



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Flight planning and monitoring 2

Course

Field of study

Aviation

Area of study (specialization)

Flight Training For Civil Aviation

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/5

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

Number of hours

Lecture

15

Laboratory classes

15

Other (e.g. online)

Tutorials

Projects/seminars

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

mgr inż. Tomasz Duda

Responsible for the course/lecturer:

Prerequisites

The student starting this subject should have a basic knowledge of flight planning. He should also have the ability to apply the scientific method in solving problems and be ready to cooperate within a team.

Course objective

To acquaint the student with the rules of flight planning and monitoring in accordance with applicable regulations, developing an operational flight plan and flight plan for air navigation services.

Course-related learning outcomes

Knowledge

1. has detailed knowledge related to selected issues in the field of the most important phenomena occurring in the Earth's atmosphere, the possibility of their prediction, recognition, research, as well as limiting the negative impact of human activity on the surrounding environment
2. 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



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. can, 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 various roles in it, and is able to properly define priorities for the implementation of a task set by himself or others

Social competences

1. understands that in technology, knowledge and skills very quickly become obsolete
2. 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:

Lecture:

FUEL PLANNING — CAT.OP.MPA.106 and CAT.OP.MPA.150 plus AMC1, 2 and 3

General

Fuel planning (general)

Pre-flight fuel planning for commercial flights

Taxi fuel

Trip fuel

Reserve fuel and its components

Contingency fuel

Alternate fuel

Final reserve fuel

Additional fuel

Extra fuel

Calculation of total fuel and completion of the fuel section of the navigation plan (fuel plan)

Specific fuel-calculation procedures

Reduced contingency fuel procedure



Isolated aerodrome or heliport procedure

Predetermined-point procedure

Fuel-tankering

PRE-FLIGHT PREPARATION

Notice to airmen (NOTAM) briefing

Ground- and satellite-based facilities and services

Departure, destination and alternate aerodromes

Airway routings and airspace structure

Pre-flight preparation of GNSS achievability

Meteorological briefing

Update of navigation plan using the latest meteorological information

Update of fuel plan

Point of equal time (PET) and point of safe return (PSR)

Point of equal time (PET)

Point of safe return (PSR)

- assessment of knowledge and skills demonstrated on the written test - 1.5 hour

Exercises:

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

Laboratory exercises:

test and rewarding knowledge necessary to implement the problems posed in a given area of laboratory tasks,

assessment of knowledge and skills related to the implementation of the laboratory exercise,
assessment of the report on the performed exercise.

Programme content

Lecture:

semester 5:



Laboratory exercises:

semester 5:

Teaching methods

1. Lecture: multimedia presentation, illustrated with examples given on the board.
2. Exercises: examples given on the board and performance of tasks given by the teacher - practical exercises.

Bibliography

Basic

Additional

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for written tests) ¹	20	1,5

¹ delete or add other activities as appropriate