

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Passing Project</b>		Code <b>1010621261010624451</b>
Field of study <b>Transport</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>3 / 6</b>
Elective path/specialty <b>Aircraft Transport</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: - Classes: - Laboratory: - Project/seminars: <b>4</b>		No. of credits <b>6</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art <b>technical sciences</b>		ECTS distribution (number and %) <b>6 100%</b>
<b>Responsible for subject / lecturer:</b> Agnieszka Merkisz-Guranowska D.Sc. email: agnieszka.merkisz-guranowska@put.poznan.pl tel. 61 665 22 26 Faculty of Machines and Transport 3 Piotrowo street, 60-965 Poznan, Poland		<b>Responsible for subject / lecturer:</b> Jarosław Markowski D.Sc.Eng., Maciej Bajerlein D. Sc. Eng. email: jaroslaw.markowski@put.poznan.pl, maciej.bajerlein@put.poznan.pl tel. 61 665 27 05, 61 665 27 91 Faculty of Machines and Transport 3 Piotrowo street, 60-965 Poznan, Poland
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic knowledge of physics, mathematics, economics, major subjects.
2	<b>Skills</b>	Support basic computer programs MS Office, CAD, and others, depending on the interest of the research
3	<b>Social competencies</b>	Ability to work in a team.
<b>Assumptions and objectives of the course:</b> Getting acquainted with the methodology of solving engineering problems, based on selected issues of system and process in the field of air transport.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
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]		
<b>Skills:</b>		
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]		
<b>Social competencies:</b>		
1. Understands the need for learning throughout life - [K1A_K01] 2. Is aware of and understands the validity of the non-technical aspects and effects of engineering activities, including its impact on the environment and the associated responsibility for decisions - [K1A_K02]		
<b>Assessment methods of study outcomes</b>		
The discussion in the class, using individual analyzes and studies undertaken in terms of student issues in the field of air transport. Jobs final.		

<b>Course description</b>		
<p>The course is project-based. Classes are carried out in working groups where participants determine what they want the issue to be addressed. Students identify scientific field and isolate the problem area of ??the phenomena of the wider air transport, acting on the selected issue. Conduct an analysis of the issue of cause and effect and are looking for ways to resolve it. Program content contained in the wider field of air transport and are technical, organizational, logistical and economical.</p>		
<p><b>Basic bibliography:</b></p> <ol style="list-style-type: none"> <li>1. W. Cheda, M. Malski ? Techniczny poradnik lotniczy. Silniki. WKiŁ, Warszawa 1984</li> <li>2. . B. Branowski - Metody twórczego rozwiązywania problemów inżynierskich, Wielkopolska Korporacja Techniczna NOT, Poznań 1999</li> <li>3. Lewitowicz J. (red) ? Problemy badań i eksploatacji techniki lotniczej. Wydawnictwo ITWL, Warszawa 2006.</li> </ol>		
<p><b>Additional bibliography:</b></p> <ol style="list-style-type: none"> <li>1. Zb. Kłos (red.) ? Rozprawy naukowe. Wydawnictwo Politechniki Poznańskiej, Poznań 2011</li> </ol>		
<b>Result of average student's workload</b>		
Activity	Time (working hours)	
1. Preparing for classes	60	
2. Participation in classes	30	
3. Office hours	5	
<b>Student's workload</b>		
Source of workload	hours	ECTS
Total workload	95	6
Contact hours	35	2
Practical activities	60	4