



Subject card

Subject name and code	Geodesy, PG_00049145						
Field of study	Civil Engineering						
Date of commencement of studies	October 2021		Academic year of realisation of subject		2022/2023		
Education level	first-cycle studies		Subject group		Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		2.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Geodesy -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Tadeusz Widerski				
	Teachers		dr inż. Tadeusz Widerski				
			dr inż. Daria Filipiak-Kowszyk				
			dr inż. Karolina Makowska-Jarosik				
			dr inż. Karol Daliga				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	15.0	0.0	0.0	45
	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	45		1.0		4.0	50
Subject objectives	Preparing the student to perform simple geodetic works in the area of a construction investment. Presentation of measurement methods and geodetic networks.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W03] knows the rules of preparing and circulation of geodetic documentation for realisation of investment; has knowledge about basics of geodetical service of road&construction investments; knows methods of plans projection as well as geodetical equipment and technology used in construction		Student classifies methods of situational and height measurements. It uses Hausbrandt symbols in geodetic calculations.		[SW1] Assessment of factual knowledge		
	[K6_U15] is able to perform basic situational and elevation measurements; can use geodetic instruments for altitude and situational measurement in a construction site; can read geodetical maps and sketches		Student works with geodetic instruments (levels, theodolites and Total Station). Calculates heights of inaccessible points and determines the coordinates of the network points using the backward and forward notches.		[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment		
Subject contents	Methods of densification of geodetic points, designing and setting up open and closed traverses, stabilization of points, calculating the coordinates of points using the forward notches and the polar method. Hausbrandt symbols. Angle measurement methods. Trigonometric leveling. Tachymetry. Use of Total - Station in geodetic measurements.						
Prerequisites and co-requisites							

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		100.0%	40.0%
		60.0%	60.0%
Recommended reading	Basic literature	1 Andrzej Jagielski Geodezja I, Geodezja II, Stabil Kraków 2006. 2 Michał Odlanicki- Poczobut Geodezja Podręcznik dla studiów inżyniersko -budowlanych. PPWK. Warszawa 1996. 3 Adam Żurowski Ćwiczenia z geodezji. Praca zbiorowa. PG. Gdańsk 1999.	
	Supplementary literature	1. Jerzy Ząbek, Zdzisław Adamczewski Ćwiczenia z Geodezji I Część I i II PWN Warszawa 1974. 2. Zygmunt Kurałowicz Geodezja - podstawowe obliczenia oraz wybrane ćwiczenia PG Gdańsk 2009.	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	1. Calculation of the height of the leveling line points. 2. Calculations of traverse points coordinates. 3. Determination of the height of the hidden point.		
Work placement	Not applicable		