

1. Field of study	Environmental Protection
2. Faculty	Faculty of Natural Sciences
3. Academic year of entry	2023/2024 (winter term), 2024/2025 (winter term)
4. Level of qualifications/degree	first-cycle studies
5. Degree profile	general academic
6. Mode of study	full-time
7. ISCED code	0521 (Environmental sciences)
8. Number of semesters	6
9. Degree	licencjat (Bachelor's Degree)
10. General characteristics of the field of study and the assumed concept of education	<p>The curriculum for the degree programme in Environmental Protection is by PRK level: level 6 of the Polish Qualification Framework. The study programme participant realizes and fulfils the directional learning outcomes related to the discipline of biological sciences, earth and environmental sciences, chemical sciences and physical sciences to which the major is assigned and acquires advanced in the area of natural sciences as well as science and technology. Selecting key mandatory learning content is closely linked to the directional learning outcomes. From the academic year 2023/24 onwards, students in this and other fields of study at the University will have the unique opportunity nationally to choose some subjects from all fields represented at the University of Silesia. The study programme implements general effects of a supportive, auxiliary nature, which significantly supports or improves the directional education (e.g. knowledge of a foreign language, knowledge of intellectual property protection or numerous social competencies derived from the leading discipline), supports the top domain and can be assigned to it. The opportunity for students to enhance their humanities and social sciences competencies is realized through the subjects: Entrepreneurship and an elective module from the area of Creative Expression and Critical Thinking. In addition, issues from the Open Module Offer (OOM) have been introduced, which can be taught in Polish and English. The curriculum of the degree programme in Environmental Studies has elements of areas that support directional education. These include the elective areas Digital World, Health and Personal Development, Environment and Technology. From Civil Society and Entrepreneurship, the student chooses the module Law in Environmental Protection. The critical mandatory learning content selection is closely linked to the directional learning outcomes. In the course of the Bachelor's degree programme, the student acquires obligatory knowledge and skills as well as social competences from the areas of natural sciences and science: from mathematics, statistics, biophysics and computer tools necessary for data analysis of natural phenomena and biological processes; from general and inorganic chemistry he/she learns about the structures of matter and physicochemical laws governing the metabolism of matter, performs chemical calculations and identifies simple chemical compounds, learns about functional groups, nomenclature, structure, reactions of obtaining and properties of individual classes of organic compounds; in physics, learns about the application of physical methods in environmental protection; in geography, learns about GIS information systems, meteorological and climatic phenomena, principles of cartography and remote sensing and geological phenomena, acquires skills in using instruments and analyzing measurement results; adapts to laboratory work and cooperates in a group.</p> <p>A unique subject, Plan Your Education Path, has also been introduced to introduce students to the research carried out by those teaching environmental studies. It is worth highlighting the implementation of content related to the region's strategy, related to the key aspect of the studies: sustainable development and environmental protection, which includes, among others: threats related to the appearance of increasingly frequent violent water surges and severe droughts in Poland and around the world, as well as the environmental hazards and human consequences caused by them, learning about the methods and mathematical models used in hydrological forecasting, on the basis of which the extent and scale of these phenomena are determined (among others: Hydrology and water management, Water management in the context of climate change, Extreme hydrological phenomena), analyses of legal, social and economic aspects and principles of current and prospective functioning of the economy; mechanisms of anthropopression and methods of studying this process and methods of identifying various factors of anthropopression and types of transformation of forest and non-forest phytocenoses; issues of biological invasions (plants and animals) and their natural, social and economic consequences (inter alia: Law in environmental protection, Economics in environmental protection Ecosystems under anthropopressure, Biological invasions; Threats to civilisation and</p>

sustainable development, Threats and nature conservation, Forest ecosystem), air monitoring using standard air quality stations through data analysis aimed at proposing measures to improve air quality and reduce emissions of those components that have a major impact on climate change; new technologies in the energy industry legal and economic aspects of their use (e.g.: Aeromonitoring of air as a tool in climate change research, Environmental monitoring, Global physical and chemical pollution of the environment); the effects of mining on the aquatic and terrestrial environment, ways of reclamation and revitalisation of mining areas, and ways of minimising mining damage to local residents; learning about the principles of practical implementation of environmental impact reports and assessments, taking into account Polish and international normative acts, and assessing toxicity and environmental risk in land use plans for areas with diverse ecosystems (inter alia:

