

Profile of the Education Program	
	General information
The official name of the educational program	Construction and Civil Engineering
Specialty	192 – Construction and Civil Engineering
Field of study	19 – Construction and Architecture
Higher education degree and title in the original language	Second (Master's degree) level of higher education with qualification "Master of Civil Engineering and Civil Engineering"
Type of diploma and scope of the education program	Master's Degree, unitary, 120 ECTS credits, term of study 1 year 9 months
Accreditation availability Cycle / level	Ministry of Education and Science of Ukraine, ND 2190239 Accreditation Certificate valid until 01.07.23
Entry level education requirements	NFQ of Ukraine- Level 8, FQ-EHEA - Second Cycle, EQF-LLL - Level 7 Bachelor's degree, diploma of the educational qualification level of Specialist, Master's degree. Specialty and foreign language entrance exams.
Language(s) of instruction	Ukrainian, English
Duration of the education program	5 years
Education program objective	
	To provide students with advanced competencies in the specialty "Construction and Civil Engineering"; integration of general technical training for professional activity in the field of construction, production-technical, design, operational services of construction enterprises, workshops, sites providing construction, in design, research institutions, educational institutions.
Education program specifications	
Subject area	<ul style="list-style-type: none"> - objects of study: scientific foundations, technologies, objects, structures and equipment in civil engineering and construction; - learning objectives: training professionals capable of developing and using modern technologies in civil engineering and civil engineering. - theoretical content of the subject area: theory of processes of designing, erection, operation, maintenance, reconstruction of objects of construction and civil engineering; - methods, techniques and technologies: experimental methods of materials and processes research, modeling methods, special methods, technologies in civil engineering and construction; - tools and equipment: experimental measuring instruments, construction

	and technological equipment, specialized software.
Orientation of the education program	Educational and scientific
Main focus of the education program and specialization	Develop and use modern technologies for creation, operation, reconstruction and repair of construction objects, engineering systems and technological processes
Features of the program	The peculiarity of the program is its orientation to the training of specialists for the design and construction of buildings, engineering structures and systems, technology for the construction of buildings and structures, the operation and reconstruction of construction sites, according to which provides internships and undergraduate practices in design and construction organizations of Ukraine
Graduate employability and further academic studies	
Employability	<p>Specialists qualified to work by type of activity according to the State Classifier of Occupations DK 003: 2010.</p> <p>Positions they may qualify: chief builder (house-building, rural construction plant), chief engineer, director of capital construction, contractor, construction contractor, master of construction and assembly works, chief of department, chief of housing and communal services, chief of the laboratory, chief of the laboratory Production Control Engineer (City Planner), Junior Researcher (Civil Engineering), Researcher (Civil Engineering), Research Associate hipster consultant (civil construction), hydraulic technician, construction expert, aerodrome operations engineer, technical supervisor (construction), design engineer, construction engineer, construction architect for architectural and urban monuments restoration, engineer -designer, technologist (building materials), junior researcher (engineering), research engineer, design engineer, consultant (in a specific engineering field), energy-saving consultant in the building , consultant on energy saving and energy efficiency, assistant, teacher of higher education institution, teacher of vocational educational institution, teacher of vocational-technical educational institution, junior researcher (teaching methods), researcher (teaching methods), research associate), teacher (teaching methods), teacher (teaching methods), labor standardization engineer, labor organization engineer, technical security expert, engineer management organization community, city and district planning specialist, junior researcher (projects and programs in the field of material and intangible production), researcher (projects and programs in the field of material and intangible production), research associate (projects and programs in the field of material and intangible production), a specialist in the management of projects and programs in the field of material (intangible) production</p>
Further academic studies	Ability to study in the third cycle programs; an opportunity to obtain the necessary qualification for teaching at a university.
Instruction and Assessment	
Teaching and learning	The main approaches are student-centered and problem-oriented

