

**Profile of the educational program "Transport technologies by type" in specialty 275 Transport technologies (Urban Transport)**

<b>1 – General information</b>	
<b>Full name of higher education institute</b>	O.M. Beketov National University of Urban Economy in Kharkiv
<b>Academic degree and the name of the qualification in the original language</b>	Bachelor of Transportation Technology
<b>The official name of the educational program</b>	Transportation technologies (Urban Transport)
<b>Type of diploma and scope of educational program</b>	Bachelor's Degree, unitary, 240 ECTS credits, term of study 3 years and 10 months
<b>Accreditation availability</b>	-
<b>Cycle / level</b>	The first (bachelor) level, NQF of Ukraine - Level 7, FQ-EHEA - First Cycle, EQF-LLL - Level 6
<b>Entry level education requirements</b>	Full general secondary education
<b>Language(s) of teaching</b>	Ukrainian, English
<b>Term of the educational program</b>	5 years
<b>Internet address for the permanent description of the educational program</b>	<a href="http://www.kname.edu.ua/">http://www.kname.edu.ua/</a>
<b>2 – The educational program purpose</b>	
	The purpose of the educational program is acquiring of the theoretical knowledge, skills and other competences sufficient to produce new ideas, to solve a complex of problems in the transport technology field, which studies the patterns that determine the conditions for the rational organization of transport services and transport processes and covers the problems of forming and ensuring the effective operation of the constituent elements of the transport complex, development of material and technical basis - a traffic network, vehicle, warehouse and reloading facilities.
<b>3 – Educational program characteristic</b>	
<b>Subject area</b>	<i>Object of study</i> – transport systems and technologies; <i>Learning goals</i> – training specialists capable to solve complex specialized tasks and practical problems in the transport field, using the theories and modern science methods, and taking into account the complexity and uncertainty of the operating conditions of transport systems. <i>Theoretical content of the subject area</i> - definitions, methods, concepts of systems theory and systems analysis, transport processes and systems, optimal

	<p>solutions and others revealing patterns of designing, efficient development and functioning of transport systems and technologies.</p> <p><i>Methods, techniques, technologies</i></p> <ul style="list-style-type: none"> <li>- formalized and qualitative methods of system analysis;</li> <li>- methods of operation research, mathematical and simulation modeling, graphical, analytical and statistical analysis;</li> <li>- methods of solving formalized tasks, algorithmization of transport processes;</li> <li>- technologies of passenger service, cargo and mail service, different kinds of transport;</li> <li>- technologies of using proper types of transport in the branches of economy.</li> </ul> <p><i>Tools and equipment:</i> set of industry devices and information systems.</p>
<b>Orientation of the educational program</b>	Educational and Professional
<b>The main focus of the educational program and specialization</b>	<p>General education in the field of Transport, specialty 275 Transport technologies by type, educational program Transport technologies by type.</p> <p><i>Keywords:</i> Transport technologies, transport systems, organization and regulation of road traffic, organization of passengers transportation, cargo operations, efficiency of transport processes, logistics, customs, auto-technical expertise.</p>
<b>Features of the program</b>	Professional subjects are taught in English according to the student's choice
<b>4 – Graduate eligibility to employment and further education</b>	
<b>Suitability for employment</b>	<p>Possible employment in public institutions and private companies in positions related to transport area (management).</p> <p>Profession (<i>according to the current version of the National Classifier of Ukraine: Classifier of Professions (DK 003: 2010):</i></p> <ul style="list-style-type: none"> <li>3115 Technician/technologist (mechanics)</li> <li>3119 Road Transport Manager</li> <li>3139 Auto-technical expertise Specialist</li> <li>3152 Traffic Safety Engineer</li> <li>3152 Traffic Safety Auditor</li> <li>3441 The customs inspector</li> <li>3436.9 Other helpers</li> <li>3439 Other technical experts in the field of management</li> </ul>
<b>Continuation training</b>	Master's Degree
<b>5 – Teaching and assessment</b>	
<b>Teaching and training</b>	Student-centered training, self-study, industrial on-

