

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject History of progress in aviation and cosmic		Code 1010601111010607486
Field of study Aerospace Engineering	Profile of study (general academic, practical) general academic	Year /Semester 1 / 1
Elective path/specialty -	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) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 1 100% 1 100%
Responsible for subject / lecturer: dr inż. Wojciech Karpiuk email: wojciech.karpiuk@put.poznan.pl tel. 616475993 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań		Responsible for subject / lecturer: dr inż. Wojciech Karpiuk email: wojciech.karpiuk@put.poznan.pl tel. 616475993 Faculty of Transport Engineering ul. Piotrowo 3 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The student has the basic knowledge necessary to understand social, economic, legal and other non-technical conditions of engineering activities.
2	Skills	The student is able to obtain information from literature, databases and other, properly selected sources.
3	Social competencies	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.
Assumptions and objectives of the course: The aim of the course is to familiarize students with the history of aviation and astronautics in the direction of technical aspects		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 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]		
Skills: 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]		
Social competencies: 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]		
Assessment methods of study outcomes		
Completion of the subject - one-choice test		

Course description		
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		
Basic bibliography:		
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		
Additional bibliography:		
1. Dzieje lotnictwa - Jim Winchester		
2. Historia lotnictwa - Robert Jackson		
3. FDR and Civil Aviation - Alan P. Dobson		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in the lecture	15	
2. Consultations	3	
3. Preparation for passing	10	
4. Participation in the completion of the subject	1	
Student's workload		
Source of workload	hours	ECTS
Total workload	29	1
Contact hours	19	1
Practical activities	0	0