



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Preparation of diploma thesis with elements of research

### Course

Field of study

Aerospace Engineering

Area of study (specialization)

Aircraft engines and airframes

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

elective

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

5

Projects/seminars

0

### Number of credit points

15

### Lecturers

Responsible for the course/lecturer:

PhD inż. Łukasz Brodzik

Responsible for the course/lecturer:

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Faculty of Environmental Engineering and Energy

Piotrowo 3 st., 60-965 Poznań

### Prerequisites

Student has knowledge of issues related to the realized diploma topic, is able to apply the scientific method in solving problems, carrying out experiments and inference, knows the limitations of their own knowledge, skills and is able to formulate questions precisely, and understands the need for further education.

### Course objective

Preparing students to independently perform engineering thesis and scientific research.

### Course-related learning outcomes

Knowledge



1. has expanded specialist knowledge about construction, methods of construction, manufacture, operation, safety systems, impact on the economy, society and the environment in the field of specialization Aircraft engines and airframes necessary to prepare the thesis [KIL\_W12]
2. has the basic knowledge necessary to prepare thesis [KIL\_W26]
3. has basic knowledge of ethics and law, in particular civil aviation law, copyright law, protection of industrial property in aerospace engineering [KIL\_W27]

#### Skills

1. knows how to use appropriate aviation terminology to the extent that it is possible to understand technical texts in the field of aircraft engine and airframe issues [KIL\_U01]
2. is able to prepare and present a short verbal and multimedia presentation devoted to the results of an engineering task in aviation [KIL\_U02]
3. has the ability to self-study necessary during the development of scientific research [KIL\_U06]

#### Social competences

1. is aware of the importance of maintaining the principles of professional ethics during the performance of tests and presenting their results [KIL\_K01]
2. is aware of the importance and understands the non-technical aspects and effects of engineering activities and in the field of aerospace engineering, the associated responsibility for decisions [KIL\_K04]
3. is aware of the social role of a technical university graduate in the field of aerospace engineering, and in particular understands the need for formulation and transfer to the public, in particular through the mass media, information and opinions on the achievements of technology and other aspects of engineering activities [KIL\_K07]

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Written exam

#### Programme content

Program content in accordance with the detailed tasks given in the topic of engineering thesis.

#### Teaching methods

Ongoing consultation and evaluation of text formatting for the selected example

#### Bibliography

Basic

- 1 Korzyński M., Metodyka eksperymentu. Wydawnictwo NT, Warszawa 2006



Additional

-

### Breakdown of average student's workload

	Hours	ECTS
Total workload	381	15,0
Classes requiring direct contact with the teacher	9	0,5
Student's own work (literature studies, implementation of tasks related to the thesis) <sup>1</sup>	372	14,5

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