

Degree Programme Profile

General Information	
Official Title of the Degree Programme	Environmental Protection Technology
Speciality	183 Environmental Protection Technology
Field of Knowledge	18 Manufacturing and technology
Degree Title in Original Language	Bachelor, Bachelor in Environmental Protection Technology Бакалавр, бакалавр з технологій захисту навколишнього середовища
Degree Type, Scope and Terms of Study of the Degree Programme	Bachelors' Degree, singular, 240 ECTS credits, terms of study – 3 years and 10 months
Accreditation Agency	Ministry of Education and Science of Ukraine, Accreditation Certificate УД № 21008296, valid till 01.07.2028
Cycle / Level	The first (bachelors') degree NQF of Ukraine – the 7 th level FQ-EHEA – the 1 st cycle EQF-LLL – the 6 th level
Entrance Requirements	High school degree Common terms of entrance issued by the national higher education authority
Language(s) of Instruction	Ukrainian
Term of Validity of the Degree Programme	5 years
The Aim of the Degree Programme	
	Forming general and professional competencies necessary for solving environmental protection tasks
Features of the Degree Programme	
Subject	<i>Object:</i> technological processes and environmental components <i>Learning objectives:</i> formation of general and professional competences necessary for solving environmental problems <i>Theoretical content of the subject area:</i> Fundamental theories and methodology of natural sciences and engineering, principles of eco-centrism and environmental imperative, interdisciplinary concepts of sustainable development, complexity and a systems approach, life cycle analysis at assessing the state of the environment; basic terms and principles of environmental design and functioning; the essence and parameters of technological processes; principles of innovation and improvement of existing environmental protection technologies; rules of applying actual legislation and norms. <i>Methods, techniques and technologies:</i> methods of modeling systems and processes of technogenic and ecological safety, theoretical and laboratory research, qualitative and quantitative chemical, physical, physicochemical, biological, microbiological methods, and methods of designing environmental protection systems and technologies.
Orientation of the Degree Programme	Applied Professional Education
Main Focus of the Degree Programme	General Key words: environmental protection, rational use of nature resources, technogenous and environmental safety, environmental engineering, urban

	environment.
Specific Features	The degree programme ensures acquiring theoretic knowledge and practical skills in solving environmental problems of urban areas.
Employment Opportunities and Further Education of Alumni	
Employment Opportunities	<p>Alumni graduated as Bachelors in Environmental Protection Technology are able to perform the following jobs according to the State Job Classifier (ДК 003:2010):</p> <p>3119 – Technicians in the fields of physical sciences and engineering;</p> <p>3211 – Laboratory assistants in life sciences:</p> <ul style="list-style-type: none"> - Environmental technician; <p>3212 –junior fellows in agronomy, forestry, water resources management and nature reserve management:</p> <ul style="list-style-type: none"> - Water resource use officer; - Environmental protection officer; <p>3439 – Other technicians in the field of management:</p> <ul style="list-style-type: none"> - Technology and environment procurement officer; <p>3449 - State controllers:</p> <ul style="list-style-type: none"> - State inspector; - State inspector on civil defence and technology safety
Further Education	Earning the Masters' Degree.
Teaching and Evaluation	
Teaching and Learning	Student-centred learning, independent learning, learning by doing, distant learning
Evaluation	<p>Credit transfer system accounting for all kinds of curricular and extracurricular activities of students aiming at acquiring the knowledge and skills specified by the degree programme.</p> <p>Written exams, reports from practical training, essays, presentations on individual assignments, public defence of bachelor's thesis.</p>
Programme learning outcomes	
Learning outcomes specified by the degree programme	<p>PR01 To comprehend modern theories, approaches, principles of environmental policy, fundamentals of Biology, Chemistry, Physics, Math, Biotechnology, as well as special and applied engineering disciplines for modelling and solving specific environmental tasks in manufacturing.</p> <p>PR02 To be able to process foreign sources in order to obtain information necessary for solving environmental protection tasks.</p> <p>PR03 To be able to use information technologies and communication networks in environmental protection activity.</p> <p>PR04 To be able to justify environmental technologies, based on understanding the mechanisms of human impact on the environment and the processes that occur in it.</p> <p>PR05 To be able to develop environmental protection projects and manage their implementation.</p> <p>PR06 To justify and utilise both natural and artificial systems and processes in environmental protection technologies following the environmental imperative and the concept of sustainable development.</p> <p>PR07 To implement scientifically sound technical, technological and organizational measures to prevent environmental pollution..</p> <p>PR08 To be able to demonstrate skills in selection, planning, designing and calculating performance parameters of certain equipment, facilities and technologies of environmental protection, by applying the knowledge on physical and chemical properties of environmental pollutants, parameters of technological processes and environmental quality norms.</p>

