



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar

### Course

Field of study

Aviation

Area of study (specialization)

Air Transport Safety

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

4/7

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

15

Projects/seminars

0

### Number of credit points

1

### Lecturers

Responsible for the course/lecturer:

prof. dr hab. inż. Krzysztof Wiślocki

Responsible for the course/lecturer:

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Wydział Inżynierii Lądowej i Transportu

ul. Piotrowo 3 60-965 Poznań

### Prerequisites

Knowledge: Basic knowledge of physics, mathematics, economics, major subjects

Skills: Use of basic MS Office, CAD, and other computer programs depending on the interest and the problem taken

Social competences: the ability to formulate questions precisely; the ability to determine the priorities important in solving the tasks set before him; ability to formulate a research problem and search for its solution, independence in solving problems, ability to cooperate in a group

### Course objective

Theoretical and practical preparation for writing an engineering diploma thesis with each graduate student



### Course-related learning outcomes

#### Knowledge

1. has a basic knowledge of the mechanisms and laws governing human behavior and psyche

#### Skills

1. is able to obtain information from various sources, including literature and databases, both in Polish and in English, integrate them properly, interpret them and make a critical evaluation, draw conclusions and exhaustively justify the opinions they formulate

2. is able to properly use information and communication techniques, applicable at various stages of the implementation of aviation projects

3. is able to prepare a short research paper while maintaining the basic editorial rules. He can choose appropriate methods for the conducted research and is able to carry out a basic analysis of the results.

#### Social competences

1. understands that in technology, knowledge and skills very quickly become obsolete

2. correctly identifies and resolves dilemmas related to the profession of an aerospace engineer

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Discussion during the classes, with the use of individual analyzes and studies of the student on the issue in the field of air transport. Final work.

### Programme content

The structure of the engineering thesis: the way of analyzing the literature to determine the state of knowledge in the issue covered by the subject of the work, formulating the research problem (basic theses of the work), the way of presenting the research methodology (analytical, experimental) and their results, formulating observations and conclusions.

Rules for quoting foreign papers.

Discussion of (sequentially) completed diploma theses: the presenter should demonstrate knowledge of the latest achievements in a given field of science and technology (domestic and foreign publications).

General discussion on the topic of the presented work and the adopted method of its implementation.

General characteristics of the diploma thesis.

Formal and editorial requirements of the diploma thesis.

Structure and types of diploma theses.

Selection of literature.



Development of source materials and links.

Developing a work plan.

Subject, goal, implementation schedule.

Developing a research program.

Research model. Experimental research. Simulation studies.

Optimization and verification of test results.

Initial job reporting.

Discussion of the work results so far. Formulation of conclusions.

Second job report. Subject, final goal, scope of work. Student discussion. Editorial notes.

The final presentation of the work. Preparation and development of guidelines for the defense of the diploma thesis.

Completion of the diploma seminar.

### Teaching methods

Paper discussion (or after the lecture in the form of a seminar) (paper on the topic as a basis for discussion)

### Bibliography

Basic

. Żylicz. M .Międzynarodowe prawo lotnicze , Lexis, Warszawa 2011

2. B. Branowski - Metody twórczego rozwiązywania problemów inżynierskich, Wielkopolska Korporacja Techniczna NOT, Poznań 1999

3. Lewitowicz J. (red) Problemy badań i eksploatacji techniki lotniczej. Wydawnictwo ITWL, Warszawa 2006.

Additional

1. Zb. Kłós (red.) - Rozprawy naukowe. Wydawnictwo Politechniki Poznańskiej, Poznań 2011



### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	10	0,5

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