



Subject card

Subject name and code	Introduction to Design and Engineering Graphics, PG_00040523						
Field of study	Engineering Management						
Date of commencement of studies	October 2019	Academic year of realisation of subject			2019/2020		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study Subject group related to scientific research 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			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Krzysztof Redlarski					
	Teachers	dr inż. Krzysztof Redlarski dr inż. arch. Karolina Krause-Brykalska					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	16.0	0.0	16.0	0.0	0.0	32
	E-learning hours included: 0.0						
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	32	6.0		37.0	75	
Subject objectives	Student knows design methodology. Student can draw basic technical drawings and correctly read drawings.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_W05] knows the statistical and IT methods and tools that enable the acquisition and presentation of data on the organisation's resources, including technical resources	Student knows technical drawings norms			[SW1] Assessment of factual knowledge		
	[K6_U06] uses basic theoretical knowledge to solve selected organizational problems, design technical solutions and manage projects, including engineering projects	knows the design methodology			[SU4] Assessment of ability to use methods and tools		
Subject contents	LECTURE Presentation of design theory. The importance of proper design in the work of an engineer and designer. Formulation of design problem. Design process. Silhouette designer. Creative thinking. DESIGN EXERCISES Implementation of handwritten drawings. Rules for drawing the various elements of technical drawing machine. Drawing dimensioning and descriptions of technical drawings. Draw connection of machines and equipment. Drawing złożeniowych drawings. Draw diagrams of the various fields of technology.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	Written exam	60.0%			30.0%		
	Project	60.0%			70.0%		
Recommended reading	Basic literature	1. Tadeusz Dobrzański: „Rysunek techniczny maszynowy” (wyd. 24), WNT Warszawa, 2005 2. J. Mazur, K. Kosiński, K. Polakowski: „Grafika inżynierska z wykorzystaniem metod CAD”, Wydawnictwo Politechniki Warszawskiej 2006r. 3. Wojciech Gasparski: „Projektowanie”, PWN, Warszawa 1978 i nowsze.					
	Supplementary literature	1. Dostępna literatura dotycząca projektowania.					

	eResources addresses	
Example issues/ example questions/ tasks being completed	Design process. Designer. Basics of technical drawings.	
Work placement	Not applicable	