Education program profile

General information	
The official name of the educational program	«Urban Construction and Economy»
Field of knowledge	192 – Construction and Civil Engineering
Branch of knowledge	19 – Architecture and Construction
Degree higher education and the name of the qualification in the language of the original	Bachelor, Bachelor of Construction and Civil Engineering
Type of diploma and volume of education program	Bachelor's degree, unitary, 180 credits ECTS, term of study 2 years 10 months
Availability of accreditation	Ministry of Education and Science of Ukraine, Certificate of Accreditation UD 21008299 Period up to – 01.07.28.
Cycle/Level	The first (Bachelor's degree) level NQF Ukraine – 6 level FQ-EHEA, EQF-LLL
Academic admission requirements	Availability of education qualification junior specialist
Teaching language	Ukraine, English
The duration of the education program	5 years
Purpose of the educational program	
Training of highly qualified specialists, capable of working in the field of construction, urban and territorial planning, capable to solve complex problems of city life.	
Education program specifications	
Subject area	**Objects of study**: - The processes of design, construction, operation, save and reconstruction of building objects, urban areas, streets and roads. **Learning objectives**: preparation of specialists for the development of urban planning projects, transport infrastructure of the city, construction, reconstruction and operation of construction and urban facilities. **Theoretical content of the subject area**: theoretical basics of construction and urban planning technologies, theory, principles, concepts and methods of fundamental and general engineering sciences **Methods, methodology of activity**: methods of graphic modelling, design techniques, construction objects construction technologies and engineering systems instruments and equipment: mean of information support. **Tools and equipment:** geodetic instruments, information aids.
Orientation of the education program	Educational and professional.
The main focus of the education program and specialization	Special education in Architecture and Construction. Urban areas, transport infrastructure of the city, construction, reconstruction and exploitation of city-planning objects, objects of urban green economy.
Features of the program	Training professionals with the skills to plan urban areas, streets and roads and retain urban facilities. Part of the subjects at the request of students is taught in English.

Graduate employability and further academic studies	
Employability	A graduate with a bachelor's degree is able to do the following according to International Standard Classification of Occupations 2010: 1223 – Research and development managers Product development manager 1476 – Managers (administrator) in architecture and construction, in technical control, analysis and advertising 1491 – Managers (administrator) in housing and communal services 214.2 – Civil engineers • Construction Supervision Engineer • Design and estimate engineer • Construction Engineer • Construction engineer for the restoration of architectural monuments and urban planning • Designer - Engineer - (civil engineering) 3112 – Civil engineering technicians • Building inspector • Clerk of Works • Civil engineering technician • Civil engineering technician (road construction) • Designer technician (construction) • Caregiver • Laboratory technician (construction) 3118 – Draughts persons • Technical designer • Technical illustrator 3119 – Physical and engineering science technicians not elsewhere classified • Techniques of preparation of technical documentation • Planning techniques 3151 – Construction and Fire safety inspectors • The inspector on the control of maintenance of buildings
Further education	Studying at the second level of higher education. Master's Degree.
Teaching and assessment	
Teaching and education	Student-centered learning, lectures, practical classes, independent work with the use of textbooks, manuals, course design, training through practice, consultations, preparation of bachelor's qualification work
Assessment	Credit-transfer system, which provides for student evaluation for all types of classroom and out classroom educational activities, aimed at mastering the educational load from the educational program. Written exams, differentiated practice reports, presentations of individual assignments. Intermediate module control, final control in the form of exams and tests in the relevant disciplines, calculation and graphic works, coursework and projects. Public defense of the Bachelor's qualification work.
Program learning outcomes	
Program learning outcomes defined by the standard	P01. To apply basic theories, methods and principles of mathematical and natural science in the field of professional activity. P02. To apply basic professional and scientific knowledge in the field socio-humanitarian and economic sciences in cognitive and professional activities P03. Mastering working skills to work effectively individually (Course

	and Diploma design) or group (Laboratory work, including leadership skills during their performance), ability to get the desired result with a limited time focus on professional integrity and exclusion of plagiarism exclusion of plagiarism. P04. Demonstrate the ability to work with geodetic instruments and use topographic materials for project development planning of urban areas, streets and roads design and creation of construction objects and engineering networks. P05. Use and develop technical documentation, including using modern information technologies. P06. Demonstrate the ability to effectively use modern construction materials, products and constructions on the basis of knowledge about their technical Specifications and Manufacturing Technology. P07. Create or use space-planning solutions for further design, including using the Information Technologies. PO8. Evaluate the impacts of climatic, engineering and environmental features of the construction site in the design Transport and engineering infrastructure of the city, buildings, engineering structures and systems, erection, reconstruction and operation of construction and urban planning facilities. PO9. To determine and evaluate the load and stress-strain state soil bases and supporting structures of buildings (structures), including using modern information technologies. PO10. Develop constructive solutions of the construction facility based on knowledge of nomenclature and constructive forms, the ability to calculate and design of building structures and components of their communication. PO11. To adhere to modern requirements of normative documentation in construction and Urban planning. PO12. To perform and analyze economic calculations of construction and urban planning facilities. PO13. Design technological processes of erection and finishing of buildings (structures). PO14. Develop independently or in the group planning and reconstruction projects, transport and engineering infrastructure of the city with the use of modern graphic software. PO15. Ensure reliable and safe operation of urban areas, objects of transport and Be able to create. Accumulate and use information Be able to create. Accumulate and use information infrastructure of the city, buildings, structure. PO16. Organize and manage construction processes while construction of construction objects and urban planning facilities and their operation, repair and reconstruction taking into account labor protection requirements. PO 17. Organize and manage construction processes in the construction and construction of facilities and their operation, repair and reconstruction, taking into account the requirements of occupational

