# POZNAN UNIVERSITY OF TECHNOLOGY



### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Diploma thesis [S1Lot2-SLiPL>PD]

Course			
Field of study Aviation		Year/Semester <b>4/7</b>	
Area of study (specialization) Aircraft Engines and Airframes		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 classe 0	es	Other 0
Tutorials 5	Projects/seminar 0	S	
Number of credit points 13,00			
Coordinators		Lecturers	
dr inż. Anna Kobaszyńska-Tward anna.kobaszynska-twardowska@			

# **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 the student to independently perform engineering work and conduct scientific research.

# Course-related learning outcomes

#### Knowledge:

knowledge of management and running a business and knows the general principles of creating and developing forms of individual entrepreneurship, especially in the aerospace sector 2. has the ability to self-educate using modern teaching tools, such as remote lectures, websites and databases, teaching programs, e-books

Skills:

Polish and English, integrate it properly, interpret and critically evaluate it, draw conclusions, and

exhaustively justify the opinions he formulates 2. is able to use information and communication techniques appropriately, which are used at various stages of implementing aviation projects 3. is able to see legal aspects in the process of formulating and solving air transport tasks, in particular, use aspects of European and national aviation law 4. is able to assess - at least to a basic extent - various aspects of risk associated with a logistics undertaking in air transport 5. is able to analyse business strategies and interpret their activities and apply in practice basic strategic analysis tools 6. is able to estimate various types of costs, is able to verify and assess market phenomena, is able to assess economic growth factors and the importance of money for its development, is able to decide on economic choices in the field of consumption and production, 7. is able to organise, cooperate and work in a group, assuming different roles in it and is able to appropriately define priorities for the implementation of a task defined by himself or others 8. is able to plan and implement the process of his own permanent learning and knows the possibilities of further education (second and third cycle studies, postgraduate studies, courses and exams conducted by universities, companies and professional organisations)

#### Social competences:

applications for the system being created, taking into account not only the business benefits but also the social benefits of the business conducted 2. is aware of the social role of a technical university graduate, in particular understands the need to formulate and convey to the public, in an appropriate form, information and opinions concerning engineering activities, technical achievements, as well as the achievements and traditions of the engineering profession 3. correctly identifies and resolves dilemmas related to the performance of the profession of an aviation and astronautics engineer

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

written examination

# Programme content

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

# **Course topics**

The diploma thesis covers issues related to aircraft design elements, flight mechanics, aerodynamics, parameters of aircraft engines and their components in terms of flow, heat transfer, as well as other aviation-related analyses.

# **Teaching methods**

Ongoing consultations to check and evaluate the text formatting for the selected example

# Bibliography

Basic: 1 Korzyński M., Metodyka eksperymentu. Wydawnictwo NT, Warszawa 2006

Additional:

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# Breakdown of average student's workload

	Hours	ECTS
Total workload	325	13,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	265	10,50