



Subject card

Subject name and code	Geometry and Graphics for Engineers, PG_00038384						
Field of study	Electrical Engineering						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2021/2022		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study		
Mode of study	Part-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Mechatronics and High Voltage Engineering -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Łukasz Doliński					
	Teachers	dr inż. Piotr Tojza dr inż. Łukasz Doliński					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	10.0	0.0	10.0	0.0	0.0	20
	E-learning hours included: 0.0						
	Adresy na platformie eNauczanie: GEOMETRIA I GRAFIKA INŻYNIERSKA [Niestacjonarne][2021/22] - Moodle ID: 16968 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=16968						
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	20	1.0		29.0		50
Subject objectives	Ability of preparing technical documentation in AutocAD type software, including electrical part.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	K6_W11	Student describes the principles of multiview projection and explains ways of presenting views and cross-sections of machine elements.			[SW1] Assessment of factual knowledge		
	K6_U04	Student prepares the technical documentation in accordance with the binding standards.			[SU1] Assessment of task fulfilment		
	K6_K01	Student selects the appropriate computer added design tools suitable for teamwork.			[SK1] Assessment of group work skills		
Subject contents	Graphical representation of spatial elements on the plane: ortographic projection; basic concepts and principles of the technical record of construction, the types of structural records, formats and scales of drawing sheets, the method of mapping a graphical design and layout dimensions, graphical design entry of connections, separable and inseparable connection, the assembly and executive drawings, rules for creating drawings using AutoCAD, a computer record of the structure, computer methods of mapping graphics, computer records of electrical systems, presentation of selected graphical symbols for use in mechanics, electrical engineering, automation and electricity.						
Prerequisites and co-requisites	The ability of using the PC on basic level						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	examination of practical part	50.0%			50.0%		
	examination of theoretical part	50.0%			50.0%		

Recommended reading	Basic literature	<ol style="list-style-type: none"> 1. Dobrzański T.: Rysunek techniczny maszynowy. Warszawa: WNT, 1998. 2. Mazur J., Kosiński k., Polakowski K. Grafika inżynierska z wykorzystaniem metod CAD. Oficyna Wydawnicza Politechniki Warszawskiej. Warszawa 2004. 3. Pikoń A. AutocCAD PL. Helion. Gliwice 2006.
	Supplementary literature	1. www.cad.pl
	eResources addresses	GEOMETRIA I GRAFIKA INŻYNIERSKA [Niestacjonarne][2021/22] - Moodle ID: 16968 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=16968
Example issues/ example questions/ tasks being completed	Please prepare a technical documentation of an element given.	
Work placement	Not applicable	