



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Management and security management in the airline company

### Course

Field of study

Aerospace Engineering

Area of study (specialization)

Safety and Management of Aviation

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/6

Profile of study

general academic

Course offered in

Polish

Requirements

### Number of hours

Lecture

45

Laboratory classes

Other (e.g. online)

Tutorials

15

Projects/seminars

30

### Number of credit points

10

### Lecturers

Responsible for the course/lecturer:

dr hab. Marek Waligórski

email: [marek.waligorski@put.poznan.pl](mailto:marek.waligorski@put.poznan.pl)

tel. +48616652049

Civil and Transport Engineering

Piotrowo 3 Str., 60-965 Poznań

Responsible for the course/lecturer:

dr inż. Piotr Smoczyński

email: [piotr.smoczynski@put.poznan.pl](mailto:piotr.smoczynski@put.poznan.pl)

tel. +48616652841

Civil and Transport Engineering

Piotrowo 3 Str., 60-965 Poznań

### Prerequisites

**Knowledge:** The student has a basic knowledge of economic phenomena, including factors influencing the development of air transport and the specifics of making economic decisions, as well as aviation law and civil aviation organizations.

**Skills:** The student is able to associate and integrate obtained information, analyze phenomena occurring in the environment, draw conclusions, formulate and justify opinions, as well as analyze complex processes: identify and describe their components.



Social competences: The student is able to independently search for information in the literature, knows the rules of discussion and work in a group, and is able to set priorities important in solving the tasks set before them.

### Course objective

Understanding the specifics of the operation of air transport companies and the economics of their operation, with particular emphasis on knowledge and skills allowing for independent design of elements of safety management systems

### Course-related learning outcomes

#### Knowledge

1. Student knows the specifics of the functioning of air transport entities on the market
2. The student knows the types of competition strategies of enterprises and competition models of the air transport sector
3. The student has basic knowledge in the field of law, in particular civil aviation law

#### Skills

1. The student knows how to analyze enterprise strategies and interpret their activities
2. The student is able to put into practice the basic tools of strategic analysis
3. The student is able to obtain information from literature, the Internet, databases and other sources. Is able to integrate the information obtained, interpret and draw conclusions from them as well as create and justify opinions

#### Social competences

1. The student is able to apply the acquired knowledge for practical purposes in relation to the activities of companies involved in air transport
2. The student is aware of the importance and understands the non-technical effects of the engineer's activities in the field of multi-faceted impact of air transport

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lectures: assessment of students' activity during classes and a written exam on the material being processed

Tutorials: average note from tasks performed by students during the classes.

Project: evaluation of the final report

### Programme content

Lectures:

- 1 Basic concepts related to the management of an aviation company.



- 2 Strategic analysis. The goal of strategic analysis. Division, characteristics and application of strategic analysis tools.
- 3 Business strategies. Division and characteristics of the basic types of strategies.
- 4 The influence of the environment on the functioning of TL enterprises. Market models in the transport sector.
- 5 Competition strategies and the specificity of the operation of air carriers and producers of transport means.
- 7 Economic and financial analysis of aviation companies.
- 8 Safety management systems (SMS). History, purpose of implementation, components. Safety procedures and safety culture as driving forces for SMS.
- 9 Requirements for safety management systems implemented in aviation companies, examples of requirements implementation, way of supervising over entities, typical non-compliances identified during inspections.

**Tutorials:**

- 1 Application of business environment analysis tools: development of the Porter model and construction of a map of strategic groups.
- 2 Analysis and evaluation of competition strategies of selected sector entities.
- 3 Development of a SWOT analysis for a selected aviation sector enterprise.
- 4 Economic and financial analysis of the activities of aviation companies.

**Project:**

Business plan of an airline company

Sample SMS procedures

**Teaching methods**

Informative (conventional) lecture (transfer of information in a systematic way) - can be of course (propedeutical) or monographic (specialist)

The exercise method (subject exercises, exercises) - in the form of auditorium exercises (the use of acquired knowledge in practice - can take a different nature: solving cognitive tasks or training psychomotor skills; transforming 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. Annex 19 to the Convention on International Civil Aviation

### Additional

1. Safety Management Manual (SMM), ICAO, 3rd Edition, 2012
2. Dekker S, The Safety Anarchist. Relying on human expertise and innovation, reducing bureaucracy and compliance, Routledge, 2017, ISBN 978-1138300460

## Breakdown of average student's workload

	Hours	ECTS
Total workload	300	10,0
Classes requiring direct contact with the teacher	90	3,0
Student's own work (literature studies, preparation for tutorials, preparation for tests and exam, project preparation) <sup>1</sup>	210	7,0

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