STUDY MODULE DESCRIPTION FORM

Name of the module/subject **Accessories of air engines**		Code **1010601121010633498**
Field of study **Mechanical Engineering**	Profile of study (general academic, practical) **(brak)**	Year /Semester **1 / 2**
Elective path/specialty **Aircraft Engines**	Subject offered in: **Polish**	Course (compulsory, elective) **obligatory**
Cycle of study: **Second-cycle studies**	Form of study (full-time,part-time) **full-time**	
No. of hours Lecture: **1** Classes: **-** Laboratory: **-** Project/seminars: **-**		No. of credits **1**
Status of the course in the study program (Basic, major, other) **(brak)**	(university-wide, from another field) **(brak)**	
Education areas and fields of science and art **technical sciences**		ECTS distribution (number and %) **1 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Basic knowledge of thermodynamics, machine design and construction of airports in the range shown in college.
2	**Skills**	Able to apply the scientific method to solve problems, implement experiments and reasoning
3	**Social competencies**	He knows the limitations of their knowledge and skills, is able to accurately formulate questions, understands the need for further education

Assumptions and objectives of the course:

- To familiarize students with basic knowledge on modern powertrain aircraft

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

Knowledge:

1. Has an extended knowledge in the area of information technology concerning computer programming and software for engineering calculations and simulation of physical systems. - [K2A_W05]
2. Has an extended knowledge of the life cycle of machines, operating principles of working machines and destructive processes taking place during the operation, such as tribological wear, corrosion, fatigue and surface aging. - [K2A_W13]
3. Has an extended knowledge in selected areas of technical mechanics related to the chosen specialization (e.g. soil mechanics). - [K2A_W16]
4. Has an in-depth knowledge of the design and principles of operation and grading machines from the equipment of the chosen group. - [K2A_W18]

Skills:

1. Is able to freely use an international language in contacts with professionals from the same field of study. - [K2A_U01]
2. Is able to prepare a scientific paper in a foreign language in the chosen field of study based on literature and other sources of information, including online sources and submit an oral presentation. - [K2A_U02]
3. Is able to perform a fairly complex design project of an average working machine or a subsystem using modern CAD tools, including tools for spatial modeling machines and finite elements calculation method. - [K2A_U07]

Social competencies:

1. Is able to think and act in an entrepreneurial manner. - [K2A _K05]
2. Is aware of and understands the importance and impact of non-technical aspects of mechanical engineering activities and its impact on the environment, is aware of responsibility for decisions. - [K2A_K02]
3. Is able to set priorities for realization of undertaken tasks. - [K2A_K04]

Assessment methods of study outcomes
- The written test
Course description
- General characteristics of the powertrain air: fuel systems. Lubrication, cooling, fire and icing. Instruments for monitoring the work of the team driving. Control systems and automatic control.
Basic bibliography: 1. Cichosz E. o inni, Charakterystyka i zastosowanie napędów, WKiŁ, 1980r. 2. Ilustrowany Leksykon Lotniczy, Napędy, WKiŁ, 1993r
Additional bibliography:

Result of average student's workload

Activity	Time (working hours)
1. Participation in the lecture	15
2. Preparing to pass the lecturers	8
3. Participation in completing	2
4. Consultation	2

Student's workload

Source of workload	hours	ECTS
Total workload	27	1
Contact hours	19	1
Practical activities	0	0