	the-job training
<b>Assessment</b>	Written examinations, defense of coursework, industrial and undergraduate on-the-job training reports, qualification work
<b>6 –Program competencies</b>	
<b>Integral competence</b>	Ability to solve complex specialized and practical problems in the field of transport using the theories and methods of modern transport science on the basis of a systematic approach and taking into account the complexity and uncertainty of the conditions of functioning of transport systems
<b>General competencies (GC)</b> defined by the standard of higher education	<p>GC 1. The ability to realize the rights and responsibilities as a member of society, to realize the values of civil (democratic) society and the necessity in the sustainable development, the rule of law, and political rights and freedoms in Ukraine.</p> <p>GC 2. Ability to preserve and multiply moral, cultural, scientific values and achievements of the society on the basis of understanding of history and patterns of the subject area development, its place in the general system of knowledge about nature and society, development of society, and technologies, use different types and forms of physical activity for the rest and a healthy lifestyle.</p> <p>GC 3. Ability to communicate in the state language written and oral.</p> <p>GC 4. Ability to communicate in a foreign language.</p> <p>GC 5. Information and communication technology skills.</p> <p>GC6. Ability to conduct research at the appropriate level.</p> <p>GC 7. Ability to generate new ideas (creativity).</p> <p>GC 8. Ability to develop and manage projects.</p> <p>GC 9. Skills for safe operation.</p> <p>GC10. The desire to save the environment.</p> <p>GC 11. Ability to work solo and team working.</p> <p>GC12. Knowledge and understanding of the subject area and professional activity.</p> <p>GC 13. The abstract intelligence, analysis and synthesis ability.</p>
<b>General Competencies (GCH)</b> defined by the institution of higher education	<p>GCH 14. Ability to use conflict management and conflict resolution techniques in conflict analysis.</p> <p>GCH 15. Ability to be realistic about the results of own activities, to correct of the individual and psychological characteristics, to communicate professional and psychologically justified.</p>

	<p>GCH 16. Ability to analyze and solve problems in the field of economic and social-labor relations.</p> <p>GCH 17. Ability to preserve and multiply cultural and artistic, moral, scientific values and achievements of society on the basis of understanding of history and patterns of the subject area development, its place in the general system of knowledge about nature and society, development of society, and technologies.</p> <p>GCH 18. Ability to analyze political events of today through critical thinking and well-minded.</p> <p>GCH 19. Apply logical thinking to the analysis of social phenomena and processes and in solving professional problems.</p> <p>GCH 20. Ability to analyze social reality through the lens of sociological thinking in a rational manner.</p> <p>GCH 21. Ability to understand the principles and rules of law and use them in practice.</p>
<p><b>Special (professional) competencies of the specialty (PC) defined by the standard of higher education</b></p>	<p>PC 1. Ability to analyze and forecasting parameters and performance of transport systems and technologies, including the environment impact.</p> <p>PC 2. Ability to organize and manage loading/unloading, warehouse operations.</p> <p>PC 3. Ability to organize and manage cargo carriage (by type).</p> <p>PC 4. Ability to organize and manage passenger and luggage carriage (by type).</p> <p>PC 5. Ability to in-process control of traffic flows.</p> <p>PC 6. Ability to organize the interaction of transport types.</p> <p>PC 7. Ability to make logistic operations and make transportation of goods from manufacturer to consumer, according to the laws, rules and requirements of quality management systems.</p> <p>PC 8. Ability to project transport (transport/production, storage/retrieval) systems and their separate elements.</p> <p>PC 9. Ability to evaluate the operational, technical, economic, technological, legal, social, and environmental components of transportation.</p> <p>PC 10. Ability to evaluate and ensure the ergonomic efficiency of transportation technologies.</p> <p>PC 11. Ability to evaluate and ensure the safety of transport activities.</p> <p>PC 12. Ability to arrange international carriage.</p> <p>PC 13. The ability to evaluate plans and proposals for the transportation organization and technology</p>

