STUDY MODULE DESCRIPTION FORM

Name of the module/subject	Code
General knowledge of the aircraft 2	**1010601151010637634**

Field of study	Profile of study (general academic, practical)	Year /Semester
Aerospace Engineering	**(brak)**	**3 / 5**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Aircraft Piloting	**Polish**	**obligatory**

Cycle of study:	Form of study (full-time,part-time)
First-cycle studies	**full-time**

No. of hours				No. of credits
Lecture: **1**	Classes: **1**	Laboratory: **-**	Project/seminars: **-**	**1**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
(brak)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**1 100%**
Technical sciences	**1 100%**

Responsible for subject / lecturer:

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Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	In the field of airframe assemblies, control systems, hydraulic, pneumatic, fuel, air-conditioning and emergency systems. [PRK4]
2	**Skills**	able to apply the scientific method in solving problems [PRK4]
3	**Social competencies**	knows the limits of his knowledge and skills; can work in a group [PRK4]

Assumptions and objectives of the course:

familiarize the student with the construction of the aircraft and its executive teams

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. has detailed knowledge related to selected issues in the field of construction of manned and unmanned aerial vehicles, including on-board equipment and their main components - [K1A_W13]
2. has broadened knowledge necessary for understanding of profile subjects and specialist knowledge about construction, methods of construction, manufacturing, operation, air traffic management, security systems, impact on the economy, society and the aviation and aerospace environment - [K1A_W23]
3. has a basic knowledge of the life cycle of devices, objects and technical systems, as well as the methods of their technical description - [K1A_W22]

Skills:

1. is able to analyze objects and technical solutions, is able to 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 - [K1A_U09]
2. can draw a schematic and a simple machine element in accordance with the principles of technical drawing - [K1A_U16]
3. is able to develop a manual for servicing and repairing a simple machine or its subassemblies from the machine group covered by the selected specialty - [K1A_U18]

Social competencies:

1. understands the need to learn throughout life; can inspire and organize the learning process of other people - [K1A_K01] 2. is aware of the social role of a technical university graduate, and especially understands the need to formulate and communicate to the public, in particular through mass media, information and opinions on the achievements of technology and other aspects of engineering activities; makes efforts to provide such information and opinions in a generally understandable way - [K1A_K07]

Assessment methods of study outcomes

computer exam using Aviationexam software

Course description

The ability to classify the construction systems of airframe planes and helicopters, characterize the applied structural solutions of the main airframe assemblies. Ability to characterize control systems, hydraulic, pneumatic, fuel, air-conditioning and emergency systems. The ability to interpret the indications of on-board instruments to assess the technical condition of an aircraft and its systems

Basic bibliography:

1. Cichosz E., Konstrukcja i praca płatowca, WAT, Warszawa 1986 r.
2. Olejnik A., Budowa statków powietrznych, WAT 1984 r
3. Błaszczyk J., Konstrukcja samolotów, cz.I., Obciążenia zewnętrzne, WAT, Warszawa 1984 r.
4. Danilecki S., Projektowanie samolotów, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2000 r.
5. Polak Z., Rypulak A., Bilski J., Awionika, przyrządy i systemy pokładowe, WSOSP, Dęblin 1999 r.
6. Spitzer Cary R., The Avionics Handbook, AvioniCon Inc, Williamsburg 2001 r.
7. Kazana J., Lipski J., Budowa i eksploatacja pokładowych przyrządów lotniczych, WKiŁ, Warszawa 1983 r.

Additional bibliography:

Result of average student's workload

Activity	Time (working hours)
1. Participation in classes (according to plan)	30
2. Participation in the exam / pass	1

Student's workload

Source of workload	hours	ECTS
Total workload	30	1
Contact hours	31	1
Practical activities	0	0