

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Technological machines		Code 1011101341011122395
Field of study Engineering Management - Full-time studies -	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 4
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 15 Classes: 15 Laboratory: - Project/seminars: -		No. of credits 4
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		ECTS distribution (number and %)
Responsible for subject / lecturer: dr hab. inż. Józef Gruszka, prof. nadzw. email: jozef.gruszka@put.poznan.pl tel. 6653408 Faculty of Engineering Management ul. Strzelecka 11 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge of technology
2	Skills	The ability to acquire knowledge
3	Social competencies	The ability to work in a group
Assumptions and objectives of the course: The aim of the subject is to familiarize the students with the most basic types of machines		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has a basic knowledge of: engineering graphics; design, technology, the construction and operation of machinery - [K1A_W05]		
2. Has a basic knowledge of: mechanics and machine-building industry as well as the strength of materials - [K1A_W07]		
Skills:		
1. Is able to independently develop the problem that exists within the studied subject - [K1A_U05]		
2. Can make use of analytical, experimental and simulation method which falls within the scope of this area, can solve the project problem in the area of logistics and its detailed concepts (inventory management, logistics, distribution logistics and supply, logistics, ecologistics) and supply chain management - [K1A_U09]		
Social competencies:		
1. Is aware of the need for lifelong learning; inspiring and organizing the learning process of other persons within the framework of the studied subject areas - [K1A_K01]		
2. Is willing to work together and work in a group on the resolution in the framework of the studied subject - [K1A_K03]		
Assessment methods of study outcomes		
Assessment exercises and test or exam.		
Course description		

General mechanical engineering: selected topics from the theory of mechanisms, high strength friction grip machines, engines, working elements in the mechanisms and machines: pneumatic and hydraulic, vibrators		
Basic bibliography:		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
1. lecture	15	
2. laboratory	15	
3. preparation for laboratory	20	
4. preparation for an exam	30	
Student's workload		
Source of workload	hours	ECTS
Total workload	80	3
Contact hours	30	2
Practical activities	15	1