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	Ecology, Environmental Management, Environmental Reporting, Geographical Information Systems in Environmental Protection, Environmental Protection in Mining Areas); the problem of waste and its processing and its adverse short- and long-term impact on the environment; the issue of threats to biodiversity at all levels of its organisation and the effects of these threats on the environment and man himself, while at the same time characterising anthropogenic factors affecting biodiversity (e.g. Fundamentals of Botany, Fundamentals of Zoology, Polymers and the Environment: Fundamentals of botany, Fundamentals of zoology, Polymers and the Natural environment basis of post-industrial land use, Recycling of plastics, Ecosystem services).
11. Information on the relationship between the studies and the university's strategy as well as the socio-economic needs that determine the conduct of studies and the compliance of learning outcomes with these needs	The field of study of environmental protection is part of the realisation of the goals set out in the development strategy of the University of Silesia. The education in the field of environmental protection focuses the students' attention on caring for the harmonious and sustainable development of man and nature with the use of modern technologies, counteracting environmental pollution and unfavourable climate change, based on the latest achievements in environmental protection and the study of the fundamental properties of nature, defining interactions between man and the environment: Biosphere, Lithosphere, Hydrosphere and Atmosphere; and thus it perfectly fits into the most critical areas of research activity of our Institute and the co-founding Faculties, and these coincide with the Priority Research Areas indicated in the Development Strategy of the UŚ, i.e. : POB 1: Harmonious human development - concern for health protection and quality of life; POB 2: Modern materials and technologies and their socio-cultural implications; POB 3: Environmental and climate changes with accompanying social challenges; POB 5: Investigating the fundamental properties of nature. The didactic offer of the faculty, due to its interdisciplinary nature and its focus on acquiring knowledge through its application in solving current problems of the natural environment, fulfils the University's strategic objective of innovative education and modern didactic offer. The State Accreditation Commission positively evaluates the faculty. The educational programme of the faculty is updated and modified on an ongoing basis in such a way as to ensure the most excellent possible compatibility between the level of qualifications of the graduates and the current labour market demand for specialists. These measures are fostered by the work of the teaching projects implemented at the University. Individualisation of teaching in the environmental protection faculty is implemented in many forms. This is ensured by small exercise groups of 8-10 students. In addition, during training, the student can enter an individual learning path available to particularly outstanding students. The student can also choose from a wide range of optional subjects. Within the University's strategic objective of active cooperation with the environment, the "Environmental Protection" faculty pursues ongoing partnerships with employers representing a profile related to broadly defined environmental protection, state administration units of various levels, scientific institutes and non-governmental organisations. The cooperation is realised, among other things, through a programme of compulsory vocational training for students, through meetings with representatives of the Council of Socio-Economic Partners. The development of the didactic competencies of academic teachers and the functioning internal system of ensuring high quality of education allows for continuous improvement of the quality of education at the field of study. The mobility of academic staff also contributes to this, realised mainly through the Erasmus+ programme, as teaching or training trips to and from EU and non-EU countries. The internationalisation of the faculty is realised by introducing subjects taught in Polish and English, which increases student exchange and the teaching offer available to Erasmus+ and other students. As external funding is obtained from programmes such as JUWM (One University Many Possibilities), renowned foreign lecturers are also invited to collaborate, which broadens the teaching offer of the faculty and, at the same time, promotes and opens the staff and students of the environmental protection faculty to cooperation with leading foreign centres. The high quality of education is closely linked to the scientific research conducted in the institutes of the two faculties co-creating the faculty, many of which are interdisciplinary and represent the international level. To the university's mission, education in the field of "Environmental Protection" ensures the entire development of the student and opens up a wide range of opportunities and cognitive perspectives, equipping them with knowledge capital and accumulated wisdom and readiness to serve society in all their areas of competence.
12. Specializations	n/a
13. General description of the specialization	
14. The semester from which the specializations starts	n/a
15. Percentage of the ECTS credits for	<ul style="list-style-type: none"> <i>[leading discipline]</i> biological sciences (natural sciences): 60%

	each of the scientific or artistic disciplines to which the learning outcomes are related to the total number of ECTS credits (along with the indication of the leading discipline)	<ul style="list-style-type: none"> • Earth and related environmental sciences (natural sciences): 20% • chemical sciences (natural sciences): 10% • physical sciences (natural sciences): 10%
16.	Number of ECTS credits required to achieve the qualification equivalent to the level of study	180
17.	Percentage of the ECTS credits for optional modules in relation to the total number of ECTS credits	34%
18.	Total number of ECTS credits that a student must obtain in the modules taught	134
19.	Number of ECTS credits that a student must obtain in modules assigned to disciplines within the humanities or social sciences (not less than 5 ECTS) - in the case of fields of study assigned to disciplines within the fields other than, respectively, humanities or social sciences	9
20.	Number of ECTS credits - higher than 50% of the total number of credits - that a student must obtain: <ul style="list-style-type: none"> • in general university programmes within a module connected with research carried out in the scientific or artistic disciplines to develop his/her knowledge and research skills; • in practical programmes within a module to develop practical skills 	134
21.	Total number of ECTS credits that a student must obtain in internships	4
22.	Internships (hours and conditions) in the case of practical programmes and in general university programme - if such requires internship	<p>Internships are an integral part of the study program, carried out by students in individual fields, levels, profiles and forms of study. Internships are to help in confronting the knowledge acquired during studies with the requirements of the labour market, acquiring skills useful in the profession, learning about practical issues related to working in positions for which the student is prepared during the course of studies. The internship is to familiarize the student with professional language relevant to a specific industry and work culture. The rules for the organization of internships are set out in the Rector's ordinance. Detailed rules of apprenticeship taking into account the specifics of particular fields of study are set out in the field's of study apprenticeship regulations, in particular: learning outcomes assumed to be achieved by the student during the apprenticeship, framework apprenticeship program including a description of issues, dimension of apprenticeship (number of weeks of practice); form of internship (continuous, mid-year), criteria for choosing the place of</p>

		<p>internship, obligations of the student staying in the internship, obligations of the academic tutor, conditions for completing the internship by the student and conditions for exemption from the internship obligation in whole or in part. The number of ECTS and the number of hours are specified in the course structure.</p>
23.	Graduation requirements	<p>The condition for admission to the diploma examination is to achieve the learning outcomes provided for in the study program, to obtain a certificate of an appropriate level of language proficiency in a foreign language and to obtain positive grades for the diploma dissertation. The condition for graduation is to pass the diploma examination with at least a satisfactory result. A graduate receives a higher education diploma confirming obtaining the qualifications of the appropriate degree. Detailed rules of the diploma process and the requirements for the diploma thesis are set out in the Rules and Regulations of Studies at the University of Silesia and the diploma regulations.</p>