# 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

Analyzes and simulations

**Course** 

Field of study Year/Semester

Aerospace Engineering 1/2

Area of study (specialization) Profile of study

practical

Level of study Course offered in

Second-cycle studies polish

Form of study Requirements

full-time elective

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

30 0 0

Tutorials Projects/seminars

15 15

**Number of credit points** 

4

**Lecturers** 

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

Artur Kinowski

email: artur.kinowski@pansa.pl

Polska Agencja Żeglugi Powietrznej

ul. Wieżowa 8 02-147 Warszawa

**Prerequisites** 

# **Course objective**

## **Course-related learning outcomes**

Knowledge

1. Has extended knowledge necessary to understand the profile subjects and specialist knowledge about the construction, methods of construction, production, operation, air traffic management, safety systems, impact on the economy, society and the environment in the field of aviation and cosmonautics [K2A\_W01]

## POZNAN UNIVERSITY OF TECHNOLOGY



# EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

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

- 2. Has an organized and theoretically founded knowledge of computer-aided manufacturing methods and their application in industry [K2A\_W09]
- 3. Has knowledge of how to develop research methodology [K2A W19]

#### Skills

- 1. Has the ability to self-educate with the use of modern teaching tools, such as remote lectures, websites and databases, teaching programs, e-books [K2A\_U03]
- 2. Can obtain information from literature, the Internet, databases and other sources. Can integrate the obtained information, interpret and draw conclusions from it, and create and justify opinions [K2A U04]
- 3. Can use formulas and tables, technical and economic calculations with the use of a spreadsheet, programming tools of his own authorship, specialized software [K2A\_U05]

#### 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 [K2A\_K02]
- 2. Is aware of the importance and understands the non-technical aspects and effects of engineering activities, including its impact on the environment, and the related responsibility for decisions made [K2A\_K03]

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: written exam (test)

#### **Programme content**

#### **Teaching methods**

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

Seminar lecture ("external dialogue" of the lecturer with the student; students participate in solving the problem)

## **Bibliography**

# POZNAN UNIVERSITY OF TECHNOLOGY



# EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

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

#### Basic

## Additional

- 1. Zarządzanie ruchem lotniczym w przestrzeni powietrznej RP, WLOP, Warszawa 2002.
- 2. Ustawa Prawo Lotnicze
- 3. Rucińska D., Ruciński A., Tłoczyński D., Transport lotniczy. Ekonomika i organizacja, Gdańsk 2012

# Breakdown of average student's workload

	Hours	ECTS
Total workload	105	4,0
Classes requiring direct contact with the teacher	70	3,0
Student's own work (literature studies, preparation for tutorials,	35	1,0
preparation for tests and exam, project preparation)) 1		

3

 $<sup>^{\</sup>rm 1}$  delete or add other activities as appropriate