

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Glight planning and planning 1		Code 1010601121010637513
Field of study Aerospace Engineering	Profile of study (general academic, practical) general academic	Year /Semester 1 / 2
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 1 Classes: - Laboratory: - Project/seminars: -		No. of credits 2
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 2 100% 2 100%
Responsible for subject / lecturer: dr inż. Krzysztof Szymaniec email: krzysztof.szymaniec@put.poznan.pl tel. +48 61 665 2604 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań		Responsible for subject / lecturer: dr hab. inż. Agnieszka Wróblewska email: agnieszka.wroblewska@put.poznan.pl tel. +48 784 698 595 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	in the field of general and air psychology, the essence and functioning of the cognitive, emotional and motivational processes of man [PRK4]
2	Skills	can apply the scientific method in solving problems [PRK4]
3	Social competencies	knows the limits of own knowledge and skills; can work in a group [PRK4]
Assumptions and objectives of the course: familiarize the student with the rules of planning and monitoring the flight in accordance with applicable regulations, development of operational flight plan and flight plan for air navigation services		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. has detailed knowledge related to selected issues in the field of flight rules, its preparation, as well as related operational procedures - [K1A_W17]		
2. has detailed knowledge related to selected issues in the area of the most important phenomena occurring in the Earth's atmosphere, the possibilities of their prediction, recognition, testing, as well as limiting the negative impact of human activity on the surrounding environment - [K1A_W14]		
Skills:		
1. has the ability to self-study using modern teaching tools, such as remote lectures, websites and databases, didactic programs, e-books - [K1A_U03]		
2. can use verbal communication in one additional foreign language at the level of everyday language, can describe issues in the field of the studied field of study in this language, can prepare technical documentation descriptively - drawing engineering, transport and / or logistic tasks - [K1A_U07]		
Social competencies:		
1. can interact and work in a group, taking on different roles in it - [K1A_K03]		
2. is able to properly define the priorities for the implementation of a task set by himself or others - [K1A_K04]		
Assessment methods of study outcomes		

written exam		
Course description		
<p>Mass and Balance, Center of Gravity, Loads, Mass of the empty aircraft, Mass of the aircraft ready for flight, Mass of the aircraft without fuel, Standard masses, Usable load (payload + consumable fuel), Aircraft mass checking, Requirements for re-weighing, Equipment lists, The effect of mass and balance on performance and pilot properties. Determining and practical use of data on takeoff and landing performance, during horizontal, elevational and shaft flight. Elaboration of a navigational plan, operational flight plan and flight plan for air traffic. Flight monitoring, changes to the in-flight plan</p>		
<p>Basic bibliography:</p> <ol style="list-style-type: none"> 1. Jeppesen EASA ATPL Mass and Balanc 2. Jeppesen EASA ATPL Flight Planning and Flight Monitoring 3. Aircraft Weight and Balance Handbook 4. Commission Regulation (EU) No 965/2012 of 5 October 2012 		
<p>Additional bibliography:</p>		
Result of average student's workload		
Activity	Time (working hours)	
Student's workload		
Source of workload	hours	ECTS
Total workload	50	2
Contact hours	18	1
Practical activities	0	0