



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Air accident investigation [S1Lot2-BTL>BZL]

### 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

15

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

3,00

### Coordinators

dr inż. Anna Kobaszyńska-Twardowska

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### Lecturers

### Prerequisites

Knowledge: The student understands the process of managing the risk of threats. The student has knowledge on how to recognize sources of threats and formulate threats. The student has general knowledge on risk and methods of assessing the risk of threats and security systems. The student knows the basics of mathematics, with particular emphasis on probability calculation Skills: The student is able to recognize sources/factors of threats using forward and backward methods. Has the ability to formulate threats. The student is proficient in using a package of office computer programs. The student is able to analyze complex processes: identify and describe their components. Social competences: The student understands and accepts the need to introduce appropriate restrictions to social, transport and industrial systems, which can lead to improved safety of functioning of these systems. The student is able to manage the time available to perform the tasks indicated for implementation. The student is able to determine priorities important in solving the tasks assigned to him. The student demonstrates independence in solving problems, acquiring and improving acquired knowledge and skills.

## Course objective

Learning the goals, elements and structure of the state's internal security system. Learning the procedures and acquiring practical skills in applying threat risk management in areas related to aviation Course-related learning outcomes 1 Knowledge: 1. the student has knowledge of safety and management in aviation. The student knows the concept of the human factor and methods of assessing human reliability, has detailed knowledge related to selected issues in the field of human capabilities and limitations during aircraft operation in flight, its impact on health and ability to perform flight operations, as well as possibilities of improving physical condition Skills: 1. is able to properly plan and perform experiments, including measurements and computer simulations, interpret the obtained results, and correctly draw conclusions from them Social competences: 1. is aware of the importance of knowledge in solving engineering problems and knows examples and understands the causes of malfunctioning engineering projects that led to serious financial or social losses or serious loss of health or even life 2. is aware of the social role of a graduate of a technical university, in particular understands the need to formulate and communicate to the public, in an appropriate form, information and opinions regarding engineering activities, technical achievements, as well as the achievements and traditions of the engineering profession

## Course-related learning outcomes

Knowledge:

-

Skills:

-

Social competences:

-

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Written exam in test format

## Programme content

The enterprise and its functions in the economy  
Assessment of the efficiency of the market economy  
Challenges of the modern economy.  
Impact on the market and the enterprise.  
Organizational forms of enterprises  
Strategic management and strategic analysis  
Financial management of SMEs

## Course topics

Introduction to Aircraft Incident Investigation

- Basic Tools and Methods in Aircraft Incident Investigation
- Evidence Collection and Documentation in Aircraft Investigation
- Causes of Aircraft Incidents: Technical and Human Aspects
- Aircraft Incident Investigation Procedures
- Analysis and Reporting of Investigation Results
- Investigation of Aircraft Incidents and Accidents

## Teaching methods

Informative (conventional) lecture (transmission of information in a systematic way) - may be of a course (propaedeutic) or monographic (specialist) nature  
Project

## Bibliography

Basic:

-

Additional:

-

### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	45	2,00