

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Flight rules</b>		Code <b>1010601121010637511</b>
Field of study <b>Aerospace Engineering</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>1 / 2</b>
Elective path/specialty <b>-</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: <b>1</b> Classes: <b>1</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>		No. of credits <b>2</b>
Status of the course in the study program (Basic, major, other) <b>other</b>		(university-wide, from another field) <b>university-wide</b>
Education areas and fields of science and art <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>2 100%</b> <b>2 100%</b>
<b>Responsible for subject / lecturer:</b> mgr inż. Adam Wójcik email: awpka@wp.pl tel. +48 608 312 962 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań		<b>Responsible for subject / lecturer:</b> 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
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	in the field of aircraft control [PRK4]
2	<b>Skills</b>	can apply the scientific method in solving problems [PRK4]
3	<b>Social competencies</b>	knows the limits of own knowledge and skills; can work in a group [PRK4]
<b>Assumptions and objectives of the course:</b> familiarize the student with the operation of aircraft control systems		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. has detailed knowledge related to selected issues in the field of navigation and flight techniques and the use of flight simulators - [K1A_W16]		
2. has detailed knowledge related to selected issues in the field of flight rules, its preparation, as well as related operational procedures - [K1A_W17]		
<b>Skills:</b>		
1. can obtain information from literature, the internet, databases and other sources. Can integrate the information obtained and interpret conclusions and create and justify opinions - [K1A_U04]		
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]		
<b>Social competencies:</b>		
1. understands the need to learn throughout life; can inspire and organize the learning process of other people - [K1A_K01]		
2. can interact and work in a group, taking on different roles in it - [K1A_K03]		
3. able to properly define the priorities for the implementation of a task set by himself or others - [K1A_K04]		
<b>Assessment methods of study outcomes</b>		

<p>Lecture:          - assessment of knowledge and skills demonstrated on written exam</p> <p>Exercises classes:          - assessing the ability to solve accounting problems in the field of basic thermodynamics, colloquia during the semester</p>		
<b>Course description</b>		
<p>The aircraft as a control object. Aircraft quality indicators. Aircraft control in longitudinal motion. Aircraft control in lateral movement. Automatic landing systems. Active airplane control.</p>		
<p><b>Basic bibliography:</b></p> <p>1. Principles of Flight (JAR Ref 080). JAA ATPL Training. Germany 2004</p> <p>2. Podstawy Aerodynamiki i Mechaniki Lotu Abłamowicz A., Nowakowski W., Wydawnictwo Komunikacji i Łączności, Warszawa 1980</p> <p>3. Praktyczna aerodynamika i mechanika lotu samolotu odrzutowego, w tym wysokomanewrowego Milkiewicz A., Wydawnictwo ITWL, Warszawa 2009</p> <p>4. Podstawy eksploatacji statków powietrznych Lewitowicz J., Wydawnictwo Instytutu Technicznego Wojsk Lotniczych, Warszawa 2001</p>		
<p><b>Additional bibliography:</b></p>		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Participation in classes (according to plan)	30	
2. consultations	1	
3. Preparation for the exam / pass	16	
4. Participation in the exam / pass	2	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	49	2
Contact hours	33	1
Practical activities	15	1