1.	**Field of study**	**Mathematics**
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2023/2024 (winter term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	part-time

7.	**General information about the module**
Module name	**Operating systems with elements of computer architecture**
Module code	W4-MT-N2-23-SOAKom
Number of the ECTS credits	3
Language of instruction	Polish
Purpose and description of the content of education	1. Schemat blokowy typowego mikrokomputera 2. Charakterystyka podstawowych bloków funkcjonalnych mikrokomputera. 3. Schemat działania komputera. 4. Klasyfikacja oprogramowania. 5. Oprogramowanie podstawowe – funkcje i podstawowe składniki tego oprogramowania.
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)
SOAKom_1	Zna schemat blokowy i podstawowe bloki funkcjonalne typowego komputera.	K_K01 K_U06	2 1
SOAKom_2	Umie dobierać i konfigurować podstawowe karty rozszerzeń, testować wydajność komputera	K_K01 K_U06	2 1
SOAKom_3	Umie przygotowywać dysk twardy do instalacji systemu operacyjnego oraz zainstalować system operacyjny	K_K01 K_U06	2 1
SOAKom_4	Potrafi skonfigurować wszystkie najważniejsze usługi systemów operacyjnych rodziny Windows i rodziny Linux	K_K01 K_U06	2 1
SOAKom_5	Zna najważniejsze zadania systemu operacyjnego	K_K01 K_U06	2 1

9.	Methods of conducting classes	
Code	**Category**	**Name (description)**
a03	Lecture methods / expository methods	Description *a description of objects, phenomena, processes or people; it involves specifying the structure and characteristic features of the object, phenomenon, or process being described; it is usually accompanied by a demonstration of the described object or by its models, drawings, tables, charts, etc.; a description may take the form of an explanation, classification, justification or comparison*
b08	Problem-solving methods	Activating method – peer learning *learning through the exchange of knowledge in a group/team/pair of students, i.e., in the so-called learning cell; a kind of mutual learning; an approach focused on student activity under the guidance of the person teaching the course; a learning situation where students with a similar level of experience learn from one another*
c06	Demonstration methods	Demonstration-imitation *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*
d01	Programmed learning methods	Working with a computer *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*
d03	Programmed learning methods	Working with another teaching tool *e.g. using websites in any way or according to the rules set by the teacher; or making use of other subject-specific tools*

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**
SOAKom_fns_1	lecture	15	course work	SOAKom_1, SOAKom_3, SOAKom_4, SOAKom_5	a03
SOAKom_fns_2	laboratory classes	15	course work	SOAKom_1, SOAKom_2, SOAKom_3, SOAKom_4	b08, c06, d01, d03

11.	The student's work, apart from participation in classes, includes in particular:		
Code	**Category**	**Name (description)**	**Is it part of the BUNA?**
a02	Preparation for classes	Literature reading / analysis of source materials *reading the literature indicated in the syllabus; reviewing, organizing, analyzing and selecting source materials to be used in class*	No
a03	Preparation for classes	Developing practical skills *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)*	No
a04	Preparation for classes	Consulting materials complementary to those indicated in the syllabus *agreeing on materials complementary to those indicated in the syllabus, supporting the implementation*	Yes

		of tasks resulting from or necessary for class participation	
c01	Preparation for verification of learning outcomes	Determining the stages of task implementation contributing to the verification of learning outcomes *devising a task implementation strategy embracing the division of content, the range of activities, implementation time and/or the method(s) of obtaining the necessary materials and tools, etc.*	Yes
c02	Preparation for verification of learning outcomes	Studying the literature used in and the materials produced in class *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*	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 *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*	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.