

## Educational programme profile

<b>General information</b>	
<b>Official name of the educational programme</b>	Freight transport logistics and transport management
<b>Speciality</b>	275 – Transport technologies (by modes)
<b>Branch of knowledge</b>	27 – Transport
<b>Higher education degree and title in the original language</b>	Master's degree, магістр з транспортних технологій
<b>Type of diploma and volume of educational program</b>	Masters' diploma, solitary, 90 credits ECTS, training time 1 year 4 month
<b>Accreditation availability</b>	Ministry of Education and Science of Ukraine; certificate UD № 21002025, validity – till 1 September 2023.
<b>Cycle / level</b>	The second (Master's) degree; HPK Ukraine – 8 <sup>th</sup> level; FQ-EHEA – the second cycle; EQF-LLL – 7 <sup>th</sup> level
<b>Intrant of level education requirements</b>	Bachelor's or specialist's degree availability
<b>Language (s) of teaching</b>	Ukrainian
<b>Educational programme period of validity</b>	5 years
<b>The purpose of the educational programme</b>	
	The purpose of the educational program is to acquire a person of theoretical knowledge, skills and other competences sufficient to produce new ideas, to solve complex problems in the field of transport technology, which deals with the laws that determine the conditions of rational organization of transport services and transport processes and covers problems formation and maintenance of effective work of components of a transport complex, development of its material and technical base - a network of routes, transportation, storage and reloading facilities.
<b>Educational programme characteristics</b>	
<b>Subject area</b>	<ol style="list-style-type: none"> <li>1. <i>Object of study</i> – transport systems and technologies.</li> <li>2. <i>Objectives of study</i> – training specialists capable of solving complex tasks and problems of the transport industry in the field of transport systems and technologies, or in the process of study, which involves conducting the research.</li> <li>3. <i>Theoretical content of the subject area</i> – branches of the science and technology, that study and cover the connections and patterns in the theory of functioning of transport systems and technologies.</li> </ol>

	<p>4. <i>Methods, techniques</i> – analytical, numerical and experimental methods of research of the functioning of transport systems, methods of long-term, short-term and operational management of transport systems, transport technologies.</p> <p>5. <i>Tools and equipment</i> – computer and software, multimedia; nowadays devices for controlling traffic and managing the operation of transport systems; models of transport objects and infrastructure.</p>
<b>Educational programme orientation</b>	Educational and professional.
<b>Educational programme main focus and specialization</b>	<p>Special education in industry 27 Transport by specialty 275 Transport technologies (by type), educational program Organization of transportation and management on transport.</p> <p>Keywords: transport; organization of transportation; transport technologies; transport system; transportation schemes; multimodal transportation; intermodal transportation; optimization; mathematical modeling; statistical modeling; simulation; transport and technological schemes of transportation; customs clearance of transportation; management of freight transportation; management of passenger transportation.</p>
<b>Programme features</b>	The program focuses on the integration of transport technologies and multimodality principles in the organization and management of transportation.
<b>Capability of graduates for employment and further education</b>	
<b>Capability for employment</b>	<p>Possible employment in public institutions and private companies for positions related to the organization of the transport process and research in the field of transport technologies.</p> <p>Occupations (according to the current version of the National Classifier of Ukraine: Classifier of Professions 2019):</p> <p>2149.1 - Junior Researcher (Transportation);</p> <p>2149.1 - Researcher (Transport);</p> <p>2149.1 - Research Assistant (Transport);</p> <p>2149.2 - Transportation engineer;</p> <p>2149.2 - Research Engineer;</p> <p>2419.2 - Logistician.</p>
<b>Further training</b>	Opportunity to study under the program of the third (educational-scientific) level of higher education.
<b>Teaching and assessment</b>	
<b>Teaching and learning</b>	Student-centered training, self-study, problem-oriented learning, training through industrial and undergraduate practice, dual and distance learning
<b>Evaluation</b>	Current and final control, oral and written examinations, express-testing, testing, control tasks oral presentations, defense of master's work.
<b>Program learning outcomes</b>	
<b>Integrated competency</b>	Ability to solve complex tasks and problems in professional activity in the field of transport systems and technologies in accordance with the specialization or in the process of further education, using the provisions, theories and methods of natural, technical, informational and socio-