	<p>PR09 To be able to carry out observations, instrumental and laboratory control of environmental quality, ensure internal control on environmental protection equipment at industries on the base of acquired knowledge on modern measurement techniques and modern measuring equipment and apparatuses together with the use of relevant technical guidelines and norms.</p> <p>PR010 To be able to apply knowledge on control and assessment of pollution and industrial emissions, to analyse their dynamics and changes in relation to environmental conditions and technologies of cleaning the components of the environment.</p> <p>PR011 To be able to apply knowledge on selection and justifying technologies of waste collection, sorting, storing, transportation, removal, sanitation, utilisation, and prevention, to assess their impacts on the quality of the environment, living conditions and human safety.</p> <p>PR012 To be able to select engineering measures to protect the environment, search for innovative technical, technological and organisational solutions aiming at implementation into production prospective environmental protection developments and modern equipment, to analyse pathways of improvement of existing environmental protection and restoration technologies for securing environmental safety.</p> <p>PR013 To be able to apply basic patterns of safe, resource-efficient, and environment-friendly technologies to environmental management, via environmental management and auditing systems according to international standards, as well.</p> <p>PR014 To be able to justify the degree of conformity of actual or forecasted environmental conditions to the objectives of environmental protection and restoration.</p>
<p>Learning outcomes, specified by the higher education institution</p>	<p>OPR01 To know basic techniques for intellectual property protection; apply the rules of registration of intellectual property rights.</p> <p>OPR02 To be able to identify factors of migration and accumulation of chemical elements in the environment and use reasonable methods for geochemical research and protection of environmental components.</p> <p>OPR03 To be able to choose measures to ensure environmental safety, protection and reproduction of the urban environment.</p> <p>OPR04 To be able to use administrative and economic tools for environmental management, analyze and implement sustainable urban development programs.</p> <p>OPR05 To be able to analyze the factors that determine the formation of landscape-biological diversity, select and implement landscape-engineering measures to ensure the environmental safety of cities.</p> <p>OPR06 To apply the categorical apparatus of psychology in the system of vocational training and practical activity; to take into account the basic mental socio-psychological and psychophysiological manifestations of personality; to accept scientifically grounded psychological interpretation of the structural elements of the personality psyche; to be aware of one's own mental sphere; to analyze various activities.</p> <p>OPR07 To apply the basic principles, laws and rules of logical thinking in scientific knowledge and professional activity.</p> <p>OPR08 To be able to analyze historical facts and documents that cover the main stages of the history of O.M. Beketov National University of Urban Economy in Kharkiv (O.M. Beketov NUUE); to use acquired knowledge of university history to deliberately search for little-known and unknown facts about university history, faculties, departments, life</p>

	<p>and teaching activities of teachers, the life of the student community of the university at different times of the historical past, and involvement of these data in the educational process; to form a conscious, justified by the glorious pages of the historical heritage of O.M. Beketov National University of Urban Economy in Kharkiv sense of respect for the conscientious and selfless work of previous generations of teachers and students of the University, pride in significant achievements in creating a strong scientific, educational and material base of the University; to use social research methods.</p> <p>OPR09 Communicate effectively in a foreign language in a business environment.</p> <p>OPR10 To implement professional communication: create communication products, analyze communication activities; adequately respond to criticism, generate and argue new ideas; to perform communicative impact on people, encouraging them to activities; to bring your own opinion; identify, apply information and communication technologies; to develop interpersonal skills in the team.</p> <p>OPR11 To apply professional conflict management skills, tools and strategies for managing and resolving them.</p> <p>OPR12 To be able to analyze the role and importance of modern city in the context of global and local challenges To be able to analyze the role and importance of modern city in the context of global and local challenges.</p> <p>OPR13 To use knowledge of major religious systems in social environment and professional activity.</p> <p>OPR14 To be able to use language and communication skills to communicate effectively in a foreign language.</p> <p>OPR15 To be able to use regulations that regulate the legal protection of the environment.</p> <p>OPR16 To know the technique of chemical experimentation and apply chemical equipment to gain the experience necessary to study objects and phenomena of the environment; independently acquire theoretical and practical knowledge about chemical aspects of the environment and organize them in the form of a report, a report at a scientific conference, etc.</p>
Teaching and learning resources	
Teaching Staff	<p>Programme director is Associate Professor, Dr. Iryna V. Stalinska.</p> <p>The Department responsible for the Degree Programme is the Department of Urban Environmental Engineering & Management.</p> <p>All learning disciplines are taught by experienced, qualified and certified teachers who have been trained at leading universities and research institutions both in Ukraine and abroad.</p>
Material support	<p>The condition of the material and technical base corresponds to the existing norms and provides an opportunity to carry out the educational process effectively.</p> <p>The curriculum is supported with multimedia-equipped classrooms, 2 computer classes, 10 study laboratories equipped with stationary and portable devices.</p> <p>Social infrastructure is relevant to satisfy living and social requirements of students.</p>
Information and curricula resources	<ul style="list-style-type: none"> • Official university web-site (https://www.kname.edu.ua/) • University Library • Library of the Department of Urban Environmental Engineering & Management

	<ul style="list-style-type: none"> • Electronic data-bases • Professional periodicals corresponding to the specialty profile • Distance-learning portal MOODLE (http://cdo.kname.edu.ua) • Intramural Internet Wi-Fi access <p>Subscribed access to publications indexed by the Web of Science and Scopus.</p>
Academic mobility	
National Credit Mobility	Students can participate in the national credit mobility programmes at universities providing for bachelors' degree programme in Environmental Protection Technology (183) via short study courses, seminars, summer and winter schools organised by these universities, with further transfer of learning credits in the frames of practical trainings.
International Credit Mobility	Students have a possibility to participate in international academic mobility programmes up to 10 months (2 semesters) during 3 rd or 4 th years of studies under ERASMUS+ programme at University of Nova Gorica (Republic of Slovenia) and Middle East Technical University (ODTU-METU) (Turkey Republic)
Options for International Students	Students from foreign partner universities can study under the degree programme in the frames of international credit mobility only, up to 10 months.