GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Descriptive Geometry , PG_00042590		
Field of study	Civil Engineering		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	
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	Katedra Wytrzymałości Materiałów -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Bożena Kotarska-Lewandowska	
	Teachers	dr inż. Anna Sobieraj-Żłobińska dr inż. Bożena Kotarska-Lewandowska	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	12.0	10.0	0.0	5.0	0.0	27

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	27	5.0	70.0	102

Subject objectives

Preparation for recording engineering structures in a technical drawing, projection principles. Presentation of basic constructions in geometric projections (Monge projection, topographic projection). Getting knowledge how to use geometry to solve basic engineering problems

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U04] Reads and prepares construction documentation (including drawings, graphic documentation in the CAD environment), efficiently uses maps as well as architectural, construction and geodetic drawings.	can read construction drawings, can apply the basics of the topographic and ortographic projection	[SU1] Assessment of task fulfilment
[K6_W04] Knows the rules of descriptive geometry and technical drawing for preparing and reading architectural, construction and geodetic drawings; also with the use of CAD	knows the basics of the topographic and Monge projection	[SW1] Assessment of factual knowledge

Subject contents

Topographic projection. Lines and planes in topographic projection. Spacial relations and common elements. Design of slopes, embankments and excavations for squares and roads.

Monge projection. Location of a point, line and plane in space. Mutual position of lines and planes. Common elements (intersection line). Basic constructions. Transformation and its applications. Projection of polyhedra. Intersection of polyhedrons with a straight line or a plane.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
ocena arkuszy	60.0%	50.0%
ocena kolokwium	60.0%	50.0%

Recommended reading	Basic literature	1. Otto F., Otto E.: Podręcznik geometrii wykreślnej, PWN Warszawa, 1998 (i inne wydania). 2. Bieliński A.: Geometria wykreślna, Oficyna Wydawnicza Politechniki Warszawskiej, 2005. 3. Grochowski B.: Elementy geometrii wykreślnej, PWN Warszawa, 2002. 4. Jankowski W.: Geometria Wykreślna, Wydawnictwo Politechniki Poznańskiej, 1999. 5. Bieliński A.: Ćwiczenia z geometrii wykreślnej, Oficyna Wydawnicza Politechniki Warszawskiej, 2002. 6. Błach A.: Inżynierska geometria wykreślna. Podstawy i zastosowania, Wydawnictwo Politechniki Śląskiej, Gliwice 2006
	Supplementary literature	1. Kotarska-Lewandowska B.: Geometria wykreślna. Zadania testowe, skrypt elektroniczny dostępny na stronie http://www.pbc.gda.pl/, Gdańsk, 2011. 2. Wróblewska D.: Rzut Cechowany. Odwzorowania Inżynierskie, skrypt elektroniczny dostępny na stronie http://www.pbc.gda.pl/, Gdańsk, 2014.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Slopes of excavations and embankments along the road.	
Work placement	Not applicable	