



Subject card

Subject name and code	THE REGISTRATION SYSTEM OF THE NETWORK OF NETWORK OF UTILITY 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 (tunnel) projects.						
	Student knows geodetic network during constructing bridge (tunnel).						
	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	<p>Geodetic works during preparation, bridge (tunnel) project.</p> <p>Geodetic network during constructing bridge (tunnel).</p> <p>3D geodetic network.</p> <p>Geodetic works during load tests.</p>								
Prerequisites and co-requisites									
Assessment methods and criteria	<table border="1" data-bbox="451 465 1487 526"> <thead> <tr> <th data-bbox="451 465 794 495">Subject passing criteria</th> <th data-bbox="794 465 1137 495">Passing threshold</th> <th data-bbox="1137 465 1487 495">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="451 495 794 526"></td> <td data-bbox="794 495 1137 526">60.0%</td> <td data-bbox="1137 495 1487 526">100.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade		60.0%	100.0%
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Recommended reading	Basic literature	<p>Gacał J., Geodezja inżynieryjno-przemysłowa., AGH, 2009 r.</p> <p>Żurowski A., Pomiary Geodezyjne w budowie dróg, lotnisk i mostów.,Wydawnictwo Komunikacji i łączności., 1975 r.</p> <p>www.leica-geosystems.com</p>							
	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								