COURSE DESCRIPTION CARD - SYLLABUS

Course name
Identification of risk sources in flights of Unmanned Aerial Vehicle [S2LiK1-BSP>IŹZwLBSP]

Course

Field of study
Aerospace Engineering

Year/Semester
1/2

Area of study (specialization)
Unmanned Aerial Vehicles

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
0

Other
0

Tutorials
15

Projects/seminars
15

Number of credit points

2,00

Coordinators

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Lecturers

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 identyfication of risk sources in flight of unmanned aerial vehicles

Course-related learning outcomes

Knowledge:
1. 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, teletection, image recognition, automation of individual systems

2. has knowledge of the use of unmanned aerial vehicles, their operation and procedures used in UAV traffic

Skills:
1. is able to develop a safety instruction for an on-board device, machine or technical flying object under specific environmental conditions
2. Can identify the sources of threats in various areas of aircraft operation, formulate the related threats, assess the risk of threats using appropriate methods and propose methods of ensuring safety
Social competence
1. understands the need for lifelong learning; can inspire and organize the learning process of other people
2. is able to properly define the priorities for the implementation of the tasks set by himself or others

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
Lecture: exam covering the issues discussed in class.
Classes: a final test covering the issues discussed during classes.
Project: an essay containing a solution to a selected problem

Programme content

Lecture
1. Analysis of the SORA method proposed by the JARUS organization,
Exercises:
1. Hazard analysis based on press releases with descriptions of events involving BSP
Project:
1. Analysis of potential threats based on data provided from CAA (pol. ULC) sources

Course topics

none

Teaching methods

Informative (conventional) lecture (providing information in a structured way) - may be of a course (introductory) or monographic (specialist) character
Exercise method (subject exercises, practice exercises) - in the form of auditorium exercises (application of acquired knowledge in practice)

Bibliography

Basic
1. Ustawa Prawo Lotnicze
2. Rozporządzenia do Ustawy Prawo lotnicze dotyczące bezzałogowych statków powietrznych
Additional
1. Zalecenia Prezesa Urzędu Lotnictwa Cywilnego dotyczące bezpiecznego wykonywania lotów BSP
2. Compa T., Zarządzanie przestrzenią powietrzną, AON, Warszawa 200

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	5	0,00