1.	**Field of study**	**Aquamatics - Interdisciplinary Management of Water Environments**
2.	Faculty	Faculty of Natural Sciences
3.	Academic year of entry	2020/2021 (winter term), 2021/2022 (winter term), 2022/2023 (winter term), 2023/2024 (winter term), 2024/2025 (winter term)
4.	Level of qualifications/degree	second-cycle studies (in engineering)
5.	Degree profile	general academic
6.	Mode of study	full-time

Code of the learning outcome of the programme	**Learning outcomes** The graduate:	Codes of the second-order PRK characteristics to which the learning outcome of the programme is related
KNOWLEDGE		
AQ2_W01	has advanced knowledge of exact and natural sciences and environmental engineering, enabling to develop general knowledge within the scope of water sciences	2018_P7S_WG, 2018_inż_P7S_WG
AQ2_W03	notices global civilisation challenges related to the exploitation of water resources and understands the related risks	2018_P7S_WK
AQ2_W04	has in-depth knowledge of the principles of water management in the context of natural, economic, administrative, ethical and legal conditions	2018_P7S_WK
AQ2_W05	knows and understands notions and principles in the field of industrial, intellectual and copyright protection	2018_P7S_WK
AQ2_W06	has advanced knowledge about the principles of creating and developing different forms of entrepreneurship related to a broadly-understood water management	2018_P7S_WK, 2018_inż_P7S_WK
SKILLS		
AQ2_U01	uses their knowledge to formulate theses, plan complex and non-standard experiments, calibration and validation of the obtained results, taking into consideration the ethical aspects	2018_P7S_UW
AQ2_U02	independently conducts the selection of proper methods and tools necessary to solve issues in the context of water economy	2018_P7S_UW
AQ2_U03	selects adequate sources of information, is able to use larger data resources, orders them and analyses as well as formulates them on the basis of correct conclusions	2018_P7S_UW
AQ2_U04	is able to identify and suggest the results of own research and carry out scientific discussions	2018_P7S_UK
AQ2_U06	carries out a critical analysis of the manner of functioning of advanced hydro-technical and natural solutions in water management	2018_P7S_UW
AQ2_U08	communicates with specialists, social-economic environment with the use of modern social-economic techniques of communication, using proper water sciences terminology	2018_P7S_UK
AQ2_U09	communicates in a foreign language using communicative language competencies at an advanced level. Has the ability to read with comprehension complicated scientific texts and in-depth skills in preparing various written works (including research works) and oral speeches on detailed issues in the field of a specific programme in a foreign language	2018_P7S_UK
AQ2_U10	is able to manage the work of interdisciplinary teams, including designing the logistics in field conditions, with care for safety and ergonomy of actions	2018_P7S_UO
AQ2_U11	skilfully enhances specialist knowledge in the field of water sciences and, at the same time, motivates the team to life-long learning	2018_P7S_UU
SOCIAL COMPETENCES		
AQ2_K01	is cautious and critical in assessing the obtained knowledge within the scope of water sciences and the received contents, and in the case of difficulties, is able to organise a team of experts, enabling to solve the problem	2018_P7S_KK
AQ2_K02	understands the meaning of knowledge about water in solving complicated cognitive and practical issues related to water management in accordance with the principles of sustainable development	2018_P7S_KK

AQ2_K03	initiates activities to the benefit of biotic, abiotic and social environment, and initiates actions in the public interest	2018_P7S_KO
AQ2_K04	plans team actions in an entrepreneurial manner in the current perspective and in distant time horizons	2018_P7S_KO
AQ2_K05	abides by and develops the principles of ethical conduct in life and professional work	2018_P7S_KR

Code of the learning outcome of the programme	**Learning outcomes leading to the acquisition of engineering competences** The graduate:	Codes of the second-order PRK characteristics to which the learning outcome of the programme is related
KNOWLEDGE		
AQ2_W02	knows advanced methods and techniques of monitoring water resources, as well as exploiting and distributing water	2018_inż_P7S_WG
AQ2_W07	knows and understands advanced calculation and IT techniques and tools that support research activities in the aspect of water and environment sciences, taking into account the scope and limitations of their application	2018_P7S_WK, 2018_inż_P7S_WG
SKILLS		
AQ2_U05	is able to carry out an economic analysis of advanced hydrotechnical and natural solutions, taking into account the costs and profits for the environment	2018_inż_P7S_UW
AQ2_U07	is able to design advanced hydrotechnical and natural processes and carry out their calibration and validation, taking into acccount the ethical aspects	2018_inż_P7S_UW