

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Safety management systems		Code 1010601161010627752
Field of study Aerospace Engineering	Profile of study (general academic, practical) general academic	Year /Semester 3 / 6
Elective path/specialty Aircraft Transport	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: 1 Laboratory: - Project/seminars: -		No. of credits 3
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 %) 3 100% 3 100%
Responsible for subject / lecturer: dr inż. Piotr Smoczyński email: piotr.smoczynski@put.poznan.pl tel. +48616652841 Wydział Inżynierii Transportu ul. Piotrowo 3 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The student has a basic knowledge of aviation law, organizations in civil aviation, as well as quality management systems. The student knows the basics of mathematics, with particular emphasis on probability
2	Skills	The student is able to analyze complex processes: identify and describe their components.
3	Social competencies	The student is able to cooperate in a group, taking various roles in it. The student can determine the priorities important in solving the tasks set before him. Student demonstrates independence in solving problems, acquiring and improving acquired knowledge and skills.
Assumptions and objectives of the course: Transfer of knowledge and skills allowing for independent design of elements of safety management systems that meet the requirements of aviation organizations at the international, European and national level		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. The student has a structured, theoretically founded general knowledge covering key issues in the field of flight safety and risk assessment. - [K1_W12]		
2. The student has basic knowledge in the field of law, in particular the law on civil aviation, copyright and the protection of industrial property and its impact on the development of technology, can use the resources of patent information. - [K1_W25]		
Skills:		
1. The student is able to communicate using various techniques in the professional environment and other environments using the formal record of the structure, technical drawing, concepts and definition of the scope of the studied field of study - [K1A_U02]		
2. The student can acquire information from literature, the internet, databases and other sources. Can integrate the information obtained and interpret conclusions and create and justify opinions - [K1A_U04]		
Social competencies:		
1. The student is aware of the importance and understands the non-technical aspects and effects of engineering activities, including its impact on the environment, and the related responsibility for decisions - [K1_K02]		
2. The student is able to interact and work in a group, taking on different roles - [K1_K03]		

Assessment methods of study outcomes		
Written exam in a test form		
Course description		
History of safety management. Discussing the main stages in the development of safety engineering. Actual role of SMS in civil aviation (division of responsibility between EU and national offices, discussion of the main legal acts, requirements for safety management systems implemented in airlines, examples of implementation of requirements, supervision of ULC over entities, typical irregularities identified during the inspection). Scientific discussion on the problems of safety management systems.		
Basic bibliography:		
1. Annex 19 to the Convention on International Civil Aviation 2. Kadziński A., Studium wybranych aspektów niezawodności systemów oraz obiektów pojazdów szynowych, Wydawnictwo Politechniki Poznańskiej, Poznań 2013 ? rozdział 8		
Additional bibliography:		
1. Regulation (EC) No 216/2008 of the European Parliament and of the Council on common rules in the field of civil aviation and establishing a European Aviation Safety Agency (as amended) 2. Safety Management Manual (SMM), ICAO, wyd. 3, 2012		
Result of average student's workload		
Activity	Time (working hours)	
1. Preparation for classes	10	
2. Participation in classes (according to plan)	30	
3. Revision of the content of classes	20	
4. Preparation for the exam	13	
5. Participation in the exam	2	
Student's workload		
Source of workload	hours	ECTS
Total workload	75	3
Contact hours	30	1
Practical activities	15	1