	STUDY MODULE D	ESC	CRIPTION FORM			
Name of the module/subject Foundations of Machine Construction and CAD				Code 1011101441011000152		
Field of study Logistics - Full-time studies - First-cycle studie		ies	Profile of study (general academic, practical <b>(brak)</b>	I)	Year /Semester 2 / 4	
Elective path/specialty	-		Subject offered in: <b>Polish</b>		Course (compulsory, elective) obligatory	
Cycle of study:		Forr	Form of study (full-time,part-time)			
First-cycle studies			full-time			
No. of hours					No. of credits	
Lecture: 30 Classe		F	Project/seminars:	15	4	
Status of the course in the study	program (Basic, major, other) <b>(brak)</b>	(เ	university-wide, from another	field) (bra	ak)	
Education areas and fields of sc	ience and art				ECTS distribution (number and %)	
Responsible for subj	ect / lecturer:	Re	sponsible for subje	ct /	lecturer:	
dr inż. Krzysztof Talaśka email: krzysztof.talaska@put.poznan.pl tel. 2244512			dr inż. Dominik Wilczyński email: dominik. wilczynski@put.poznan.pl tel. 2244512			
Faculty of Working Machi UI. Piotrowo 3 60-965 Po	•		Faculty of Working Machines and Transportation UI. Piotrowo 3 60-965 Poznań			
	is of knowledge, skills an					
1 Knowledge	Basics of physics, mechanics ar technical documentation.	nd str	ength of materials, the pri	incip	les of preparation of	
2 Skills	The ability to make a technical documentation in accordance with the principles of engineering drawing, strength calculations.					
3 Social competencies	A consciousness of responsibility for taking the decisions during engineering calculations.					
Assumptions and ob	ectives of the course:					
Transfer of knowledge concerned mechanical engineering. For materials and engineering d	erning mechanical engineering and cus on the possibilities of practical rawing.	d app I appl	lication of basic elements ication of knowledge from	and phy	assemblies used in sics, mechanics, strength of	
Study outco	mes and reference to the	edu	cational results for	r a f	ield of study	
Knowledge:						
1. Student has a basic know engineering and operation o	ledge in a scope of engineering dr f machines [K1A_W05]	rawin	g; construction and techn	olog	y and mechanical	
<ol> <li>Student has a basic knowledge in a scope of mechanics and mechanical engineering and strength of materials [K1A_W07]</li> </ol>						
Skills:						
1. Student can independent	y elaborate the given problem whi	ich is	put in a scope of studied	subje	ect [K1A_U05]	
2. Student can formulate pro of studied subject [K1A_U	ject task and solve it with the use [09]	of an	alytical methods and simu	ulatic	ons which are put in a scope	
3. Student can select the pro engineering [K1A_U15]	oper tools and solution methods fo	or the	given engineering task in	a so	ope of mechanical	
Social competencies						
1. Student is conscious of the need of learning through the whole life, inspiration and organization of learning process for other persons in a scope of issues which are put in the studied subject [K1A_K01]						
2. Student is eager to cooperate and work in a team for solving the problems which are put in a scope of studied subject [K1A_K03]						

## Assessment methods of study outcomes

a) in a scope of the project: assessment of current progress of the project b) in a scope of lectures: assessment of the answers for the questions concerning the knowledge which was presented during previous lectures Summarizing assessment: a) in a scope of project: assessment of the course of work on the project and the final result of the project b) in a scope of lectures: written exam.  Course description Design process, computer aided design, the principles of designing, constructional features, dimensional tolerances and fits, basic strength calculations. Bonded connections: soldered connections, welded joints, glue joints, riveted joints, shaped connections: key joints, pin joints, spigot joints; screwed connections. Screw gears: examples and applications, engineering calculations, constructional solutions. Elastic elements: springs, rubber elastic elements, thermal bimetals. Atles and shafts: designing, materials. Bearings: friction phenomenon, slide and rolling bearings. Clutches and brakes: the principles of selection, permanent couplings, controlled and self-acting couplings. Transmissions: friction gears, toothed gears and strand gears. Basic bibliography:  Additional bibliography:  I. Lecture 2. Project 3. Consultations 4. Preparing to pass 5. Consultations 4. Preparing to pass 5. Project 5. Prays the exam 4. Preparing to pass 5. Project 5. Prays the exam 5. Project 5. Proj	Forming assessment:					
previous lectures       Summarizing assessment:         a) in a scope of project: assessment of the course of work on the project and the final result of the project         b) in a scope of project: assessment of the course of work on the project and the final result of the project         b) in a scope of lectures: written exam.         Course description         Design process, computer aided design, the principles of designing, constructional features, dimensional tolerances and fits, basic strength calculations. Bonded connections: soldered connections, welded joints, glue joints; riveted joints, shaped connections, constructional solutions. Elastic elements: springs, rubber elastic elements, thermal bimetals. Akles and shafts: designing, materials. Acles and shafts: designing, materials. Acles and shafts: designing, materials. Bearings: friction phenomenon, slide and rolling bearings. Clutches and brakes: the principles of selection, permanent couplings, controlled and self-acting couplings. Transmissions: friction gears, toothed gears and strand gears.         Basic bibliography:         Additional bibliography:         Additional bibliography:         1. Lecture       30         2. Project       15         3. Consultations       20         4. Preparing to pass       25         5. Pass the exam       2	a) in a scope of the project: assessment of current progress of the project					
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Additional bibliography:         Result of average student's workload         Activity       Time (working hours)         1. Lecture       30         2. Project       15         3. Consultations       20         4. Preparing to pass       25         5. Pass the exam       2	basic strength calculations. Bonded connections: soldered connections, welded joints, glue joints; rivete connections: key joints, pin joints, spigot joints; screwed connections. Screw gears: examples and appli calculations, constructional solutions. Elastic elements: springs, rubber elastic elements, thermal bimeta designing, materials. Bearings: friction phenomenon, slide and rolling bearings. Clutches and brakes: th selection, permanent couplings, controlled and self-acting couplings. Transmissions: friction gears, toot	ed joints, shaped cations, engineering als. Axles and shafts: he principles of				
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2. Project153. Consultations204. Preparing to pass255. Pass the exam2	Activity	•				
3. Consultations204. Preparing to pass255. Pass the exam2	1. Lecture	30				
4. Preparing to pass255. Pass the exam2	2. Project	15				
5. Pass the exam     2	3. Consultations	20				
	4. Preparing to pass	25				
Student's workload	5. Pass the exam	2				
	Student's workload					

Student's workload						
Source of workload	hours	ECTS				
Total workload	92	4				
Contact hours	77	3				
Practical activities	15	1				