	safety. PO 18. Skills to develop, independently or in a group, planning and reconstruction projects, urban areas, urban transport and engineering infrastructure, using modern graphic software. PO19. Ensure reliable and safe operation of urban areas, objects of transport and engineering infrastructure of the city, structural structures of buildings, structures and utilities. PO20. Ability to apply knowledge of the basics of building physics, in the development of projects of energy efficiency and thermal modernization of buildings. PO21. Ability to work in a modern information environment of urban development (knowledge of GIS basics, cadastral systems) PC201. Make informed decisions on the execution of urban planning projects and operation of municipal facilities and operation of municipal facilities. PC202. Predict prospective urban planning social demands and use it at different stages of design and operation of objects urban construction. PC203. Be able to use system methods, mathematical models and Information Technologies in solving design engineering and Production tasks in urban planning and territorial planning. PC204. Be able to create, accumulate and use information legislative documents, state building norms and rules In the field of urban and spatial planning, maintenance and operation of urban buildings and urban planning facilities. PC205. Ability to demonstrate critical analysis and evaluation climatic, ecological, engineering and technical, Socio-demographic and urban conditions and the assessment of decisions taken regarding the improvement of urban environment in the design and Construction of urban planning facilities. PC206. Be able to use the principles and methods of calculating the planning projects, urban construction and Urban infrastructure (transport, landscaping, utilities, etc.). PC207. Demonstrating the ability to predict the real estate market condition and financing of urban planning programs, information and legal base onnomy of city planning and urban economy. PC208. Use the economic rationale in the development process building planning projects, landscaping, reconstruction, retention and exploitation of city territories, transport and transportation engineering of the city, use Methods of investment evaluation of urban objects and urban areas, which are subject to reconstruction. PC209 Demonstrate the ability to control the technology realization of repair works at urban-planning objects and objects of urban economy. PC210. Be able to develop projects within the project group planning, reconstruction and improvement
Programmatic	PC211. Planning, reconstruction and improvement of city territories,

Program Learning Outcomes defined by the higher education institution	objects of transport, and roads, engineering infrastructure with the use of modern graphical software (AutoCAD, Autodesk Revit, Autodesk InfraWorks 360, AutoCAD Civil 3D, 3D MAX). Calculation of urban planning indices, evaluation of design decisions.. PC212. Be able to work in the environment of geoinformational Urban Systems and cadastral urban management systems Systems and cadastral urban management systems Systems and cadastral urban management systems PC213. Be able to create accumulate and use information legislative documents, state building norms and rules in the area of maintenance and exploitation of city buildings and urban planning facilities In the area of maintenance and exploitation of city buildings and urban planning facilities. PC214. Be able to use principles and methods of calculating developing projects for maintaining urban infrastructure (Transport, landscaping, utilities and others). PC215. Ability to demonstrate critical analysis and evaluation climatic, ecological, engineering and technical, socio-demographic and urban conditions and the assessment of decisions taken on rehabilitation of the urban environment during maintenance and operation city building and urban planning facilities
Resource support for education program implementation	
Staff assistance	The educational program is provided by scientific and pedagogical staff of 18 persons, but 15 persons have a scientific degree.
Logistics	The condition of the material and technical base meets the requirements and provides an opportunity to carry out the educational process effectively. The educational process of O.M. Beketov National University of Urban Economy in Kharkov is provided with an auditorium, which has advanced equipment and software, administrative and support facilities. I have state-of-the-art equipment and software in specialized computer labs and at the University. The university is provided with all social infrastructure. All premises (educational, training, production, household, sports and other) of the university comply with the sanitary rules and regulations, state building standards of Ukraine. Lectures are used by university lecturers who have multimedia equipment. Computer Laboratory (BIM) "BUILD.IT lab" aud. 309 archive), which has advanced hardware and software (AutoCAD, ArchiCAD, Autodesk Revit, AutoCAD Civil 3D, Autodesk Infra Works 360).
Information and educational-methodological support	The official web-site contains information on educational programs, educational, scientific and educational activities, the university structure, admission rules, event announcements, news (https://www.kname.edu.ua/). Students are provided with study materials in each discipline. O.M. Beketov National University of Urban Economy in Kharkov has a library, which includes a scientific room, a fiction room and a reading room for 540 seats. The scientific library of O.M. Beketov National University of Urban Economy in Kharkov has her own web-site, which provides unlimited access to the Internet to all registered library-users. The scientific library provides access to databases of periodicals in Ukrainian and English, including the Web of Science and Scopus scientometric databases. The University has an electronic repository

	((http://eprints.kname.edu.ua/), which provides students with access to methodical and teaching materials (textbooks, tutorials, lecture notes, methodological recommendations, monographs, abstracts, articles, scientific- university technical publications, etc.).
Academic mobility	
National Credit Mobility	Cooperation agreements with: - Lutsk National Technical University; - Kyiv National University of Civil Engineering and Architecture; - National University of Water and Environmental, Rivne; - Odessa State Academy of Civil Engineering and Architecture.
International Credit Mobility	Memorandum on cooperation of higher education with the Eberhard Stock Foundation (Germany) in Ukraine, which envisages modernization and adaptation of training in the specialty "Urban Construction and Economy" in accordance with European standards in the framework of international projects in the field of higher education.
Training of foreign higher education applicants	Education of foreign citizens is provided in in Ukrainian and English languages.