



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Practice (45h)

### Course

Field of study

Aerospace Engineering

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/1

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

mgr inż. Wojciech Stępień

email: wojciech.stepien@pansa.pl

tel. +48 22 574 5350

Polska Agencja Żeglugi Powietrznej

ul. Wieżowa 8, 02-147 Warszawa

Responsible for the course/lecturer:

dr inż. Remigiusz Jasiński

email: remigiusz.jasinski@put.poznan.pl

tel. +4861 665 2252

Wydział Inżynierii Lądowej i Transportu

ul. Piotrowo 3 60-965 Poznań

### Prerequisites

Knowledge: The student has knowledge of the applicable rules for the implementation of internships. Student knows the internship regulations and the conditions for passing them. Has a basic knowledge of the issues covered by the study program.

Skills: The student has the ability to creatively use the knowledge acquired during studies

Social competences: The student is able to work in a working group. Can transparently distribute tasks in the group. He can correctly interpret and perform the received tasks and is able to make a verbal presentation of the results of his work



## Course objective

Verification of the theoretical knowledge possessed by the student with reality, gaining new professional experience in real working conditions in the field of generally understood provision of air navigation services and processes related to their provision.

## 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]
2. Has detailed knowledge related to selected issues in the field of manned and unmanned spacecraft construction, in the field of on-board equipment, control systems, communication and recording systems, life support systems, satellite navigation systems, teledetection, image recognition, automation of individual systems [K2A\_W05]

### Skills

1. Is able to use the following languages: native and international to a degree enabling the understanding of technical texts and writing technical descriptions of machines in the field of aviation and aerospace using dictionaries (knowledge of technical terminology) [K2A\_U01]
2. 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]
3. Can draw a diagram and a complex machine element in accordance with the rules of a technical drawing, can create a system diagram, select elements and perform basic calculations of the electrical and electronic system of machines or aerospace equipment [K2A\_U06]
4. Can analyze objects and technical solutions, can search in catalogs and on manufacturers' websites, ready components of machines and devices, including means and transport and storage devices, assess their suitability for use in their own technical and organizational projects [K2A\_U08]

### Social competences

1. Understands the need for lifelong learning; can inspire and organize the learning process of other people [K2A\_K01]
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 case of difficulties in solving the problem on its own [K2A\_K02]
3. 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:

Completion of the internship on the basis of a report on the implementation of internships, certified by the company, assessment of the internship tutor by the company.

### Programme content

Getting acquainted with the functioning of the agency, carrying out activities related to the provision of air navigation services and cooperating with other entities in the field of aviation, both civil and state.

### Teaching methods

Project method (individual or team implementation of a large, multi-stage cognitive or practical task, the effect of which is the creation of a work).

### Bibliography

Basic

1. Rules for the implementation of internships at WILiT
2. Framework internship program at WILiT
3. Specimens of documents necessary for the implementation of the internship, agreement, report, detailed internship program, procedures in force in PANSA, PANSA internal instructions

Additional

### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	5	0,0
Student's own work <sup>1</sup>	45	2,0

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