



## Subject card

Subject name and code	SPECIALIZATION PRACTICE, PG_00044844						
Field of study	Geodesy and Cartography						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2022/2023		
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 The internship can be carried out outside Poland, then it is not required to carry out the internship in Polish.		
Semester of study	6		ECTS credits		6.0		
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. Jakub Szulwic				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	0.0	0
	E-learning hours included: 0.0						
	Additional information: The internship may be settled on the basis of § 4 of the Internship Regulations - in special cases.Students who within the last five years may apply for crediting all or part of the internship without the obligation to complete it:a) perform or have performed paid work, volunteering or individual practice, including abroad, if their nature meets (meteed) the requirements of the practice program,b) participate or have participated in industrial internships, research and implementation works or the work of a science camp, meeting the requirements of the current practice program,c) completed a program internship with a similar profile at another university, faculty or field of study.						
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	0		5.0		160.0	165
Subject objectives	<p>The aim of the internship is to enable students to use the acquired knowledge in practice by participating in geodetic measurements, cartographic studies or creating geoinformatics applications. The student may also participate in the process of approval or documentation, both on the part of the entrepreneur and the office.</p> <p>The internship is a procedure based on the Regulations for the pursuit of the profession of standard operational procedure in the field of Geodesy and Cartography.</p>						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U13] is able to apply the principles of health and safety at work during the execution of geodetic works		During the practice, the student should acquire the ability to work in a surveying team with the division of roles and understanding the scope of duties resting on members of the surveying team in small, field or official work.		[SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information		
	[K6_K02] is ready to solve problems related to the profession of geodesy and cartography engineer and to assess risks and effects of the performed activity		The student should participate in geodetic works typical for the profession of a surveyor or cartographer, understanding the responsibility and tasks that are associated with selected types of issues entrusted to a graduate of Geodesy and Cartography.		[SK5] Assessment of ability to solve problems that arise in practice		

Subject contents	To achieve a minimum of four topics:  measurement situation and altitude (for investments linear and area), the assumption matrix metering, setting and measuring the warp implementation, measurement engineering structures, setting an object on the ground, the measurement of post-completion, measurement control points in detail, preparation and conduct of division of property, keeping a register of land and buildings , control measures, monitoring of construction works, construction laser scanning, photogrammetry development stereogram images, preparation and photogrammetric measurement matrix, preparation of maps, preparation of data for SIP, SIP modeling, geocoding objects, create algorithms surveying / geo, geo-building applications, analysis of source materials , the verification of the legal status of real estate / investments, development of technical documentation, the creation or analysis of tender documents for the work of surveying / mapping.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	conversation	60.0%	30.0%
	report	60.0%	70.0%
Recommended reading	Basic literature	Current legislation from the website of the Central Office of Geodesy and Cartography: <a href="http://www.gugik.gov.pl">http://www.gugik.gov.pl</a> and materials entrusted for analysis by the workplace/office where the internship is carried out.	
	Supplementary literature	no requirements	
	eResources addresses	Podstawowe <a href="https://pg.edu.pl/files/wilis/2021-07/21.06.2021_Regulamin%20praktyk%20zawodowych%20WILi%20na%20RW.docx">https://pg.edu.pl/files/wilis/2021-07/21.06.2021_Regulamin%20praktyk%20zawodowych%20WILi%20na%20RW.docx</a> - Regulations of internships with attachments (editable version). Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	<ul style="list-style-type: none"><li>• Paving of the building on the ground,</li><li>• Preparation and execution of situational-altitude measurement.</li><li>• Analysis of source materials for the division of property.</li><li>• Implementation of the development in the field of spatial information systems.</li><li>• The development of photogrammetric images using non-metric.</li><li>• The development of digital terrain model based on LiDAR data.</li></ul>		
Work placement	Field exercises		