

## Degree Programme Profile

<b>General Information</b>	
<b>Official Title of the Degree Programme</b>	Environmental Protection Technology
<b>Speciality</b>	183 Environmental Protection Technology
<b>Field of Knowledge</b>	18 Manufacturing and technology
<b>Degree Title in Original Language</b>	Master, Master in Environmental Protection Technology Магістр, магістр з технологій захисту навколишнього середовища
<b>Degree Type, Scope and Terms of Study of the Degree Programme</b>	Masters' Degree, singular, 90 ECTS credits, terms of study – 1 years and 4 months
<b>Accreditation Agency</b>	Ministry of Education and Science of Ukraine, Accreditation Certificate УД № 21006913, valid till 01.07.2024
<b>Cycle / Level</b>	The second (Masters') degree NQF of Ukraine – the 8 <sup>th</sup> level FQ-EHEA – the 2 <sup>nd</sup> cycle EQF-LLL – the 7 <sup>th</sup> level
<b>Entrance Requirements</b>	University (bachelors') degree
<b>Language(s) of Instruction</b>	Ukrainian
<b>Term of Validity of the Degree Programme</b>	5 years
<b>The Aim of the Degree Programme</b>	
	Ability to solve complex problems in the field of environmental protection technology in professional activities or in the process of studies that foresees research and is characterized by sophistication and uncertainty of terms and requirements
<b>Features of the Degree Programme</b>	
<b>Subject</b>	Modern environmental protection technologies, optimal measures and solutions to protect the environment in order to secure environmental safety, development of environmental protection measures and environmentally safe technological processes, analysing, forecasting and assessing risks associated with technologies' impacts on the environment at economic activities.
<b>Orientation of the Degree Programme</b>	Applied Professional Education
<b>Main Focus of the Degree Programme</b>	Advanced higher education and professional training in the field of environmental protection technology Key words: the environment, environmental protection, human impacts, technogenous and environmental safety, energy and natural resources efficiency, environmental risks and hazards, industrial ecology, environmental protection measures, alternative energy sources, the urban environment
<b>Specific Features</b>	
<b>Employment Opportunities and Further Education of Alumni</b>	
<b>Employment Opportunities</b>	Alumni graduated as Masters in Environmental Protection Technology are able to perform the following jobs according to the State Job Classifier (ДК 003:2010): 2149.1 Junior Research Fellow (Engineering);

	<p>2149.1 Research Fellow (Engineering)  2149.2 Environmental Protection Engineer;  2149.2 Energy Efficiency Expert;  2149.2 Environmental Safety Engineer;  2148.2 Geosystems Environmental Monitoring Officer;  2442.2 Nature Resource Management Officer;  2213.2 Water Resource Engineer;  2213.2 Ecosystem Restoration Engineer;  2213.2 Water Resource Planner.</p>
<b>Further Education</b>	Earning the Doctoral (Third Cycle) Degree; further professional post-graduate training
<b>Teaching and Evaluation</b>	
<b>Teaching and Learning</b>	Student-centred learning, lectures, practical classes, independent learning, consultations, project work, preparation of Master's thesis.
<b>Evaluation</b>	<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.</p> <p>Interim control during learning semesters, final examinations and credit sessions on specific disciplines, control assignments of calculation and drawing character, course papers and projects.</p> <p>Public defence of Master's thesis.</p>
<b>Programme learning outcomes</b>	
<b>Learning outcomes specified by the degree programme</b>	<p>PR01. To be able to analyse complex systems, to understand their interrelations and structure, to comprehend modern advances of science and technology in the field of environmental protection.</p> <p>PR02. To be able to apply foreign language skills to writing essays, scholar papers and communicating at scientific conferences.</p> <p>PR03. To be able to use modern information and communication technologies in the field of environmental protection, to collect, store and process information on the state of the environment, to analyse information on the state of the environment and production field for solving professional tasks.</p> <p>PR04. To possess skills in planning and organising research activities in the field of environmental protection and organisational management.</p> <p>PR05. To be able to develop and manage projects, to evaluate and ensure quality of performance.</p> <p>PR06. To be able to generate ideas on new technologies for environmental protection, to justify decisions on securing environment and occupational safety.</p> <p>PR07. To be able to perform tasks in various team settings (during internship, carrying out international projects, etc.)</p> <p>PR08. To be capable to use statistical methods of experimental data processing in the field of environmental protection technologies, aided by appropriate software.</p> <p>PR09. To be able to perform SWOT-analysis of social and economic state of enterprises, settlements, communities and regions, and to develop strategies of their sustainable development.</p> <p>PR10. To be able to develop Environmental Management and Auditing Systems adherent to ISO 14004, to define procedures and promote environmental protection measures during whole Life Cycle of production.</p> <p>PR11. To master principles of integrated waste management and</p>

