POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Flight planning and monitoring 1 [S1Lot2>WiPL1]

Course

Field of study Year/Semester

Aviation 1/2

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other 0

15

Tutorials Projects/seminars

0

Number of credit points

1.00

Coordinators Lecturers

mgr inż. Tomasz Górzeński

Prerequisites

A student starting this subject should have basic knowledge of flight planning. They should also have the ability to apply the scientific method to problem solving and be willing to work as part of a team.

Course objective

Familiarizing the student with the principles of flight planning and monitoring in accordance with applicable regulations, developing an operational flight plan and a flight plan for air navigation services.

Course-related learning outcomes

Knowledge:

- 1. has detailed knowledge related to selected issues in the scope of the most important phenomena occurring in the Earth's atmosphere, the possibilities of their prediction, recognition, research, as well as limiting the negative impact of human activity on the surrounding environment.
- 2. has basic knowledge regarding environmental protection in transport, is aware of the threats related to environmental protection and understands the specificity of the impact of mainly air transport on the environment and the social, economic, legal and other non-technical conditions of engineering activities.
- 3. has basic knowledge regarding the mechanisms and laws governing the behavior and psyche of

humans.

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 comprehensively justify the opinions he/she formulates.
- 2. is able to, when formulating and solving tasks related to civil aviation, apply appropriately selected methods, including analytical, simulation or experimental methods.
- 3. is able to organize, cooperate and work in a group, assuming different roles in it, and is able to appropriately define priorities for the implementation of a task defined by himself/herself or others.

Social competences:

1. understands that in technology knowledge and skills become obsolete very quickly.

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

Lecture:

Flight planning for VFR flights. Flight planning for IFR flights. VFR and IFR navigation plan. Data concerning airspace, communications, visualization and radio navigation from VFR and IFR charts. General principles of fuel planning, total fuel for the flight, reserve fuel. Pre-flight preparation. ATS flight plan. Flight planning and in-flight re-planning. Purpose of considering mass and balance. Loads.

Course topics

Flight planning for VFR flights. Flight planning for IFR flights. VFR and IFR navigation plan. Data concerning airspace, communications, visualization and radio navigation from VFR and IFR charts. General principles of fuel planning, total fuel for the flight, reserve fuel. Pre-flight preparation. ATS flight plan. Flight planning and in-flight re-planning. Purpose of considering mass and balance. Loads.

Teaching methods

1. Lecture: multimedia presentation, illustrated with examples given on the blackboard.

Bibliography

Basic:

- 1. Flight planning and monitoring ATPL Ground Training Serie, Book Seven, EASA First Edition Revised for NPA 29
- 2. Mass and Balance, Performance ATPL Ground Training Serie, Book Six, EASA First Edition Revised for

NPA 29

Additional:

1. Flight Planning JAA ATPL Trainig, Jeppesen 2004

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,50