

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Transitional Work II		Code 1010252431010250218
Field of study Mechatronics	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty -	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: 3		No. of credits 5
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 %) 5 100% 5 100%
Responsible for subject / lecturer: dr inż. Andrzej Gessner email: andrzej.gessner@put.poznan.pl tel. 61 665 22 58 Wydział Budowy Maszyn i Zarządzania ul. Piotrowo 3, 60-965 Poznań		Responsible for subject / lecturer: dr inż. Andrzej Gessner email: andrzej.gessner@put.poznan.pl tel. 61 665 22 58 Wydział Budowy Maszyn i Zarządzania ul. Piotrowo 3, 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge of mathematics, foundations of machine designing and technology, automatics and automation
2	Skills	Computer skills, CAD software, using the Internet as the source of information
3	Social competencies	Awareness of necessity for broadening knowledge and skills. Ability to comply with rules during lectures and laboratory classes, ability to communicate with others during classes
Assumptions and objectives of the course: The acquisition of the ability to solve practical engineer problems by prepare the design of mechatronic machine/device, with the use of standard components as well as individual designed parts together with their technology.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Basic knowledge about the use of computer to solve engineering problems - [-] 2. Knowledge in particular technical area, described by the subject of given project. - [-] 3. Knowledge of conducting simulations in selected commercial programming environments for analysis of behaviour of designed mechanism. - [-]		
Skills: 1. Ability to conduct a research of state-of-the-art in a particular area. - [-] 2. Ability to elaborate a several variants of the design and choose the optimal - [-] 3. Ability to use the commercial software for designing of particular machine - [-]		
Social competencies: 1. Understanding the requirement of learning by whole life; ability to inspire and organize learning process of other people. - [K_K01] 2. Ability to cooperate and work in team/group taking various roles. - [K_K03] 3. Ability to define priorities leading to task completion. - [K_K04]		

Assessment methods of study outcomes

Project: - project review according to settled schedule (milestones), - evaluation of the finished project. Receiving additional points for class activity, especially for substantial remarks to presented projects.		
Course description		
Project schedule: developing and using, state-of-art review in particular technical area, elaborating and evaluating of technical variants, selection of ready-made components, semi-finished products and technology, elaborating of product specification, evaluation of making cost.		
Basic bibliography: 1. Peter Childs, Mechanical Design, 2004. 2. Gitin M Maitra, Handbook of mechanical design, Tata McGraw-Hill Education, 2009. 3. Michael Rider, Designing with Creo Parametric 2.0, SDC Publications, 2013.		
Additional bibliography: 1. Louis Gary Lamit, Creo Parametric 2.0, ISBN-13: 978-1285190716 ISBN-10: 1285190718 2. Hong-Sen Yan, Creative Design of Mechanical Devices, Springer, 1998. 3. James G. Skakoon, Detailed Mechanical Design: A Practical Guide, ASME Press, 2000.		
Result of average student's workload		
Activity	Time (working hours)	
1. Project	45	
2. Consultations	15	
Student's workload		
Source of workload	hours	ECTS
Total workload	60	5
Contact hours	5	0
Practical activities	45	5