



Subject card

Subject name and code	THE REGISTRATION SYSTEMOF THENETWORK OF NETWORK OF UTILTY LINES, PG_00044855						
Field of study	Geodesy and Cartography						
Date of commencement of studies	October 2021		Academic year of realisation of subject		2023/2024		
Education level	first-cycle studies		Subject group		Optional subject group		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		4.0		
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		mgr inż. Mariusz Chmielecki				
	Teachers		mgr inż. Mariusz Chmielecki				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	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		6.0		49.0	100
Subject objectives	Student knows geodetic works during preparations, bridge 9tunnel) projects.						
	Student knows geodetic network during constructing bridge (tunnel).						
Subject objectives							
	Student knows geodetic works during load tests.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W07] has a well-established knowledge and understands concepts in the field of engineering geodesy including the use of calculations and measurements methods carried out with the use of geodetic instruments and photogrammetric and remote sensing technologies related to geodetic support for investment, surveying and inventory measurements and photogrammetry with remote sensing		has well-established knowledge and understands the concepts of engineering surveying, including the use of calculation methods and measurements carried out with the use of geodetic instruments				
	[K6_U06] can solve geodetic tasks and select measurement methods for typical engineering tasks including the curvature of the Earth and the impact of gravity		can solve geodetic tasks and select measurement methods for typical engineering tasks				

Subject contents	Geodetic works during preparation, bridge (tunnel) project. Geodetic network during constructing bridge (tunnel). 3D geodetic network. Geodetic works during load tests.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		60.0%	100.0%
Recommended reading	Basic literature	Gacał J., Geodezja inżynieryjno-przemysłowa., AGH, 2009 r. Żurowski A., Pomiary Geodezyjne w budowie dróg, lotnisk i mostów.,Wydawnictwo Komunikacji i łączności., 1975 r. www.leica-geosystems.com	
	Supplementary literature	Janusz W., Obsługa geodezyjna budowli i konstrukcji., PWN, 1975 r.	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		