

**Subject card**

<b>Subject name and code</b>	Information Technology - laboratory classes , PG_00201089						
<b>Field of study</b>	Marine Hydrography						
<b>Date of commencement of studies</b>	October 2026	<b>Academic year of realisation of subject</b>			2026/2027		
<b>Education level</b>	Bachelor's studies	<b>Subject group</b>			Obligatory subject group in the field of study Subject group related to practical vocational preparation		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	1	<b>Language of instruction</b>			Polish		
<b>Semester of study</b>	1	<b>ECTS credits</b>			2.0		
<b>Learning profile</b>	practical	<b>Assessment form</b>			credit		
<b>Conducting unit</b>	Laboratory of Physical Oceanography -> Department of Physical Oceanography and Climate Research -> Faculty of Oceanography and Geography -> Rector						
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		dr Gabriela Gic-Grusza				
	<b>Teachers</b>						
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	0.0	0.0	25.0	0.0	0.0	25
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	<b>Number of study hours</b>	25		2.0		23.0	50
<b>Subject objectives</b>	<p>The aim of the course is to acquire the knowledge, skills, and competencies necessary for further education in the field of study.</p> <ul style="list-style-type: none"> <li>• Basic operations on files and directories.</li> <li>• Office suite: principles of text editing, functions of a document editor, functions of a spreadsheet.</li> <li>• Fundamentals of computer graphics.</li> <li>• Fundamentals of GIS.</li> <li>• Fundamentals of programming.</li> </ul>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[HML3-W12] knows and understands, at an advanced level, the key processes occurring in the life cycle of devices, facilities, and technical systems	knows and understands at an advanced level the importance of basic techniques, research methods and IT tools used in hydrography work to describe and interpret phenomena and processes in the aquatic environment	[SW4] test/exam - oral or written [SW1] oral statement/conversation/discussion [SW2] presentation/project/paper/report [SW5] implementation of a problem task
	[HML3-U07] is able to effectively use information and communication techniques, including utility programs to solve professional problems	is able to effectively use basic techniques, research methods, and (IT) tools used in hydrography to describe and interpret phenomena and processes occurring in the aquatic environment	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report [SU3] text preparation/written work [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
	[HML3-U08] is able to independently use the professional literature available in traditional and electronic form, make an assessment, critical analysis and synthesis as well as the correct interpretation of the information obtained	is able to utilize source information, including archival and electronic databases, in the field of hydrographic issues, and performs critical analysis and synthesis of information	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report [SU3] text preparation/written work [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work
[HML3-U15] is able to communicate using a variety of techniques, including non-verbal and different technical means in the professional environment and in other environments	Is able to use specialized computer software in the analysis of data and description of phenomena and processes occurring in the marine environment	[SU1] oral statement/conversation/discussion [SU2] presentation/project/paper/report [SU3] text preparation/written work [SU4] test/exam - oral or written [SU5] implementation of a problem task [SU6] demonstration of practical skills [SU8] observation of student's independent or team work	
Subject contents	<ul style="list-style-type: none"> <li>• Basic operations on files and directories.</li> <li>• Office suite: principles of text editing, functions of a document editor, functions of a spreadsheet.</li> <li>• Fundamentals of computer graphics.</li> <li>• Fundamentals of GIS.</li> <li>• Fundamentals of programming.</li> </ul>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	determination of the final grade based on partial grades received during the semester	51.0%	100.0%
Recommended reading	Basic literature	<ul style="list-style-type: none"> <li>• Slaying the Excel Dragon: A Beginners Guide to Conquering Excels Frustrations and Making Excel Fun</li> <li>• Excel Basics In 30 Minutes (2nd Edition): The Quick Guide to Excel and Google Sheets</li> </ul>	
	Supplementary literature	<ul style="list-style-type: none"> <li>• Matthes E. (2015). Python Crash Course: A Hands-On, Project-Based Introduction to Programming. No Starch Press, 560.</li> <li>• Dale N., Lewis J. (2019): Computer Science Illuminated. Jones and Bartlett Publishers, Inc; 7th Revised edition</li> </ul>	
	eResources addresses		
Example issues/example questions/tasks being completed	<ul style="list-style-type: none"> <li>• Calculation tasks</li> <li>• Project on data processing and visualization</li> </ul>		
Work placement	Not applicable		

Document generated electronically. Does not require a seal or signature.