

1.	Field of study	Environmental Hazard Engineering
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2023/2024 (winter term), 2024/2025 (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	Meteorology and Climatology
Module code	W2-IZ-S1-153
Number of the ECTS credits	3
Language of instruction	Polish
Purpose and description of the content of education	The student acquires advanced meteorological and climatic knowledge to understand the fundamental processes in the atmosphere, including those leading to the occurrence of geohazards. The student can explain these processes. The student can use meteorological instruments to conduct weather measurements and observations. The student knows the construction and principles of operation of meteorological instruments. The student knows and can apply basic statistical methods for data analysis and obtaining data for meteorological and climatic studies from various sources.
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)
U01	the student is able to use available electronic and other sources of meteorological and climatic information, including geohazards, and can correctly draw conclusions based on data from various sources	U02	5
U02	the student applies basic research techniques and tools in meteorology and climatology, as well as basic statistical methods, algorithms and IT techniques to describe phenomena and data analysis	U04	5
W01	the student understands basic meteorological phenomena and processes, including geohazards	W01	5
W02	the student knows the basic techniques and research tools used in meteorology and climatology to describe the conditions of occurrence, causes and effects of geohazards	W03	3
W06	the student has basic knowledge about the life cycle of objects, devices and technical systems used in meteorology and climatology	W08	5

9. Methods of conducting classes		
Code	Category	Name (description)
a01	Lecture methods / expository methods	Formal lecture/ course-related lecture <i>a systematic course of study involving a synthetic presentation of an academic discipline; its implementation assumes a passive reception of the information provided</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>
e01	Practical methods	Laboratory exercise / experiment <i>[also conducted as fieldwork] a method of practical application of knowledge; implemented in three stages: the recognition of a problem induced by the task content, the formulation of the problem and the attempt to solve it accompanied by the assessment of the effects; the goal is to acquire skills, abilities and habits, and to consolidate the acquired knowledge so that it becomes operational; the laboratory method assumes greater independence of learners than carrying out an experiment</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
W2-IZ-S1-153_fs_1	lecture	15	exam	W01, W02	a01
W2-IZ-S1-153_fs_2	laboratory classes	15	course work	U01, U02, W01, W02, W06	d01, e01

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
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>	No
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>.