

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Proseminar		Code 1010621261010624114
Field of study Transport	Profile of study (general academic, practical) (brak)	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: - Laboratory: - Project/seminars: -		No. of credits 1
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 1 100%
Responsible for subject / lecturer: Prof. Jerzy Merkisz, D.Sc, email: jerzy.merkisz@put.poznan.pl tel. 61 665 22 08 Faculty of Machines and Transport 3 Piotrowo street, 60-965 Poznan, Poland		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic knowledge of physics, mathematics, economics, of course subjects
2	Skills	Support basic computer programs MS Office, CAD, and others, depending on the interest of the research
3	Social competencies	Teamwork skills
Assumptions and objectives of the course: Theoretical and practical preparation for a thesis? engineering of each graduate student.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has a basic knowledge of what to do to solve a given problem - [[K1A_W14]]		
2. Has a basic knowledge related to the editing of texts containing the results of their analyzes and solutions - [[K1A_W16]]		
3. Has a wider knowledge of the issues in the field of air transport - [[K1A_W24]]		
Skills:		
1. Is able to identify the problem in the field of air transport. - [[K1A_U07]]		
2. Is able to analyze the cause and effect of the problem and propose a solution to - [[K1A_U08]]		
Social competencies:		
1. Understands the need for learning throughout life - [[K1A_K01]]		
2. Is aware of the importance and understand the business impact of non-technical engineer, particularly in terms of the impact of aviation on the environment. - [[K1A_K02]]		
Assessment methods of study outcomes		
The discussion in the class, using individual analyzes and studies undertaken in terms of student issues in the field of air transport. Jobs final.		
Course description		

<p>Structure of engineering : a method for analyzing the literature to determine the state of knowledge in the issue of a recognized subject of work , the formulation of the research problem (essential also work) , the presentation of research methodology (analytical , experimental) and their results, formulation of findings and conclusions . Quoting foreign studies . Overview (sequentially) implemented theses : the referring shall demonstrate knowledge of the latest developments in the field of science and technology (national and foreign publications) . General discussion on the topic of this work and accepted way of its implementation. General characteristics of the thesis. Formal requirements and editorial thesis. Structure and types of dissertations. Selection of literature. Development of source materials and links. Develop a plan of work. Subject , purpose timetable for implementation. The development of the research program. Model tests. Experimental studies . Simulation studies . Optimization and verification of test results. Preliminary reporting to work. Discussion of current performance. Draw conclusions . Second referencing work. Subject , the ultimate goal , the scope of work. Talk students. Notes to editors . The final presentation of the work. Preparation and development of guidelines for the thesis defense . Examination diploma seminar .</p>		
<p>Basic bibliography:</p> <ol style="list-style-type: none"> 1. Żylicz. M .Międzynarodowe prawo lotnicze , Lexis, Warszawa 2011 2. B. Branowski - Metody twórczego rozwiązywania problemów inżynierskich, Wielkopolska Korporacja Techniczna NOT, Poznań 1999 3. Lewitowicz J. (red) ? Problemy badań i eksploatacji techniki lotniczej. Wydawnictwo ITWL, Warszawa 2006. 		
<p>Additional bibliography:</p> <ol style="list-style-type: none"> 1. Zb. Kłós (red.) ? Rozprawy naukowe. Wydawnictwo Politechniki Poznańskiej, Poznań 2011 		
<p>Result of average student's workload</p>		
<p>Activity</p>	<p>Time (working hours)</p>	
1. Preparation for lectures	40	
2. Participation in lectures	15	
3. Office hours	10	
<p>Student's workload</p>		
<p>Source of workload</p>	<p>hours</p>	<p>ECTS</p>
Total workload	65	1
Contact hours	25	1
Practical activities	0	0