



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma thesis [S1Lot2-BTL>PD]

### Course

Field of study

Aviation

Year/Semester

4/7

Area of study (specialization)

Air Transport Safety

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

5

### Number of credit points

13,00

### Coordinators

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### Lecturers

### Prerequisites

Basic knowledge of physics, mathematics, economics, and major subjects. Basic computer programs MS Office, CAD, and others, depending on interest and the problem being addressed. Teamwork skills.

### Course objective

Familiarization with the methodology of solving engineering problems on the example of selected system and process issues in the field of air transport. Development of skills in creating scientific studies and texts.

### Course-related learning outcomes

Knowledge:

1. has knowledge of how to present research results in tabular and graph form, perform measurement uncertainty analysis
2. has basic knowledge of research methods and how to prepare and conduct scientific research, and knows the principles of editing a scientific paper
3. has the ability to self-educate using modern teaching tools, such as remote lectures, Internet sites and databases, teaching programs, e-books

#### Skills:

2. is able to properly use information and communication techniques that are used at various stages of the implementation of aviation projects
3. is able to properly plan and perform experiments, including measurements and computer simulations, interpret the obtained results, and correctly draw conclusions from them
4. the student is able to use theoretical probability distributions. The student is able to analyze and interpret statistical data. The student is able to apply the methods and tools of mathematical statistics in engineering practice
5. is able to prepare a short scientific paper, observing basic editorial principles. Is able to select appropriate methods for the research conducted and is able to conduct a basic analysis of the results.
6. is able to organize, cooperate and work in a group, assuming different roles in it and is able to appropriately determine priorities for the implementation of a task specified by himself or others

#### Social competences:

1. understands that in technology knowledge and skills very quickly become outdated
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:

Written work, formatted according to the template, covering a selected issue. The student selects and analyzes the topic in cooperation with the thesis supervisor, in the form of consultations. After identifying the problem and isolating the area of phenomena from the broadly understood air transport, a written study is carried out.

### Programme content

Cause-effect analysis of a selected problem, methodology for developing scientific papers, in-depth analysis of a selected issue. The program content is contained in the broadly understood field of air transport and has a technical, organizational, logistic and economic character.

### Course topics

Formulating research goals and problems. Thesis methodology. Literature review. Writing the introduction to the thesis. Writing conclusions and recommendations. Developing a bibliography and citing sources. Consulting with the supervisor. Editing and drafting the thesis. Preparing the thesis presentation. Guidelines for the defense of the thesis. Preparing the final version of the thesis. The ethics of the thesis

### 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:

-

Additional:

-

### Breakdown of average student's workload

	Hours	ECTS
Total workload	325	13,00
Classes requiring direct contact with the teacher	60	4,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	265	10,50