1.	**Field of study**	**Computer Science**
2.	Faculty	Faculty of Science and Technology
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

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	
IN_W01	knows and understands issues in mathematics and physics to the extent necessary to formulate and solve problems in the field of computer science;	2018_P6S_WG
IN_W02	knows and understands to an advanced degree the possible applications of computer science methods in various fields of science and technology. Understands the challenges of developing these methods, including artificial intelligence methods;	2018_P6S_WG, 2018_P6S_WK
IN_W03	has advanced knowledge of programming, implementation of algorithms, programming paradigms and styles, methods of verifying program correctness, formal languages and various programming environments;	2018_P6S_WG
IN_W04	has advanced knowledge of various branches of computer science and selected related disciplines, including knowledge and understanding of theoretical foundations, design rules and connections with multiple aspects of science and technology;	2018_P6S_WG, 2018_inż_P6S_WG
IN_W05	knows the functioning and management of the IT systems, including team projects management;	2018_P6S_WG
IN_W06	has extended knowledge of modern computer systems;	2018_P6S_WG, 2018_inż_P6S_WG
MOB.2023_W01	has advanced knowledge of selected scientific or scholarly theories and methods, is familiar with the issues specific to the chosen academic discipline and understands its connection with the leading discipline of the degree programme	2018_P6S_WG
MOB.2023_W03_VP	understands the relationship between legal issues – especially those pertaining to civil rights and obligations and their implementation – and the leading discipline of the degree programme, in particular the basic concepts and provisions pertaining to the protection of industrial protection and copyright law	2018_P6S_WK
OMU.2023_W01	has advanced knowledge of selected scientific theories and methods and is familiar with the issues specific to the selected academic discipline in the context of other disciplines	2018_P6S_WG
	SKILLS	
IN_U01	can work individually and in a team, can lead a small team, can create and complete a work schedule that ensures meeting deadlines;	2018_P6S_UO
IN_U02	can create detailed documentation regarding the implementation of the project task and prepare a presentation of its results;	2018_P6S_UW, 2018_inż_P6S_UW
IN_U03	can prepare and present an oral presentation regarding the implementation of a project task and lead a discussion regarding the presentation;	2018_P6S_UK
IN_U04	can define and implement the process of self-education, among others, to improve professional competencies; can obtain information from literature, databases and other properly selected sources; can integrate the received data, interpret it, draw conclusions and formulate and justify opinions;	2018_P6S_UU
IN_U05	can use advanced methods, techniques and IT tools to solve complex problems; can use new technologies by integrating knowledge from various fields;	2018_P6S_UW, 2018_inż_P6S_UW
IN_U06	can use in practice the methodologies and tools that support the management of IT projects by current standards;	2018_P6S_UW, 2018_inż_P6S_UW

KJ.2023_U	clearly and comprehensibly communicates with others in a foreign language at the B2 level of the Common European Framework of Reference for Languages, making use of his/her knowledge and terminology	2018_P6S_UK
MOB.2023_U01	asks questions, analyzes research problems and finds solutions to them based on the knowledge, skills and experience he/she has gained within the chosen academic discipline in conjunction with the leading discipline of the degree programme; communicates the results of his/her work in a way which is clear and understandable not only to specialists	2018_P6S_UK, 2018_P6S_UW
OMU.2023_U01	has advanced skills in asking research questions, analyzing problems or providing practical solutions to them based on the knowledge, experience and skills gained within the chosen academic discipline in the context of other disciplines	2018_P6S_UW
SOCIAL COMPETENCES		
IN_K01	is aware of the importance and understands non-technical aspects and consequences of the professional activity of an IT specialist and the related responsibility for decisions made;	2018_P6S_KO
IN_K02	acts ethically, and understands the importance of intellectual honesty in one's own and other people's actions. Is ready to take care of the achievements and traditions of the IT profession;	2018_P6S_KR
IN_K03	knows the principles of innovative entrepreneurship, can act creatively;	2018_P6S_KO
IN_K04	understands the need for an interdisciplinary approach to the problems being solved and is willing to consult with experts when it is challenging to solve a problem independently;	2018_P6S_KK
MOB.2023_K01	is ready to meet social obligations, co-organize activities for the benefit of the community and is open to scientific solutions to cognitive and practical problems	2018_P6S_KK, 2018_P6S_KO
OMU.2023_K01	acknowledges and makes use of knowledge from different disciplines and is ready to change opinion in the light of scientifically proven arguments	2018_P6S_KK

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		
IN_W07	has an advanced understanding of the methods, techniques and IT tools used to solve complex IT problems;	2018_P6S_WG
IN_W08	knows specialized techniques, methods and tools used in the process of solving IT tasks, mainly of an engineering nature, in the broad field of computer science;	2018_P6S_WG, 2018_inż_P6S_WG
MOB.2023_inż_W02_P	understands the relationship between entrepreneurship-related issues and the leading discipline of the degree programme, exhibits an entrepreneurial mindset	2018_P6S_KO, 2018_inż_P6S_WK
SKILLS		
IN_U07	can design objects, tools and systems and develop methods for their application in a manner consistent with the rules and good practices applicable to various areas of computer science and selected related disciplines;	2018_inż_P6S_UW
IN_U08	can identify and estimate factors affecting the performance of computer systems, microprocessors or microcontrollers and experimentally determine appropriate parameters;	2018_inż_P6S_UW
IN_U09	is able to use advanced, specialized knowledge from various branches of computer science and related disciplines to solve engineering tasks;	2018_inż_P6S_UW