GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Law and safety of flights, PG_00053256		
Field of study	Geodesy and Cartography		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2026/2027
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 Polish
Semester of study	5	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Marek Pszczoła	
	Teachers	dr hab. inż. Marek Pszczoła dr hab. inż. Paweł Burdziakowski	

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	15.0	0.0	0.0	0.0	45
	E-learning hours included: 0.0						
	eNauczanie source address: https://enauczanie.pg.edu.pl/2025/course/view.php?id=6714 Moodle ID: 6714 Prawo i bezpieczeństwo wykonywania lotów / WILiŚ / geodezja i kartografia / stacj. / st. 1 / sem. 5 / zima / 2026-2027 https://enauczanie.pg.edu.pl/2025/course/view.php?id=6714						

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	4.0	51.0	100

Subject objectives	The aim of the course is to provide students with knowledge regarding the legal basis for operating unmanned aerial vehicles.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W13] has knowledge and understands concepts in the field of non-technical conditions of engineering activities as well as occupational safety and health regulations in the profession of geodesy engineer	The student possesses knowledge of and makes use of legal acts concerning the performance of measurements using unmanned aerial vehicles.	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects
[K6_W06] has a well-grounded knowledge and understands geodesy concepts including the main methods of obtaining data about space togather with the surveying and computional methods, which from the one hand are compatible with the current legal status and from the other hand refer to measurements on the plane and cover the use of modern geodetic instruments, with taking into account the curvature of the Earth and the impact of gravity on the maner of measurements and results	The student possesses the knowledge and is able to apply the principles for the safe execution of geodetic measurements using unmanned aerial vehicles.	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects
[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 possesses the knowledge and skills required to practice as a surveying and cartografic engineer, specially in the area of conducting measurements using unmanned aerial vehicles. The student is able to perform a risk analysis related to the use of unmanned aerial vehicles in surveying operations.	[SK5] Assessment of ability to solve problems that arise in practice [SK2] Assessment of progress of work

Subject contents

Course content – lecture

Lecture:
1. Aviation regulations and administration
2. Unmanned flights in Polish airspace
3. Human factors in aviation
4. Airspace structure
5. Mitigating threats that may affect flight safety
6. Procedures for emergency and hazardous situations
7. Risk analysis

Course content – exercises

Exercises: 1. Unmanned flights in Polish airspace 2. Requirements to be met by unmanned aerial vehicles 3. Risk analysis.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Test based on lectures	50.0%	60.0%
Completion of exercise assignments	50.0%	40.0%

Recommended reading

Basic literature	1. Act of 3 July 2002 – Aviation Law (Journal of Laws of 2002, No. 130, item 1112, as amended) 2. Announcement of the Minister of Infrastructure of 3 July 2019 regarding the publication of the consolidated text of the Regulation of the Minister of Transport, Construction and Maritime Economy on the exclusion of the application of certain provisions of the Aviation Law to specific types of aircraft, and on the determination of conditions and requirements for the operation of such aircraft. 3. Commission Delegated Regulation (EU) 2019/945 of 12 March 2019 on unmanned aircraft systems and on third-country operators of unmanned aircraft systems. 4. Commission Implementing Regulation (EU) 2019/947 of 24 May 2019 on the rules and procedures for the operation of unmanned aircraft.
Supplementary literature	Literature recommended by the instructor during class.
eResources addresses	

Example issues/ example questions/ tasks being completed

1. Discuss the structure of airspace. 2. Discuss the SORA risk assessment methodology. 3. Discuss the role of air traffic services.

Practical activites within the subject

Not applicable

Document generated electronically. Does not require a seal or signature.