to the project	400	
4. Consultations	30	
5. Preparation to pass the exam	30	
6. Exam	2	
Student's workload		
Source of workload	hours	ECTS
Total workload	507	20
Contact hours	47	2
Practical activities	507	20