

1.	Field of study	Biomedical Engineering
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2023/2024 (winter term)
4.	Level of qualifications/degree	first-cycle studies (in engineering)
5.	Degree profile	general academic
6.	Mode of study	full-time

7. General information about the module	
Module name	Designing rehabilitation constructions
Module code	08-IBSI-S1-17-6-PKR
Number of the ECTS credits	4
Language of instruction	Polish
Purpose and description of the content of education	Opanowanie materiału z "Projektowanie konstrukcji rehabilitacyjnych" wymaga wiedzy z zakresu budowy maszyn, ergonomii i rehabilitacji medycznej. Podstawy teoretyczne to przede wszystkim przyswojenie i zrozumienie pojęć związanych z przedmiotem, nabycie umiejętności kojarzenia oraz zastosowania omawianych zagadnień. Umiejętności praktyczne student nabywa poprzez analizę przykładowych problemów, przez samodzielne i zespołowe wykonywanie projektów i ćwiczeń w ramach zajęć. Studiowanie modułu wymaga uwzględnienia aspektu kreatywności jako jest podstawową cechą inżyniera projektanta. Jest to też umiejętność odpowiednio efektywnego i szybkiego odszukiwania wymaganych informacji w literaturze i źródłach elektronicznych. W ramach tego modułu słuchacze zapoznają się z kompleksowym i zespołowym działaniem na rzecz osób niepełnosprawnych fizycznie lub psychicznie projektując lub analizując koncepcyjne rozwiązania techniczne, które mają na celu przywrócić osobie pełnej lub maksymalnej do osiągnięcia sprawności fizycznej.
List of modules that must be completed before starting this module (if necessary)	not applicable

8. Learning outcomes of the module			
Code	Description	Learning outcomes of the programme	Level of competenc (scale 1-5)
K_1	Ma wiedzę w zakresie kluczowych aspektów konstrukcji i rehabilitacji.	W06	4
K_2	Używa metod i narzędzi wykorzystywanych przy projektowaniu części maszyn.	U10	5
K_3	Wyszukuje informacje w literaturze, zasobach internetowych oraz innych źródłach.	U01	4
K_4	Wykorzystuje wiedzę z mechaniki, robotyki i ergonomii w celu formułowania i rozwiązywania zadań inżynierskich.	U12	5
K_5	Projektuje elementy konstrukcji rehabilitacyjnych.	U15	4
K_6	Wykonuje prace w zespole oraz indywidualnie.	K03	3
K_7	Potrafi myśleć i działać w sposób przedsiębiorczy.	K05	3

9. Methods of conducting classes		
Code	Category	Name (description)
a05	Lecture methods / expository methods	Explanation/clarification <i>explication involving the derivation of a predetermined theorem from other, already known ones, in the number of steps specified by the person teaching the course</i>
c06	Demonstration methods	Demonstration-imitation <i>a presentation of a model way of performing specific activities accompanied by a commentary; it aims at triggering imitation activities in an individual or in a group of participants observing the activities of the person teaching the course until the right habit is formed through regular exercise; the demonstration-imitation method is combined with a physical practice of activities/behaviours</i>
d01	Programmed learning methods	Working with a computer <i>e.g., Webquest; implementation of educational tasks using electronic and digital devices, computer programs and Internet applications; the academic teacher acts as a consultant; students' work is carried out step by step according to the plan laid own by the person teaching the course and following his instructions, and proceeds towards producing the indicated results within the set deadline</i>

10. Forms of teaching					
Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
k_fs_1	laboratory classes	30	course work	K_1, K_2, K_3, K_4, K_5, K_6, K_7	a05, c06, d01

11. The student's work, apart from participation in classes, includes in particular:			
Code	Category	Name (description)	Is it part of the BUNA?
a01	Preparation for classes	Search for materials and review activities necessary for class participation <i>reviewing literature, documentation, tools and materials as well as the specifics of the syllabus and the range of activities indicated in it as required for full participation in classes</i>	No
a02	Preparation for classes	Literature reading / analysis of source materials <i>reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class</i>	No
a03	Preparation for classes	Developing practical skills <i>activities involving the repetition, refinement and consolidation of practical skills, including those developed during previous classes or new skills necessary for the implementation of subsequent elements of the curriculum (as preparation for class participation)</i>	No
a05	Preparation for classes	Production/preparation of tools, materials or documentation necessary for class participation <i>developing, preparing and assessing the usefulness of tools and materials (e.g. aids, scenarios, research tools, equipment, etc.) to be employed in class or as an aid when preparing for classes</i>	No
b01	Consulting the curriculum and the organization of classes	Getting acquainted with the syllabus content <i>reading through the syllabus and getting acquainted with its content</i>	Yes
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class <i>exploring the studied content, inquiring, considering, assimilating, interpreting it, or organizing knowledge obtained from the literature, documentation, instructions, scenarios, etc., used in class as well as from the notes or other materials/artifacts made in class</i>	No

d01	Consulting the results of the verification of learning outcomes	Analysis of the corrective feedback provided by the academic teacher on the results of the verification of learning outcomes <i>reading through the academic teacher's comments, assessments and opinions on the implementation of the task aimed at checking the level of the achieved learning outcomes</i>	Yes
d02	Consulting the results of the verification of learning outcomes	Development of a corrective action plan as well as supplementary/corrective tasks <i>reviewing and selecting tasks and activities enabling the elimination of errors indicated by the academic teacher, their verification or correction resulting in completing the task with at least the minimum passing grade</i>	Yes

Information on the details of the module implementation in a given academic year can be found in the syllabus available in the USOS system: <https://usosweb.us.edu.pl>.