STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Flight rules		**1010604121010637511**

Field of study	Profile of study (general academic, practical)	Year /Semester
Aerospace Engineering	**general academic**	**1 / 2**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
-	**Polish**	**obligatory**

Cycle of study:	Form of study (full-time,part-time)
First-cycle studies	**part-time**

No. of hours				No. of credits
Lecture: **9**	Classes: **9**	Laboratory: **-**	Project/seminars: **-**	**2**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
other	**university-wide**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**2 100%**
Technical sciences	**2 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student has knowledge in the field of aircraft control [PRK4]
2	**Skills**	Student can apply the scientific method in solving problems [PRK4]
3	**Social competencies**	Student knows the limits of own knowledge and skills; can work in a group [PRK4]

Assumptions and objectives of the course:

-- familiarize the student with the operation of aircraft control systems

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. Student has detailed knowledge related to selected issues in the field of navigation and flight techniques and the use of flight simulators - [[K1A_W16]]
2. Student has detailed knowledge related to selected issues in the field of flight rules, its preparation, as well as related operational procedures - [[K1A_W17]]

Skills:

1. Student is able to obtain information from literature, the internet, databases and other sources. Is able to integrate the obtained information, interpret and draw conclusions from them and create and justify opinions - [[K1A_U04]]
2. Student is able to use verbal communication in one additional foreign language at the level of everyday language, can describe the issues in the field of the studied field of study in this language, can prepare technical documentation descriptively? drawing of an engineering, transport and / or logistic task - [[K1A_U07]]

Social competencies:

1. Student understands the need to learn throughout life; can inspire and organize the learning process of other people - [[K1A_K01]]
2. Student is able to interact and work in a group, assuming different roles in it - [[K1A_K03]]
3. Student is able to properly determine the priorities for the implementation of the task set by himself or others - [[K1A_K04]]

Assessment methods of study outcomes

Lecture:

- assessment of knowledge and skills demonstrated on written exam exercises:
- checking the preparation (knowledge) for classes,
- rewarding knowledge gained during previous exercises,
- assessment of knowledge and skills shown in the written test - colloquium.

Course description

-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.

Basic bibliography:

1. Principles of Flight (JAR Ref 080). JAA ATPL Training. Germany 2004
2. Podstawy Aerodynamiki i Mechaniki Lotu Abłamowicz A.. Nowakowski W., Wydawnictwo Komunikacji i Łączności, Warszawa 1980
3. Praktyczna aerodynamika i mechanika lotu samolotu odrzutowego, w tym wysokomanewrowego Milkiewicz A.. Wydawnictwo ITWL, Warszawa 2009
4. Podstawy eksploatacji statków powietrznych Lewitowicz J., Wydawnictwo Instytutu Technicznego Wojsk Lotniczych, Warszawa 2001

Additional bibliography:

Result of average student's workload

Activity	Time (working hours)
1. Participation in classes (according to plan)	0
2. Consultations	0
3. Preparation for the exam / pass	0
4. Participation in the exam / pass	0

Student's workload

Source of workload	hours	ECTS
Total workload	49	2
Contact hours	33	1
Practical activities	15	1