

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>History of progress in aviation and cosmic</b>		Code <b>1010604111010607486</b>
Field of study <b>Aerospace Engineering</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>1 / 1</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>part-time</b>	
No. of hours Lecture: <b>9</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>		No. of credits <b>1</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>1 100%</b> <b>1 100%</b>
<b>Responsible for subject / lecturer:</b> dr inż. Wojciech Karpiuk email: wojciech.karpiuk@put.poznan.pl tel. 616475993 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań		<b>Responsible for subject / lecturer:</b> dr inż. Wojciech Karpiuk email: wojciech.karpiuk@put.poznan.pl tel. 616475993 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>	The student has the basic knowledge necessary to understand social, economic, legal and other non-technical conditions of engineering activities.
2	<b>Skills</b>	The student is able to obtain information from literature, databases and other, properly selected sources.
3	<b>Social competencies</b>	The student understands the need for lifelong learning, can inspire and organize the learning process of other people, understands the need and ability to self-education, shows the ability to work in a team.
<b>Assumptions and objectives of the course:</b> The aim of the course is to familiarize students with the history of aviation and astronautics in the direction of technical aspects		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. has a basic knowledge of the history of aviation and astronautics, especially aircraft and space engines, major events and figures that have contributed to the development of specific fields of science relevant to human development, as well as the latest trends in the construction of machinery and equipment - [T1A_W05]		
<b>Skills:</b> 1. has the ability to self-study using modern teaching tools, such as remote lectures, websites and databases, didactic programs, e-books - [T1A_U01, T1A_U05] 2. can obtain information from literature, the Internet, databases and other sources. Can integrate the information obtained and interpret conclusions and create and justify opinions - [T1A_U01, T1A_U05]		
<b>Social competencies:</b> 1. understands the need to learn throughout life; can inspire and organize the learning process of other people - [T1A_K01] 2. 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 - [T1A_K02]		
<b>Assessment methods of study outcomes</b>		
Completion of the subject - one-choice test		

<b>Course description</b>		
The earliest attempts, aviation pioneers - the first engine flights, airships, World War I, the beginnings of aviation, inter-war aviation, World War II, jets, rotorcraft, air force 1945 - 1960, bomber time, cold war 1960 - 1990, transport aviation after 1960 , advances in cosmonautics, military aviation		
<b>Basic bibliography:</b>		
1. Historia lotnictwa, od maszyny latającej Leonarda da Vinci do podboju kosmosu - Riccardo Niccoli		
2. Historia lotnictwa w Polsce - wielu autorów, wydawnictwo Carta blanca		
3. Historia Lotnictwa. Od Pierwszych Dwupłatowców Po Podbój Kosmosu - David Simons		
<b>Additional bibliography:</b>		
1. Dzieje lotnictwa - Jim Winchester		
2. Historia lotnictwa - Robert Jackson		
3. FDR and Civil Aviation - Alan P. Dobson		
<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Participation in the lecture	9	
2. Consultations	3	
3. Preparation for passing	7	
4. Participation in the completion of the subject	1	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	20	1
Contact hours	13	1
Practical activities	0	0