COURSE DESCRIPTION CARD - SYLLABUS

Course name
Flying Technique

Course

Field of study
Aerospace Engineering

Year/Semester
2/3-4; 3/5-6; 4/7

Area of study (specialization)

Profile of study
general academic

Level of study
First-cycle studies

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
30

Laboratory classes

Other (e.g. online)

Tutorials
90

Projects/seminars

Number of credit points

7

Lecturers

Responsible for the course/lecturer:
mgr pil. Wojciech Nowaczyk

Wydział Inżynierii Środowiska i Energetyki

email: wojciech.nowaczyk@put.poznan.pl

tel. +48 500 123 360

Responsible for the course/lecturer:
dr hab. inż. Agnieszka Wróblewska, prof.PP

Wydział Inżynierii Środowiska i Energetyki

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tel. 61 665 2201

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 ground-based 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

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

2. has extensive knowledge of technical vocabulary, in particular specialized terminology used in the departments of science and technology related to aviation engineering

3. has expanded knowledge necessary to understand profile subjects and specialist knowledge about construction, methods of construction, manufacture, operation, aircraft control, safety systems, economic, social and environmental impact in the field of aviation engineering for selected specialties:

1. Piloting of aircraft

2. Aero engines and airframes.

Skills

1. be able to use a language sufficient to understand technical texts in the field of aviation (knowledge of technical terminology)

2. can communicate using various techniques in a professional environment and other environments using the formal record of construction, technical drawing, concepts and definitions of the scope of the studied field of study.

3. can obtain information from literature, the Internet, databases and other sources. Is able to integrate obtained information, interpret and draw conclusions from them.

Social competences

1. Is aware of the importance of maintaining the principles of professional ethics

2. is able to properly set priorities for the implementation of the task specified by himself or others based on available knowledge

3. Understands the need for critical assessment of knowledge and continuous learning.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture:

- 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 (semester 4 and 7) and by two 45-minute colloquia carried out in 7 and 15 classes (semester 5 and 6)

Programme content

Lecture:

in accordance with the training instructions

exercises:

in accordance with the training instructions

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

EASA regulations

Additional

EASA regulations

Breakdown of average student's workload

	Hours	ECTS
Total workload	175	7,0
Classes requiring direct contact with the teacher	140	5,6
Student's own work (literature studies, preparation for written test) [1]	35	1,4

[1] delete or add other activities as appropriate