	<p>created by other entities, and make changes based on the technical and operational parameters and operation principles of objects and devices of transport infrastructure, vehicles (ships).</p> <p>PC 14. Ability to use modern information technologies, automated control systems and geoinformation systems in the transport process.</p> <p>PC 15. Ability to arrange freight forwarding.</p> <p>PC 16. Ability to consider the human factor in transport technologies.</p>
<p><b>Specialty (professional) competencies of specialty (PCH) determined by institution of higher education</b></p>	<p>PCH 17. Ability to identify and solve problems connected with estimation of efficiency of transport processes.</p> <p>PCH 18. Knowledge of technical and operational parameters of vehicles</p> <p>PCH 19. Ability to determine human factor influence in transport processes</p> <p>PCH 20. Skills to be aware of the development of transport systems</p> <p>PCH 21. Ability to apply technical means of traffic flow organization</p> <p>PCH 22. Ability to solve complex logistics management issues related to transportation, warehousing, cargo handling, ordering and inventory</p> <p>PCH 23. Ability to apply the principles of the customs tariff system of the country, the provision of customs services and transactions, the implementation of currency and customs regulation.</p>
<p><b>7 – Program learning outcomes</b></p>	
<p><b>Program Learning Outcomes (PLO)</b> defined by the standard of higher education</p>	<p>PLO 1. Take responsibility, exercise civic awareness, community relief, be a part of civil society life, have a partitive thinking and critical view of life.</p> <p>PLO 2. Critically evaluate the scientific values and achievements of society in the development of transport technologies.</p> <p>PLO 3. Answer, explain, understand, discuss, report in the state language at a professional level.</p> <p>PLO 4. Answer, explain, understand, discuss, report in the foreign language at a professional level.</p> <p>PLO 5. Apply and use modern information and communication technologies to solve practical problems in the transport organization and designing of transport technologies.</p> <p>PLO 6. Investigate transport processes, experimentalize, analyze and evaluate the parameters of transport systems and technologies.</p> <p>PLO 7. Formulate, modify and develop new ideas</p>

	<p>for improving transportation technologies.</p> <p>PLO 8. To develop, design and manage projects in the field of transport systems and technologies.</p> <p>PLO 9. To develop, plan and implement safety methods of activities in the field of transport systems and technologies.</p> <p>PLO 10. Develop and use transportation technologies according to safety environmental requirements.</p> <p>PLO 11. Classify and identify transport processes and systems. Assess the parameters of transport systems. Make a system analysis and forecasting of transport systems.</p> <p>PLO 12. Finding solutions for rational methods of loading/unloading. Schedule loading/unloading operations. To choose mechanisms and means of carrying out loading/unloading.</p> <p>PLO 13. Make arrangements and manage the cargo carriage in different ways. To choose the vehicles (ships) type, model, and travel route. Control over transportation.</p> <p>PLO 14. Make arrangements and manage passenger and luggage carriage in different ways. To choose the vehicles (ships) type, model, and travel route. Provide the passenger service at stations and Terminals.</p> <p>PLO 15. Assess traffic flow parameters. Design flow diagrams and networks of transportation systems. Develop technologies for operational management of traffic flows.</p> <p>PLO 16. Choose effective interaction technologies of transport by type. Analyze possibilities of application of different version transport interaction by type.</p> <p>PLO 17. Develop supply chains and evaluate their performance. Establish connection between different supply chains. Define the logistics centers functions. Analyze the features of related information and financial flows.</p> <p>PLO 18. Investigate the transport systems by type. Find solutions to optimize the parameters of transport systems. Evaluate the efficiency of infrastructure and technology of transportation systems functioning.</p> <p>PLO 19. Explain the operational, technical, economic, technological, legal, social and environmental efficiency of transportation arrangement.</p> <p>PLO 20. Investigate the ergonomic components of transport technologies. Establish their efficiency and reliability.</p> <p>PLO 21. Implement methods of safety transport</p>
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	<p>activities.</p> <p>PLO 22. Organize international transportation. Apply customs clearance and customs control methods.</p> <p>PLO 23. Recognize the qualitative and quantitative indicators of vehicles (ships). Evaluate the construction elements of vehicles (ships). Establish a connection between the construction elements of vehicles (ships).</p> <p>PLO 24. Choose information systems for transportation arrangement. Operate automated control and navigation systems during transportation. The electronic cards applying.</p> <p>PLO 25. Apply a freight forwarding service methods of different transportation modes.</p> <p>PLO 26. Investigate human factors related to transportation, and the consequence of management error for safety transportation. Identify human behaviors in relation to errors.</p>
<p><b>Program Learning Outcomes (PLOH)</b> determined by institution of higher education</p>	<p>PLOH 27. Apply professional conflict management skills, tools and strategies for managing and resolving conflicts.</p> <p>PLOH 28. To apply the categorical instrument of psychology in the system of professional learning and practice; consider the main mental, social, psychological and psychophysiological soft skills; accept scientifically grounded psychological interpretation of the person mind structural elements; recognize own psychological characteristics; analyze various activities.</p> <p>PLOH 29. To analyze the processes of legal and market regulation of socio-economic labor relations.</p> <p>PLOH 30. Analyze the cultural conception of the modern society; make comparative analysis of the main cultural centers of the modern society; analyze the patterns of cultural development of society; draw historical comparisons between the contemporary cultural and the historical antecedent.</p> <p>PLOH 31. Apply the basic principles of political science in solving professional problems.</p> <p>PLOH 32. Reasonable use the basic principles, laws and rules of logical thinking in scientific knowledge and professional engagement.</p> <p>PLOH 33. Apply the basic provisions and methods of sociological science in solving professional problems.</p> <p>PLOH 34. Use normative legal acts regulating professional engagement.</p> <p>PLOH 35. Apply methods of foreign economic company's management, use the documentation</p>

