# POZNAN UNIVERSITY OF TECHNOLOGY



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

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name Practical training 7 [S1Lot2-PSPL>PZ7]

Course			
Field of study Aviation		Year/Semester 4/7	
Area of study (specialization) Aircraft Piloting		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		Other 77
Tutorials 0	Projects/seminars 0	5	
Number of credit points 6,00			
Coordinators dr inż. Łukasz Brodzik lukasz.brodzik@put.poznan.pl		Lecturers	

#### **Prerequisites**

Student has knowledge of the applicable rules for the implementation of practical training. Knows the regulations of practical training and the conditions for passing them. Has basic knowledge of issues covered by the study program. Has the ability to creatively use the knowledge acquired during studies.Can work in a working group. Is able to transparently distribute tasks in a group. Is able to interpret and perform received tasks correctly.

### **Course objective**

Verification of the theoretical knowledge possessed by the student with reality, gaining new professional experience in real working conditions.

#### **Course-related learning outcomes**

#### Knowledge:

of differential equations, probability, analytical geometry as well as physics covering the basics of classical mechanics, optics, electricity and magnetism, solid state physics, thermodynamics, useful for formulating and solving complex technical tasks related to aviation engineering and modeling 2. has structured, theoretically based general knowledge in the field of technology and various means of air transport, about

the life cycle of means of transport, both hardware and software, and in particular about the key processes occurring in them 3. has structured and theoretically based general knowledge in the field of key issues of technology and detailed knowledge in the field of selected issues related to air transport, knows the basic techniques, methods and tools used in the process of solving tasks related to air transport, mainly of an engineering nature 4. has structured, theoretically based general knowledge covering key issues in the field of technical thermodynamics, fluid mechanics, in particular aerodynamics 5. has detailed knowledge related to selected issues in the field of construction of manned and unmanned aircraft, in the field of on-board equipment, control systems, communication and recording systems, automation of individual systems, has basic knowledge of flight simulation training devices and simulation methods used to solve air transport issues 6. has the ability to self-educate using modern teaching tools, such as remote lectures, Internet sites 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 appropriately use information and communication techniques, which are applied at various stages of implementation of aviation projects 3. is able to appropriately select materials for simple aircraft structures, indicate differences between fuels used in aviation 4. is able to communicate using various techniques in a professional environment and other environments using a formal design record, technical drawing, concepts and definitions of the scope of the studied field of study 5. is able to solve tasks using basic knowledge of aerodynamics, flight mechanics and flow around bodies 6. is able to design means of transport with appropriate external requirements (e.g. regarding environmental protection) 7. is able to analyze objects and technical solutions, is able to search catalogs and on manufacturers' websites for ready-made components of machines and devices, including means and devices, assess their suitability for use in one's own technical and organizational projects 8. is able to use the language of mathematics (differential and integral calculus) to describe simple engineering issues. 9. is able to organize, 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 10. is able to plan and implement the process of his own permanent learning and knows the possibilities of further education (2nd and 3rd degree studies, postgraduate studies, courses and exams conducted by universities, companies and professional organizations)

#### Social competences:

2. 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, social losses or serious loss of health or even life 3. 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 concerning engineering activities, technical achievements, as well as the achievements and traditions of the engineering profession 4. correctly identifies and resolves dilemmas related to the profession aerospace engineer

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

Learning outcomes presented above are verified as follows:

**Aviation Practice** 

### Programme content

Practical implementation of integrated training for the ATPL (A) frozen line pilot license

Course topics

not applicable

### Teaching methods

Completion of internships based on the completed flight training program

## Bibliography

Basic: not applicable

# Breakdown of average student's workload

	Hours	ECTS
Total workload	100	6,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	90	5,50