



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Air transport

### Course

Field of study

Aerospace Engineering

Area of study (specialization)

–

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

2/4

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

### Number of hours

Lecture

18

Laboratory classes

0

Other (e.g. online)

0

Tutorials

9

Projects/seminars

9

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

Marta Galant-Gołębiewska, BEng, PhD

email: [marta.galant@put.poznan.pl](mailto:marta.galant@put.poznan.pl)

tel. +4861 665 2252

Faculty of Civil and Transport Engineering

ul. Piotrowo 3 60-965 Poznań

Responsible for the course/lecturer:

Monika Ginter BEng, MSc

email:

[monika.t.kardach@docotrate.put.poznan.pl](mailto:monika.t.kardach@docotrate.put.poznan.pl)

tel: 61 665 2791

Faculty of Civil and Transport Engineering

ul. Piotrowo 3 60-965 Poznań

### Prerequisites

The student knows the basics of economics and aviation law. He speaks Polish and English to the extent that he can read the legal acts in the field of aviation in both these languages. He knows the basics of mathematics and statistical analysis.

### Course objective

The aim of the course is to familiarize students with the characteristics of air transport and its functioning in Poland and in the world. Clarification of the share of individual subsystems in the aviation industry. Explanation of basic terminology, description of individual elements of the air transport system. Case study related to the organization of air transport.



## Course-related learning outcomes

### Knowledge

has extended knowledge necessary to understand the profile subjects as well as specialist knowledge about the construction, operation, air traffic management, safety systems, the impact on the economy, society and the environment in the field of aviation and space [K2A\_W01]

has detailed and structured knowledge in the field of the use of air technical facilities in the field of passenger, goods, dangerous goods transport, as well as in the management of air operations and airports [K2A\_W23]

### Skills

is able to communicate using various techniques in the professional environment and other environments using the formal notation of a construction, technical drawing, concepts and definitions of the scope of the field of study [K2A\_W02]

has the ability to formulate tasks in the field of transport engineering and their implementation using at least one of the popular computer tools [K2A\_U19]

### Social competences

is aware of the social role of a technical university graduate, and especially understands the need to formulate and transmit to the society, in particular through the mass media, information and opinions on technological achievements and other aspects of engineering activities; makes efforts to provide such information and opinions in a commonly understandable manner [K2A\_K08]

understands the need for lifelong learning; can inspire and organize the learning process of other people [K2A\_K01]

is aware of the importance of professional behavior, compliance with the rules of professional ethics and respect for the diversity of cultures [K2A\_K09]

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Written exam (lecture).

Colloquium of exercises in the form of a test.

A short presentation on the completed project.

## Programme content

1. Introduction to air transport
2. Airplane (types, manufacturers, fuels)
3. Airlines (strategies, alliances, network of connections)
4. Airports



- 5. Flight control
- 6. Legal conditions
- 7. Aviation and the environment

**Teaching methods**

Informative (conventional) lecture (providing information in a structured way) - may be of a course (introductory) or monographic (specialist) character

The exercise method (subject exercises, practice exercises) - in the form of auditorium exercises (application of acquired knowledge in practice - may take various forms: solving cognitive tasks or training psychomotor skills; transforming a conscious activity into a habit through repetition)

Project method (individual or team implementation of a large, multi-stage cognitive or practical task, the effect of which is the creation of a work)

**Bibliography**

Basic

- 1. Rucińska D., Rynek usług transportowych w Polsce, Polskie Wydawnictwo Ekonomiczne, 2015.
- 2. Polkowska M., Międzynarodowe konwencje i umowy lotnicze oraz ich zastosowanie - zarys problematyki , Wydaw. AON 2004.
- 3. Koziarski S., Przekształcenia infrastruktury transportowej w Polsce, Wydaw. uniwersytetu opolskiego, 2010

Additional

- 1. Koziarski M., Polska w systemie transportowym Unii Europejskiej : inwestycje infrastrukturalne, Wydaw. uniwersytetu opolskiego, 2014.
- 2. Dzedzic T., Obsługa pasażerów lotniczych w erze nowych technologii informatycznych : wyzwania i nowe standardy, Wydawnictwo Grupy Uczelni Vistula, 2016.

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	40	2,0
Student's own work (literature studies, preparation for tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	35	1,0

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