	<p>necessary for carrying out foreign economic engagement.</p> <p>PLOH 36. Apply methods of auto-technical expertise to investigate the process and cause of accidents, analyze the actions of accident participants in accordance with current legislation.</p> <p>PLOH 37. Investigate the social, economic, environmental feasibility of advent of intelligent system technology in transport, investigate the feasibility of advent of intelligent system technology in transport technologies by types.</p> <p>PLOH 38. Carry out modeling of transport processes using computer technologies. Carry out management of transport systems on the basis of transport processes models.</p> <p>PLOH 39. Develop arrangement of traffic technical means basis of the elements of transport networks.</p> <p>PLOH 40. Calculate and justify the passengers and cargo transport tariff in different ways. Carry out predicted commercial calculations during passengers and cargo transportation.</p> <p>PLOH 41. Apply methods of distributive logistics, engineer and evaluate efficiency of logistic system functioning.</p>
<b>8 – Program implementation resourcing</b>	
<b>Staff assistance</b>	<p>The staff of the program is the highly qualified scientific and pedagogic with scientific degrees and academic titles. Staff assistance of the educational process is based on the selection and training of highly qualified specialists in the field of transport. The advanced training of pedagogical staff is enhanced through internship in relevant Ukrainian and European organizations and educational institutions. Leading experienced specialists of the region are involved in the teaching of professional disciplines.</p> <p>Six teachers have B-2 level English certificate.</p>
<b>Material and technical support</b>	<p>Lectures classes are wired multimedia equipment. Practical classes are wired information and communication equipment, classes are held information systems and transport software products. The ergonomic laboratory is fitted out modern equipment, instruments, measuring and diagnostic hardware. Many of these products are already putted into learning process or actively implemented: MS Project, Teamwork, TeamLab, OpenWorkbench., GanttProject, dotProject., EverNote, Nirvana, Wunderlist, Toggl, Office 365, Document. online, AllFusionProcessModeler 7, MS Visio, LibreofficeImpress, Mind42, ViSta,</p>

	MacANOVA, Matrixer. AnyLogic and Vissum, Vissim, Copert simulation software.
<b>Information and methodological support</b>	<p>All educational components of the Transport Technologies by type program are provided with the following educational and methodological materials: textbooks; tutorials; lecture notes; methodical recommendations; individual tasks; collections of situational tasks (cases); examples of solving or completing typical tasks; computer presentations; illustrative materials; resource directories and more.</p> <p>All information and methodological materials are available for students in the reading rooms of the Scientific Library</p> <p><a href="http://library.kname.edu.ua/index.php/uk/">http://library.kname.edu.ua/index.php/uk/</a>, including the information room equipped computers with Internet access and the University's local network, in the digital repository <a href="http://eprints.kname.edu.ua">http://eprints.kname.edu.ua</a>, and the Distance Learning Centre <a href="http://cdo.kname.edu.ua/">http://cdo.kname.edu.ua/</a></p>
<b>9 – Academic mobility</b>	
<b>National credit mobility</b>	In accordance with the regulations on academic mobility of students, PhD students, teachers and academic workers of O.M. Beketov National University of Urban Economy in Kharkiv.
<b>International credit mobility</b>	<p>Erasmus + program</p> <p>Capacity Building in Higher Education (E + CBHE)</p> <p>Partner agreement</p> <p>Project Number - 585832-EPP-1- 2017-1- IT-EPPKA2- CBHE-JP</p> <p>Smart transport and logistics for cities SmaLog</p>
<b>Foreign applicants training</b>	In accordance with the Rules of admission to the O.M. Beketov National University of Urban Economy in Kharkiv.