GDAŃSK UNIVERSITY OF TECHNOLOGY

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 elevetion measurements; can use geodetic instruments for altitude and situational measurement in a cinstruction site; can read geodetical maps and sketches	Student works with geodetic instruments (levels, theodolites and Toral 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

<table>
<tr><td>Assessment methods and criteria</td><td colspan="2"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td></td><td>100.0%</td><td>40.0%</td></tr>
<tr><td></td><td>60.0%</td><td>60.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>1 Andrzej Jagielski Geodezja I, Geodezja II, Stabil Kraków 2006.

2 Michał Odlanicki- Poczobut Geodezja Podręcznik dla studiów inżynieryjno -budowlanych. PPWK. Warszawa 1996.

3 Adam Żurowski Ćwiczenia z geodezji. Praca zbiorowa. PG. Gdańsk 1999.</td></tr>
<tr><td>Supplementary literature</td><td>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.</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">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.</td></tr>
<tr><td>Work placement</td><td colspan="2">Not applicable</td></tr>
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