



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Processing and presentation of results

### Course

Field of study

Aerospace Engineering

Area of study (specialization)

–

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

Profile of study

general academic

Course offered in

polish

Requirements

compulsory

### Number of hours

Lecture

15

Laboratory classes

15

Other (e.g. online)

0

Tutorials

0

Projects/seminars

15

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

dr inż. Remigiusz Jasiński

Responsible for the course/lecturer:

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Wydział Inżynierii Lądowej i Transportu

ul. Piotrowo 3

60-965 Poznań

### Prerequisites

Knowledge: The student has basic knowledge of mathematics and can use SI units,

Skills: The student is able to use the basic computer programs used in the processing and presentation of results,

Social competences: The student is able to work in a group and knows the rules of discussion,

### Course objective

The aim of the course is to familiarize the student with the rules of processing and presentation of scientific research results, to familiarize them with the correct form of data recording, the most important elements of the development of scientific results and their presentation.



### Course-related learning outcomes

#### Knowledge

1. has knowledge in the field of mathematics, including algebra, analysis, theory of differential equations, necessary for numerical solving of boundary problems, inverse problems, optimization, statistical analyzes
2. has basic knowledge necessary to understand social, economic, legal and other non-technical determinants of engineering activity
3. has knowledge of how to develop research methodology

#### Skills

1. Can communicate using various techniques in the professional and other environments, using the formal notation of construction, technical drawing, concepts and definitions of the field of study studied
2. has the ability to self-study with the use of modern didactic tools, such as remote lectures, internet websites and databases, teaching programs, e-books
3. Can obtain information from literature, the Internet, databases and other sources. Can integrate the obtained information, interpret and draw conclusions from it, as well as create and justify opinions
4. Can prepare and present a short verbal and multimedia presentation on the results of an engineering task

#### Social competences

1. Understands the need for lifelong learning; can inspire and organize the learning process of other people
2. 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 the event of difficulties with solving the problem on its own
3. Can think and act in an entrepreneurial manner

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

LECTURE: written exam from the content presented during the lecture

LABORATORIES: assessment of tickets and reports

PROJECT: assessment of individual parts of the project delivered throughout the course of the course and defense of the project at the end of the semester

### Programme content

Presentation, public appearances, appearances in front of the camera and the transformation of destructive stress into constructive, The art of effective and precise communication, Creativity, Talking



about complex things in an understandable way, Personal development, lifelong learning, Effective problem solving in practice; case studies, presentation of results using the MS Office suite, data acquisition and evaluation, the most important elements of graphs and presentations

### 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. Pomiary wielkości fizycznych : opracowanie i prezentacja wyników. Zofia Kolek. Wydawnictwo Uniwersytetu Ekonomicznego, Kraków, 2009.
2. Pomiar i przetwarzanie wyników badań w pedagogice empirycznej. Janusz Gnitecki ; Uniwersytet im. Adama Mickiewicza w Poznaniu. Wydawnictwo Naukowe UAM, 1992.
3. Komputer i pomiary : pomiary z użyciem Z-80 - nieskomplikowana analiza i przetwarzanie wyników / Hubert Joas ; z jęz. niem tł. Barbara Szatyńska. Wydawnictwa Komunikacji i Łączności, 1990.

Additional

1. [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)
2. Metodyka transformacji wyników badań naukowych do zastosowań praktycznych : raport. Andrzej H. Jasiński, Dominik Ludwicki, Studia i Materiały / Wydział Zarządzania. Uniwersytet Warszawski, Warszawa 2007

### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	50	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, studium preparation <sup>1</sup>	25	1,0

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