COURSE DESCRIPTION CARD - SYLLABUS

Course name
Flying technique 5 [S1Lot2-PSPL>TPiSL5]

Course

Field of study
Aviation

Year/Semester
4/7

Area of study (specialization)
Aircraft Piloting

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
35

Projects/seminars
0

Number of credit points

4,00

Coordinators

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Lecturers

Prerequisites

A student starting this subject should have basic knowledge of airframe assemblies, control systems, hydraulics, pneumatics, fuel, air conditioning, emergency systems. They should also have the ability to apply the scientific method to solve problems and be willing to cooperate within a team.

Course objective

Construction and principles of operation of a flight simulator. Daytime VFR flights. Daytime IFR flights. Approach to landing according to instrument indications. Navigating the aircraft based on indications of instruments and ground-based radio navigation means. Assessment of the situation and proper action in specific situations during flight. Principles of conducting radio correspondence.

Course-related learning outcomes

Knowledge:
1. 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
2. has the ability to self-educate using modern teaching tools, such as remote lectures, Internet sites and

databases, teaching programs, e-books

Skills:
1. is able to obtain information from various sources, including literature and databases, both in Polish and English, integrate it properly, interpret and critically evaluate it, draw conclusions, and exhaustively justify the opinions he formulates
2. is able to appropriately use information and communication techniques, which are used at various stages of the implementation of aviation projects
3. is able to see legal aspects in the process of formulating and solving air transport tasks, in particular to use aspects of European and national aviation law
4. is able to assess - at least to a basic extent - various aspects of risk associated with a logistics project in air transport
5. is able organize, cooperate and work in a group, assuming different roles in it and is able to properly define priorities for the implementation of a task defined by himself or others
6. is able to plan and implement the process of his own permanent learning and knows the possibilities of further education (second and third degree studies, postgraduate studies, courses and exams conducted by universities, companies and professional organizations)

Social competences:
1. is able to think and act in an entrepreneurial manner, including finding commercial applications for the system being created, taking into account not only the business benefits but also the social benefits of the conducted activity
2. is aware of the social role of a graduate of a technical university, in particular understands the need to formulate and communicate to the public, in an appropriate form, information and opinions on engineering activities, technical achievements, as well as the achievements and traditions of the engineering profession
3. correctly identifies and resolves dilemmas related to the performance of the profession of an aviation and astronautics engineer

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture:
- assessment of knowledge and skills demonstrated in the written test - 1.5 hours

Programme content

Exercises:
Semester 7:
Preparation for APS MCC
MCC - according to the Training Instructions - ATP Integrated Training

Course topics

1. Introduction to the APS MCC concept
2. Crew cooperation theory and practice
3. Risk management and crew decision-making
4. Cockpit communication
5. Multi-person aviation operational procedures
6. Emergency and crisis management
7. Crew fatigue and stress management
8. Cabin crew and air traffic control interactions
9. Emergency simulations and scenarios
10. Mutual expectations between crew members
11. Technologies supporting cooperation in the cockpit
12. Flight termination and reporting

Teaching methods

1. Exercises: examples given on the board and implementation of tasks given by the instructor - practical exercises.

Bibliography

Basic:
• “The Pilot's Manual: Flight School” - The Pilot's Manual Series
• “Cockpit Confidential: Everything You Need to Know About Air Travel” - Patrick Smith
Supplementary
• “The Complete Pilot: Everything You Need to Know to Become a Successful Pilot” - Bob Gardner

Additional:
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Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	55	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	62	2,00