	<p>environmental-economic aspects of their utilisation, basics of landfill designing and assessing their impacts on the environment and human health.</p> <p>PR12. To know principles of industrial planning at different management levels and to be able to carry out environmental research on spatial planning problems.</p> <p>PR13. To be aware of hazard of physical, chemical and biological pollution of the Biosphere and its consequences to humans and the environment, to be able to analyse changes that occur in the environment under impacts of natural and technogenous factors.</p> <p>PR14. To be able to perform the assessment of impacts from industries on the environment and related responsibility for decisions made, to plan and carry out research on the industrial impacts on the environment.</p> <p>PR15. To understand pathways of utilisation and sanitation of hazardous wastes, to assess impacts from industrial and hazardous wastes on the environment.</p> <p>PR16. To be able to design and operate modern purification systems, facilities and technologies of environmental protection and to develop relevant guidelines.</p> <p>PR17. To be able to implement and operate the most efficient modern renewable energy sources and resource-efficient technologies in industrial and social contexts.</p> <p>PR18. To be able to critically appraise the performance of hydraulic systems, to choose energy-efficient technologies of drinking water treatment, to propose modern wastewater treatment systems at industries and municipalities.</p> <p>PR19 To master basics of design and planning environment-protection measures in water economy, to implement advanced technologies of water protection, to plan and carry out research on the state of water systems.</p> <p>PR20. To be able to assess the scope of land degradation at mining, desertification, water logging, to choose appropriate technologies for post-mining remediation, water logging abatement, and land reclamation.</p> <p>PR21. To be able to prevent atmospheric pollution by applying modern air cleaning equipment at industries.</p> <p>PR22. To be able to assess the scope of radioactive contamination of th environment, to perform radiological control, to analyse radiation-bound risks and hazards, to develop and use technologies of protection against radiation factors.</p> <p>PR23. To be able to use national and international environmental legislation norms in professional activity.</p>
<p><b>Learning outcomes,</b> specified by the higher education institution</p>	<p>PR24. To demonstrate relevant skills in disaster and emergency management.</p> <p>PR25. To be able to choose optimal measures and techniques to reduce occupational health risks and to prevent accidents.</p> <p>BPR26. To be able to analyse environmental risks and hazards under conditions of information deficit and uncertainty.</p> <p>BPR27. To comprehend the process of urbanisation and the principles of urban systems functioning.</p> <p>BPR28. To be able to define natural climatic and planning conditions of urban areas.</p> <p>BPR29. To comprehend basic compositional, planning and constructive approaches to urban planning and reducing the impact of environmental hazards on the human's living environment.</p>

<b>Teaching and learning resources</b>	
<b>Teaching Staff</b>	<p>The Programme Director is Associate Professor, Dr. Tetyana V. Dmytrenko.</p> <p>The Department responsible for the Degree Programme is the Department of Urban Environmental Engineering &amp; 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>
<b>Material support</b>	<p>The curriculum is supported with multimedia-equipped classrooms, a specialised computer class, 2 specialised study laboratories – the Environmental Monitoring and Applied Ecology ones equipped with stationary and portable devices.</p> <p>All university premises satisfy the norms of sanitary and state construction regulations.</p>
<b>Information and curricula resources</b>	<ul style="list-style-type: none"> <li>• Official university web-site (<a href="https://www.kname.edu.ua/">https://www.kname.edu.ua/</a>)</li> <li>• University Library</li> <li>• Electronic data-bases</li> <li>• Distance-learning portal MOODLE (<a href="http://cdo.kname.edu.ua">http://cdo.kname.edu.ua</a>)</li> <li>• Intramural Internet Wi-Fi access</li> <li>• Subscribed access to publications indexed by the Web of Science and Scopus.</li> </ul>
<b>Academic mobility</b>	
<b>National Credit Mobility</b>	<p>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.</p>
<b>International Credit Mobility</b>	<p>Students have a possibility to participate in international academic mobility programmes up to 6 months of studies under ERASMUS+ programme at University of Nova Gorica (Republic of Slovenia) and Middle East Technical University (ODTU-METU) (Turkey Republic)</p>
<b>Options for International Students</b>	-