

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name				
Flying Technique				
Course				
Field of study		Year/Semester		
Aviation		3/6		
Area of study (specialization)		Profile of study		
Flight Training For Civil Aviation		general academic		
Level of study		Course offered in		
First-cycle studies		polish		
Form of study		Requirements		
full-time		compulsory		
Number of hours				
Lecture	Laboratory classe	s Other (e.g. online)		
Tutorials	Projects/seminars			
50				
Number of credit points				
5				
Lecturers				
Responsible for the course/lecturer: mgr pil. Wojciech Nowaczyk		Responsible for the course/lecturer: mgr pil. Tomasz Zdziarski		
Wydział Inżynierii Środowiska i Energetyki		Wydział Inżynierii Środowiska i Energetyki		
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### Prerequisites

The student starting this subject should have basic knowledge of airframe assemblies, control systems, hydraulic, pneumatic, fuel, air-conditioning and emergency systems. He should also have the ability to apply the scientific method in solving problems and be ready to cooperate within a team.

#### **Course objective**

Construction and operation principles of an aviation simulator. VFR day flights. IFR day flights. Instrument approach for landing. Navigating the aircraft based on instrument readings and groundbased radio navigation devices. Assessment of the situation and appropriate action in specific situations during the flight. Rules of conducting radio correspondence.

**Course-related learning outcomes** Knowledge



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1. has detailed knowledge related to selected issues in the field of navigation, flight mechanics and piloting techniques, the use of simulators, flight rules, its preparation, and related operating procedures

2. the student has knowledge of aviation safety and management. The student knows the concept of the human factor and methods of assessing human reliability, has detailed knowledge related to selected issues in the field of human capabilities and limitations during aircraft operation in flight, its impact on health and the ability to perform air operations, as well as the possibility of improving physical condition

3. has detailed knowledge related to selected issues in the field of construction of aircraft propulsion systems and the design of their components as well as their life cycles and principles of technical description

4. has the ability to self-study with the use of modern teaching tools, such as remote lectures, websites and databases, teaching programs, e-books

5. has a basic knowledge of the mechanisms and laws governing human behavior and psyche

### Skills

1. is able to obtain information from various sources, including literature and databases, both in Polish and in English, integrate them properly, interpret them and make a critical evaluation, draw conclusions and exhaustively justify the opinions they formulate

2. is able to properly use information and communication techniques, applicable at various stages of the implementation of aviation projects

3. can see legal aspects in the process of formulating and solving tasks in air transport, in particular, use the aspects of European and national aviation law regulations

4. can assess - at least in a basic scope - various aspects of the risk associated with a logistics undertaking in air transport

5. is able to organize, cooperate and work in a group, assuming various roles in it, and is able to properly define priorities for the implementation of a task set by himself or others

6. is able to plan and implement the process of own permanent learning and knows the possibilities of further education (2nd and 3rd degree studies, postgraduate studies, courses and exams conducted by universities, companies and professional organizations)

### Social competences

1. is aware of the importance of knowledge in solving engineering problems and knows examples and understands the causes of faulty engineering projects that have led to serious financial and social losses, or to a serious loss of health and even life

2. is able to think and act in an entrepreneurial way, incl. finding commercial applications for the created system, bearing in mind not only the business benefits, but also the social benefits of the activity



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3. is aware of the social role of a technical university graduate, in particular understands the need to formulate and provide the society, in an appropriate form, with information and opinions on engineering activities, technological achievements, as well as the achievements and traditions of the engineer profession

4. correctly identifies and resolves dilemmas related to the profession of an aerospace engineer

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows: Exercises:

 - knowledge acquired as part of the exercises is verified by two 45-minute colloquia carried out in 3 and 7 classes

#### **Programme content**

Exercises:

semester 6:

Preparation for MEP (L) Stage 4 Task 3 and 4

ME - in accordance with the Training Manual - ATP Integrated Training

ME IR - in accordance with the Training Manual - ATP Integrated Training

NEW KSA

Summative assessment 2

Preparation for UPRT Step 5

UPRT - in accordance with the Training Manual - ATP Integrated Training

#### **Teaching methods**

Exercises: examples given on the board and performance of tasks given by the teacher - practical exercises.

#### **Bibliography**

Basic

Additional



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### Breakdown of average student's workload

	Hours	ECTS
Total workload	132	5,0
Classes requiring direct contact with the teacher	70	3,0
Student's own work (literature studies, preparation for written test) <sup>1</sup>	62	2,0

<sup>&</sup>lt;sup>1</sup> delete or add other activities as appropriate