



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pilotage of UAV

### Course

Field of study

Aviation and cosmonautics

Area of study (specialization)

Unmanned Aerial Vehicles

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

elective

Year/Semester

1/1

Profile of study

general academic

Course offered in

polish

Requirements

elective

### Number of hours

Lecture

0

Laboratory classes

60

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

dr Jędrzej Łukasiewicz

email: jedrzej.lukasiewicz@put.poznan.pl

tel. 61 224 45 11

Wydział Inżynierii Lądowej i Transportu

ul. Piotrowo 3, 60-965 Poznań

Responsible for the course/lecturer:

Responsible for the course/lecturer:

### Prerequisites

Knowledge:

The student has a basic knowledge of UAV construction, aviation law and the rules of UAV flights

Skills:

The student is able to analyze complex processes: identify and describe their component parts.

Social competences:

The student is able to cooperate in a group, assuming various roles in it. The student is able to determine the priorities important in solving the tasks set before him. The student shows independence in solving problems, gaining and improving the acquired knowledge and skills.

### Course objective

To acquaint students with issues related to the pilotage of unmanned aerial vehicles



### Course-related learning outcomes

#### Knowledge

1. Has knowledge of the use of unmanned aerial vehicles, their operation and procedures used in UAV traffic
2. Has extended knowledge in the field of construction, piloting and the possibility of using unmanned aerial vehicles in various areas of human activity

#### Skills

1. Is able to plan and perform a flight on an unmanned aerial vehicle, taking into account the availability of airspace, terrain obstacles, UAV capabilities and the type of flight
2. Can lead the process of designing an unmanned aircraft and its operation based on known components and flight physics

#### Social competence

1. Is ready to critically evaluate the possessed knowledge and perceived content, recognize the importance of knowledge in solving cognitive and practical problems and consult experts in case of difficulties with solving the problem on its own
2. Can properly define priorities for the implementation of tasks set by himself or others

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Laboratories: a final test covering the issues discussed in class.

### Programme content

#### Laboratories:

1. exercises carried out on a flight simulator,
2. exercises carried out with the use of unmanned aerial vehicles, legal basis

### Teaching methods

Practical training with the use of flight simulators and a computer or unmanned aerial vehicle flights

### Bibliography

#### Basic

1. Aviation Law Act
2. Regulations to the Aviation Law regarding unmanned aerial vehicles

#### Additional

1. Recommendations of the President of the Civil Aviation Authority regarding the safe performance of UAV flights

### Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	70	3,0
Student's own work (preparation for laboratory classes, preparation for exam) <sup>1</sup>	30	1,0

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