STUDY MODULE DESCRIPTION FORM

Name of the module/subject	Code
Bearings of Rotor Machines	**1010634351010612831**

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

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

No. of hours	No. of credits
Lecture: **18** Classes: **-** Laboratory: **-** Project/seminars: **-**	**2**

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

Education areas and fields of science and art	ECTS distribution (number and %)

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**	Has basic knowledge of machine construction.
2	**Skills**	Can independently use various sources of information, also foreign language.
3	**Social competencies**	Competences in the field of interpersonal communication.

Assumptions and objectives of the course:

Presentation of basic issues related to the bearing of rotating machines. Description of the construction, principles of operation and rules for the selection of rolling and sliding bearings.

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

Knowledge:

1. Has detailed knowledge in the field of technical operation, knows the rules for the selection of parameters for the use of devices including fixed and momentary loads, factors and processes forcing changes in the damage technical condition of devices, technical diagnostics, methods of maintaining devices in technical readiness, issues of durability of machines and transport devices - [K1A_W15]

2. Has basic knowledge in the field of technical diagnostics of means of transport as well as methods and ways of solving issues of assessment of technical condition and forecasting, knows: conditions for diagnosing technical facilities, the essence of technical diagnostics in application to means of transport, tasks and objectives of technical diagnostics - [K1A_W25]

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_U10]

2. Is able to design technology for the implementation of a simple operating system and the technology of assembly and disassembly of this system - [K1A_U14]

3. Is able to develop a manual for operating and repairing machines from the group of devices and means of transport covered by the selected specialty - [K2A_U15]

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 importance and understands the non-technical aspects and effects of the mechanic engineer's activity and its impact on the environment and the responsibility for the decisions made - [K1A_K02]
3. He can determine the priorities for the implementation of the task - [K1A_K04]
4. Is aware of the social role and mechanical engineer and understands the need and is able to communicate opinions and knowledge regarding the achievements of technology in the field of mechanical engineering, especially through mass media - [K1A_K06]

Assessment methods of study outcomes
Written test.
Course description
Construction of rotating machines with the specificity of their bearings. Criteria for selecting the method of selecting the type of bearing in selected rotor machines. Breakdown of rolling bearings. Rules for the selection of rolling bearings. Operating problems of rolling bearings. Construction and operation principle of slide bearings. Rules for the selection of plain bearings. Operating problems of slide bearings.
Basic bibliography:
Additional bibliography:

Result of average student's workload

Activity	Time (working hours)
1. Preparation for the lecture	3
2. Participation in the lecture	30
3. Consolidation of lecture content	10
4. Consultations	2
5. Preparation to the test	5
6. Written test	2

Student's workload

Source of workload	hours	ECTS
Total workload	52	2
Contact hours	34	1
Practical activities	0	0