	economic sciences, which provides for research and / or innovation and characterized by the complexity and uncertainty of the conditions.
<b>General competences</b> defined by the standard of higher education specialty	<p>3K 01. Ability to work in an international context.</p> <p>3K 02. Ability to motivate people and move toward a common goal.</p> <p>3K 03. Ability to search, process and analyze information from different sources.</p> <p>3K 04. Ability to communicate with representatives of other professional groups of different levels (with experts in other fields of knowledge / types of economic activity).</p> <p>3K 05. Ability to develop and manage projects.</p> <p>3K 06. Ability to evaluate and ensure the quality of work performed.</p> <p>3K 07. Ability to identify, set and solve problems.</p> <p>3K 08. The ability to generate new ideas (creativity).</p>
<b>Special competencies of the specialty,</b> defined by the standard of higher education of the specialty	<p>ΦK 01. Ability to research and manage the functioning of transport systems and technologies.</p> <p>ΦK 02. Ability to identify and apply promising directions of modeling of transport processes.</p> <p>ΦK 03. Ability to use modern technologies of freight forwarding activities.</p> <p>ΦK 04. Ability to manage supply chains and logistics centers.</p> <p>ΦK 05. Ability to manage freight traffic by mode of transport.</p> <p>ΦK 06. Ability to manage passenger transportation by mode of transport.</p> <p>ΦK 07. Ability to manage traffic flows.</p> <p>ΦK 08. Ability to manage the reliability and efficiency of transport systems and technologies.</p> <p>ΦK 09. Ability to carry out expertise in transport accidents by type of transport.</p> <p>ΦK 10. Ability to take into account the impact of customs procedures in the formation of transport technologies.</p> <p>ΦK 11. Ability to use advanced computer software products in the field of transportation systems and technologies.</p>
<b>Special competencies of the specialty,</b> defined by the institution of higher education	<p>ΦKB 12. Ability to analyze the activities of the transportation system in the main areas and identify existing problems, develop measures to overcome them.</p> <p>ΦKB 13. Ability to evaluate the functioning of multimodal cargo transportation systems.</p> <p>ΦKB 14. Ability to manage urban and regional supply chains and logistics systems using econometric models.</p> <p>ΦKB 15. Ability to form logistic systems at macro-, meso- and micro-levels with the study of evaluation of the influence of interaction of material and financial flows on the efficiency of their functioning.</p> <p>ΦKB 16. Ability to evaluate the performance of the material supply system in the light of inventory management strategies.</p> <p>ΦKB 17. Ability to research and manage the functioning of integrated transport systems.</p> <p>ΦKB 18. Ability to apply strategies for the development of transport systems and technologies in the implementation of projects in the field of transport.</p>

<p><b>Program learning outcomes</b> defined by the standard of higher education specialty</p>	<p>PIPH 01. Analyze information sources, criticize, discuss, draw conclusions on the chosen topic in the national and foreign language.</p> <p>PIPH 02. Present the results of analysis or research in printed or other form in the state and foreign language. Translate terms, abstract and abstract into a foreign language.</p> <p>PIPH 03. Use new knowledge and skills in practice, in particular in new areas of knowledge not directly related to the field of activity.</p> <p>PIPH 04. Be able to convey their knowledge, decisions and grounds for their adoption to specialists and non-specialists in a clear and unambiguous form, to present the results of work performed in the form of reports, abstracts, scientific articles, reports and applications for inventions.</p> <p>PIPH 05. Choose the necessary provisions from the legislation on labor protection, civil protection and environmental protection concerning relevant research issues. Put these provisions into practice.</p> <p>PIPH 06. To substantiate the need for the development of new and improvement of existing transport systems and technologies, to define the development goals, criteria of efficiency and scope.</p> <p>PIPH 07. Know and apply the necessary research methods and tools, develop and analyze physical, mathematical and computer models of research objects related to the operation of transport systems and the improvement of transport technologies.</p> <p>PIPH 08. To develop technologies of freight and passenger transportation using modeling of processes of cargo transportation by modes of transport.</p> <p>PIPH 09. To develop technologies for the transportation of passengers and goods in international traffic. Investigate the impact of customs procedures on the efficiency of transport technologies</p> <p>PIPH 10. To substantiate the feasibility of using modern technologies of freight forwarding services.</p> <p>PIPH 11. To analyze and calculate performance indicators of supply chains and logistics centers. Use information resources for supply chain modeling.</p> <p>PIPH 12. Manage technological processes in accordance with their duties, ensure technical safety of production in the field of their professional activity.</p> <p>PIPH 13. Organize work and manage the primary production, design or research unit.</p> <p>PIPH 14. Use modern computer software for the analysis, development and improvement of transportation systems and technologies.</p>
<p><b>Program learning outcomes</b> defined by the higher education institution</p>	<p>PIPHB 15. Improvement of approaches and methods for research and operation management of integrated transport systems.</p> <p>PIPHB 16. Substantiation of feasibility of measures to improve transport technologies using modeling of transport processes. Evaluate the effectiveness of the measures chosen.</p> <p>PIPHB 17. Analyze and justify the application of modern techniques, have the ability to analyze and calculate the economic indicators of supply chain and logistics centers. Use information resources for supply chain modeling.</p> <p>PIPHB 18. Develop measures for the management of freight traffic using modeling of freight transportation processes by type of transport.</p>

