

<b>1. Field of study</b>	<b>Biotechnology</b>
2. Faculty	Faculty of Natural Sciences
3. Academic year of entry	2021/2022 (winter term), 2022/2023 (winter term), 2023/2024 (winter term), 2024/2025 (winter term)
4. Level of qualifications/degree	second-cycle studies
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
<b>KNOWLEDGE</b>		
2BT_E_W01_P	Has a deep knowledge of mathematics and natural sciences necessary for understanding the laws of nature and a description of life processes	2018_P7S_WG
2BT_E_W02_P	Has a deep knowledge of the chosen specialty of biotechnology	2018_P7S_WG
2BT_E_W03_P	Recognizes and analyzes relationships and dependencies in nature using knowledge about various aspects of biotechnology	2018_P7S_WG
2BT_E_W04_P	Specifies and describes laboratory and industrial procedures applied in biotechnology	2018_P7S_WG
2BT_E_W05_P	Describes and understands the significance of biotechnology in agriculture, environmental protection and medicine	2018_P7S_WG
2BT_E_W06_P	Has knowledge about the principles of creating and developing various forms of entrepreneurship and sources of funds for research and economic development	2018_P7S_WK
2BT_E_W07_P	Understands and applies the principles of the industrial property and the copyright protection and is able to use patent information	2018_P7S_WK
2BT_E_W08_P	Deepens knowledge about the benefits and risks associated with the development of biotechnology	2018_P7S_WK
2BT_E_W09_P	Knows the advanced methods and techniques used in biotechnology research and rules of the implementation of production process from the organism to the industrial level	2018_P7S_WK
W_ODD	has in-depth knowledge of selected scientific methods and knows the issues specific to a selected discipline of science unrelated to the leading discipline of the field of study	2018_P7S_WG, 2018_P7S_WK
<b>SKILLS</b>		
2BT_E_U01_P	Independently selects and applies advanced research techniques and modifies them adequately to the problem	2018_P7S_UW
2BT_E_U02_P	Proficiently chooses and uses specialized sources of information, interprets the obtained data, presents them and conducts scientific discussions on their basis	2018_P7S_UK, 2018_P7S_UW
2BT_E_U03_P	Plans and performs advanced physical, biological and chemical measurements and analyzes the obtained results, formulating and verifying research hypotheses	2018_P7S_UW
2BT_E_U04_P	Shows the ability to lead the team and communicate within the environments	2018_P7S_UK, 2018_P7S_UO
2BT_E_U05_P	Has the ability to communicate in English at B2+ European Framework of Reference for Languages level, obtain information from English-language texts and use specialized scientific terminology	2018_P7S_UK
2BT_E_U06_P	Capably deepens specialist knowledge in the field of biotechnology and motivates others to continuous learning	2018_P7S_UU
U_ODD	has advanced skills in posing research questions and analyzing problems or solving them in practice on the basis of the acquired content and practical experience and skills in the field of a selected discipline of science unrelated to the leading discipline of the field of study	2018_P7S_UW
<b>SOCIAL COMPETENCES</b>		

2BT_E_K01_P	Demonstrates a cautious and critical attitude towards information available in the mass media referring to achievements in natural sciences and biotechnology	2018_P7S_KK
2BT_E_K02_P	Carries out an objective self-assessment of his own work and provides the public with information about new achievements of biotechnology	2018_P7S_KK, 2018_P7S_KO
2BT_E_K03_P	Works in an entrepreneurial and creative way, taking into account the needs of the society	2018_P7S_KO
2BT_E_K04_P	Follows and develops the rules of ethical behavior in life and in the workplace	2018_P7S_KR
KS_OOD	understands the need for an interdisciplinary approach to solving problems, integrating knowledge or using skills from various disciplines and practicing self-education aimed at deepening the acquired knowledge	2018_P7S_KK