



Subject card

Subject name and code	Geometry and Engineering Graphics II, PG_00039394							
Field of study	Medical and Mechanical Engineering, Mechanical and Medical Engineering							
Date of commencement of studies	October 2020		Academic year of realisation of subject		2020/2021			
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study			
Mode of study	Full-time studies		Mode of delivery		at the university			
Year of study	1		Language of instruction		Polish			
Semester of study	2		ECTS credits		2.0			
Learning profile	general academic profile		Assessment form		assessment			
Conducting unit	Department of Machine Design and Vehicles -> Faculty of Mechanical Engineering and Ship Technology							
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Waldemar Karaszewski					
	Teachers		mgr inż. Katarzyna Mazur					
			dr inż. Sebastian Grelik-Urbanowski					
			dr inż. Grzegorz Rotta					
Lesson types and methods of instruction	Lesson type		Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours		15.0	0.0	0.0	15.0	0.0	30
	E-learning hours included: 0.0							
	Adresy na platformie eNauczanie:							
	Engineering Graphics II - Moodle ID: 13548 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13548							
Learning activity and number of study hours	Learning activity		Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours		30		3.0		17.0	50
Subject objectives	The aim of the course is to learn the principles of drawing machine parts, connections used in machine construction and preparation of assembly drawings.							
Learning outcomes	Course outcome		Subject outcome			Method of verification		
	K6_U02		A student draws based machine elements according to machine technical drawing standards. He creates working and assembly drawings of machine elements. He reads information about machine elements based on presented elements and units drawings. He draws and reads structural forms of three-dimensional mechanical elements and mechanical units. He reads diagrams of complex mechanical systems.			[SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment		
	K6_W07		A student draws based machine elements according to machine technical drawing standards. He creates working and assembly drawings of machine elements. He reads information about machine elements based on presented elements and units drawings. He draws and reads structural forms of three-dimensional mechanical elements and mechanical units. He reads diagrams of complex mechanical systems.			[SW1] Assessment of factual knowledge		

Subject contents	Principles of assembly drawings. Permanent joints presentation of machine elements (welded, glue, rivet joints). Temporary fastenings presentation of machine elements (screw, shaft-hub joints). Presentation ways of standardized machine elements (bearings, gears, clutches, brakes, shafts and axles). Presentation ways of springs and seals. Basic information about technical drawings in electrotechnics and electronics, electric diagrams. Pneumatics and hydraulics diagrams. Drawings and machine diagrams practical reading. Introduction to computer graphics.		
Prerequisites and co-requisites	Engineering Graphics I <		