	<p>IIPHB 19. Develop measures for the management of passenger transportation using simulations of passenger transportation processes by type of transport.</p> <p>IIPHB 20. Analyze and justify strategies for developing passenger and cargo transportation systems.</p> <p>IIPHB 21. Have the skills to investigate theoretical and experimental models of managing the reliability and efficiency of transport technologies by modes of transport.</p> <p>IIPHB 22. To develop and study the impact of customs features in the formation of transport technologies.</p> <p>IIPHB 23. Have the skills to develop multimodal cargo transportation systems and evaluate the effectiveness of their application.</p> <p>IIPHB 24. To plan the work of loading and unloading points, to evaluate their capacity based on the degree of mechanization of loading and unloading works.</p> <p>IIPHB 25. Develop schedules of access to the line of taxis, form the transport capacity of the fleet of taxis in the conditions of variable demand for service.</p> <p>IIPHB 26. Analyze and justify the feasibility of applying scientific recommendations and modern methods for the organization and management of vehicle traffic.</p> <p>IIPHB 27. Have strategic planning skills for the development of transport systems and technologies.</p>
<b>Resources for programme implementation</b>	
<b>Staff assistance</b>	The qualitative level of professional training of masters is ensured by the qualified scientific and pedagogical staff of the department, which includes doctors and candidates of sciences, professors, associate professors. Six teachers are certified in English at B-2 level; eight teachers have completed international internships.
<b>Material and technical support</b>	Lectures are held in classrooms with multimedia equipment. Practical classes are held in specialized computer classes using information and communication equipment, using information systems and software used in transport technology and logistics. Many of these products are already implemented or are being actively implemented in the learning process: Office 365, MS Visio, Libre office Impress. AnyLogic and PTV Visum simulation software, Copert.
<b>Informational, educational and methodological support</b>	<p>All educational components of the educational program The organization of transportation and transportation management are provided with the following educational and methodological materials: textbooks; tutorials; lecture notes; methodical instructions and recommendations; individual tasks; collections of situational tasks (cases); Examples of solving typical tasks or completing typical tasks computer presentations; illustrative materials; resource directories and more.</p> <p>All teaching materials are available to students in the reading rooms of the Scientific Library <a href="http://library.kname.edu.ua/index.php/en/">http://library.kname.edu.ua /index.php/en/</a>, including in the Information Room equipped with computers with Internet access and the University's local network, in the digital repository</p>

	<a href="http://eprints.kname.edu.ua">http://eprints.kname.edu.ua</a> , on the portal of the Distance Learning Center <a href="http://cdo.kname.edu.ua/">http://cdo.kname.edu.ua/</a>
<b>Academic mobility</b>	
<b>National Credit Mobility</b>	In accordance with the Regulations on Academic Mobility of Students, Graduate Students, Doctoral Students, Scientific-Pedagogical and Scientific Workers of O.M. Beketov NUUE in Kharkiv.
<b>International Credit mobility</b>	Agreement on cooperation between O.M. Beketov NUUE in Kharkiv and: - Estonian University of Natural Sciences (Tartu), agreement No. 90 of October 10, 2017
<b>Training of foreign higher education applicants</b>	In accordance with the Admission Regulations of O.M. Beketov NUUE in Kharkiv