### POZNAN UNIVERSITY OF TECHNOLOGY



### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

**Airports** 

Course

Field of study Year/Semester

Aerospace Engineering 1/2

Area of study (specialization) Profile of study

Level of study Course offered in

general academic

First-cycle studies polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

0 0

Tutorials Projects/seminars

0 15

**Number of credit points** 

4

**Lecturers** 

Responsible for the course/lecturer: Responsible for the course/lecturer:

Marta Galant Marta Maciejewska

email: marta.galant@put.poznan.pl marta.r.maciejewska@doctorate.put.poznan.pl

tel. 61 665 2252 Faculty of Civil Engineering and Transport

Faculty of Civil Engineering and Transport ul. Piotrowo 3, 60-965 Poznań

ul. Piotrowo 3, 60-965 Poznań

**Prerequisites** 

Knowledge: Basic knowledge of the English language, understanding of basic issues related to transport

logistics

Skills: Acquiring knowledge with understanding.

Social competences: Is prepared for teamwork.

**Course objective** 

Getting to know the basic sources of aviation law, conventions, applicable regulations.

**Course-related learning outcomes** 

Knowledge

# POZNAN UNIVERSITY OF TECHNOLOGY



# EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

- 1. has extended knowledge necessary to understand the profile subjects and specialist knowledge about the construction, operation, air traffic management, safety systems, impact on the economy, society and the environment in the field of aviation and aerospace [P7S\_WG, P7S\_WK, K2A\_W01]
- 2. has detailed knowledge related to selected issues in the field of ground handling of aircraft and propulsion systems, including logistics aspects [P7S\_WG, K2A\_W19]
- 3. has detailed and structured knowledge in the field of the use of air technical facilities in the field of passenger, goods and dangerous goods transport, as well as in the management of air operations and airports [P7S WG, K2A W23]

#### Skills

1. Can communicate using various techniques in the professional and other environments, using the formal notation of the structure, technical drawing, concepts and definitions of the scope of the studied field of study [7S UK, K2A U02]

### Social competences

- 1. Understands the need for lifelong learning; can inspire and organize the learning process of other people [P7S\_UU, K2A\_K01]
- 2. Is ready to critically evaluate the knowledge and content received, recognize the importance of knowledge in solving cognitive and practical problems and consult experts in the event of difficulties with solving the problem on its own [P7S KK, K2A K02]
- 3. is aware of the social role of a technical university graduate, and especially understands the need to formulate and convey to the society, in particular through the mass media, information and opinions on the achievements of technology and other aspects of engineering activities; makes efforts to provide such information and opinions in a commonly understandable manner [P7S KO, K2A K08]

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

a final test covering the material discussed submission and defense of the project at the end of the semester

### **Programme content**

- 1. Introduction (airport origins, key definitions, airport identification methods)
- 2. Airport infrastructure (structure and elements of the movement area, PRN horizontal and vertical markings, light and technical aids and apron lighting)
- 3. Terminals and ground handling (terminal classification, main elements, design principles, terminal configurations, passenger and baggage handling)
- 4. Polish airports and air traffic (statistics, configurations, locations)
- 5. Airspace in the vicinity of airports and airport navigation aids

### POZNAN UNIVERSITY OF TECHNOLOGY



### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

- 6. Designing the movement area
- 7. Airport capacity
- 8. Impact, airport design, location (airport pressure zone, airport profit structure, environmental regulations regarding the establishment of airports)
- 9. Key airports in the world statistics, analyzes

### **Teaching methods**

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

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. Żylicz. M. International Aviation Law, Lexis, Warsaw 2011
- 2. Compa.M. Airspace capacity. WLOP Deblin 2009
- 3. ICAO Annexes
- 4. Chakuu S., Kozłowski P., Nędza M .: Basics of air transport, Academic Consortium, Kraków, Rzeszów, Zamość 2012
- 5. Nita S. Designing airfield and Airports, 2014
- 6. Kozłowski M., Airports infrastructure, operation and management, Warsaw, 2015

#### Additional

- 1. Training materials, Internal of the Polish Air Navigation Services Agency
- 2. Rydzkowski W., Wojewódzka-Król K. (ed.): Transport. PWN, Warsaw 1998

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	55	2,0

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