



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Airports infrastructure [S2LiK2P>IPL]

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### Course

Field of study

Aerospace Engineering

Year/Semester

1/2

Area of study (specialization)

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Profile of study

practical

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

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### Number of hours

Lecture

30

Laboratory classes

15

Other

0

Tutorials

0

Projects/seminars

0

### Number of credit points

2,00

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### Coordinators

Daniel Korkozowicz

### Lecturers

### Prerequisites

Knowledge: Basic knowledge of the English language, understanding of basic issues related to air transport Skills: Acquiring knowledge with understanding. Social competences: Is prepared for teamwork.

### Course objective

To acquaint students with the construction and structure of airports.

### Course-related learning outcomes

Knowledge:

1. Has an orderly, theoretically founded general knowledge covering key issues in the field of the impact of aviation on the natural environment, emission of toxic compounds from aircraft propulsion, acoustic emission of flying objects.

Skills:

1. understands the need for lifelong learning; can inspire and organize the learning process of other people

Social competences:

1. 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 case of difficulties in solving the problem on its own

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: final test covering the discussed material

Laboratory: grade average for theoretical preparation for classes and reports

Project: execution of subsequent phases of the project and its defense at the end of the semester

### Programme content

1. Key definitions of airports, methods of identifying airports, sources of law
2. Airport infrastructure - structure and elements of the movement area, horizontal and vertical markings of PRN, light and technical navigation aids and apron lighting)
3. Terminals and ground handling - terminal classification, main elements, design principles, terminal configurations, passenger and baggage handling)
5. Airspace in the vicinity of airports and airport navigation aids
6. Designing the movement area
7. Airport capacity
8. Airport pressure zone, airport profit structure, environmental regulations for establishing airports)
9. Airport safety and security
10. Key airports in the world - statistics, analyzes
11. The impact of airports - noise and exhaust emissions, impact on the development of the region
12. Airport performance - overview of the basic indicators used to evaluate the performance of airports
13. Central Communication Port - discussion of issues related to planning and implementation
14. Certification of airports

### Course topics

none

### Teaching methods

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

Laboratory (experiment) method (students conduct experiments independently)

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

### Bibliography

Basic:

1. Żylicz. M. Międzynarodowe prawo lotnicze , Lexis, Warszawa 2011
2. Compa.M . Przepustowość przestrzeni powietrznej. WLOP Dęblin 2009
3. Aneksy ICAO
4. Chakuu S., Kozłowski P., Nęcza M.: Podstawy transportu lotniczego, Konsorcjum Akademickie, Kraków, Rzeszów, Zamość 2012
5. Niła S. Projektowanie lotnisk i portów lotniczych, 2014
6. Kozłowski M., Porty lotnicze - infrastruktura, eksploatacja i zarządzanie, Warszawa, 2015

Additional:

1. Materiały szkoleniowe, wewnętrzne Polskiej Agencji Żeglugi Powietrznej
2. Rydzkowski W., Wojewódzka-Król K. (red.): Transport. PWN, Warszawa 1998

### Breakdown of average student's workload

	Hours	ECTS
Total workload	65	2,00
Classes requiring direct contact with the teacher	35	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00