

1.	Field of study	Environmental Hazard Engineering
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2025/2026 (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		Remote sensing in geohazard analysis
Module code		W2-IZ-S1-307
Number of the ECTS credits		3
Language of instruction		Polish
Purpose and description of the content of education		As part of the module, the student will acquire skills and knowledge in geohazard analysis based on remote sensing and photogrammetric data, as well as the use of geographic information systems.
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	be able to use available sources of information on geohazards, including cartographic, electronic sources, and have the ability to make correct inferences from data from different sources	U02	4	
U02	applies basic research techniques and tools in geohazards science, including remote sensing and photogrammetry to identify phenomena and analyse data. Carries out research tasks or expert reports on geohazards under the guidance of a supervisor	U04	3	
U03	is able - when solving engineering tasks - to take measurements, interpret the results obtained and draw conclusions using remote sensing methods and geographical information systems	U04	2	
U04	is able - when formulating and solving engineering tasks in the field of geohazards - to perceive their systemic and non-technical aspects	U10	5	

9.	Methods of conducting classes		
	Code	Category	Name (description)
	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>
	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
--	--	--

<b>10. Forms of teaching</b>
------------------------------

Code	Name	Number of hours	Assessment of the learning outcomes of the module	Learning outcomes of the module	Methods of conducting classes
W2-IZ-S1-307_fs_1	laboratory classes	15	course work	U01, U02, U03, U04	d01, d03

<b>11. The student's work, apart from participation in classes, includes in particular:</b>
---

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>	Yes
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>	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>.