	<p>learning, self-study and research-based learning.</p> <p>Teaching is conducted in the form of lectures, practical classes, laboratory work, consultations, individual classes, internships and undergraduate practice, group, independent and project work. Learning to criticize your own work, constructive criticism of the work of others.</p>
Assessment	<p>Ongoing and intermediate evaluation: oral questioning, testing of knowledge and skills, consultations to discuss the results of ongoing and intermediate evaluation.</p> <p>Final assessment of subjects: defense of reports on internships and undergraduate practice, tests, written exams.</p> <p>Certification of applicants for higher education is carried out in the form of defense of the qualification work of the master-scientist.</p>
Program learning outcomes	
Program learning outcomes as defined by the standard	
Program learning outcomes as defined by the higher education institution	<p>PLO1. PRN1. Ability to demonstrate mastery of traditional and modern innovative research methods;</p> <p>PLO 2. Ability to comprehend and understand scientific and technical foreign literature in the specialty, to prepare scientific and technical documentation and to communicate on professional topics;</p> <p>PLO 3. Ability to evaluate and adjust the level of safety of workers in enterprises and to provide social guarantees for workers in the field of protection;</p> <p>PLO 4. Ability to demonstrate mastery of geoinformation technologies, basic theoretical provisions, technical and software tools for their implementation, means of creating electronic maps, thematic layers, generalization of spatial objects of the real world, performing GIS analysis;</p> <p>PLO 5. Ability to develop measures for occupational safety and the environment during research and in production activities;</p> <p>PLO 6. Be able to conduct the design and conduct of experiments, metrological support, collection, processing and analysis of results, identification of theory and experiment;</p> <p>PLO 7. To be able to calculate the efficiency of investment projects, calculate the profitability and time dimension of investment, determine ways to optimize the investment process;</p> <p>PLO 8. Possession of management features at different levels of the life cycle of enterprises, specifics of managing varieties of enterprises and their associations, conditions of internal and external environment, creation and registration of enterprises of different organizational and legal forms;</p> <p>PLO 9. Be able to correctly model the structural elements in the software and analyze the calculation results;</p> <p>PLO 10. Ability to use various laws of distribution of random variables and connection of standard software complexes to the solution of reliability problems;</p> <p>PLO 11. Ability to evaluate the technical condition of the building structures, the degree of their wear and bearing capacity;</p>

	<p>PLO 12. Ability to independently solve the issues of calculation and design of reinforcement of metal, reinforced concrete and wooden structures;</p> <p>PLO 13. Ability to evaluate the load-bearing capacity of soils for use as foundations of buildings and structures in complex engineering-geological conditions, to design foundations and foundations on soils of subsidence and man-made soil;</p> <p>PLO 14. Ability to use advanced methods of technology and organization in performing construction works, to know ways to reduce their labor and energy intensity. Be able to choose the basic machines and mechanisms for performing these works;</p> <p>PLO 15. Ability to use regulatory and reference materials for calculations of building structures of buildings;</p> <p>PLO 16. Ability to analyze design features of various construction schemes and display them in calculation and analytical programs;</p> <p>PLO 17. To be able to draw up design schemes of varieties of engineering structures and to design elements of engineering structures and nodes of their connection;</p> <p>PLO 18. Be able to perform calculations of buildings and structures under construction in seismicity zones;</p> <p>PLO 19. To be able to design a new object near the old one, to carry out a feasibility study of the choices made and to strengthen the foundations;</p> <p>PLO 20. Be able to use mechanical, structural, thermal and hydraulic means of artificial bases and design them with the help of calculation programs.</p>
Resources for program implementation	
Human Resourcing	<p>The scientific-pedagogical staff involved in the implementation of the educational component of the educational-scientific program have a scientific degree and academic rank, and are full-time employees of O.M. Beketov NUUE, All scientific-pedagogical workers have a confirmed level of scientific and professional activity.</p>
Logistics	<p>The educational process of O.M. Beketov National University of Urban Economy in Kharkiv is provided with an auditor's fund, administrative and auxiliary premises, the total area of the premises used in the educational process is 32180.9 square meters. There are 6 laboratories and 1 specialized office in the educational process.</p> <p>The specialized computer laboratories of the department and the university as a whole have the modern equipment and software necessary for the implementation of the curriculum, the ability to access the Internet.</p> <p>The university has 8 dormitories with a total area of 45327,6 square meters, which provides 100 percent of all non-resident students places.</p> <p>At the university and hostels, there are 17 food establishments in the form of buffets and canteens. The structure of social infrastructure objects of O.M. Beketov NUUE owns a sports building with several gyms (volleyball, gym, basketball, gymnastics, etc.), offices for theoretical training.</p> <p>An important component of the educational process is the modern</p>

	<p>library. The Educational Literature Fund has been operating an information service room at the University Library and Reading Rooms (886996 copies) since 2007.</p> <p>The digital repository of the university, which is one of the best in Ukraine and registered in the international roar registry, plays a significant role in the informational and methodological support of the educational work of students and teachers in the disciplines of the curriculum. The repository site http://eprints.kname.edu.ua is based on e-prints 3 software developed by the University of Southampton, freely distributed under the gnu license. The digital repository contains textbooks, manuals, lecture notes, guidelines, electronic resources, monographs, abstracts, articles, scientific and technical publications of the University. At the graduate departments (chairs), information support rooms were created, where normative-technical, reference and methodical publications, samples of course and diploma projects, electronic library of educational-methodical literature were collected.</p> <p>The educational and laboratory base of the graduating and providing departments fully ensures the carrying out of the classroom lessons at the modern level, makes it possible to widely use of visual methods, laboratory and demonstration equipment, technical means of training. Lecture classes are used by university lecturers who have multimedia equipment</p>
Information and training support	<p>Availability of a description of the educational and professional program.</p> <p>Availability of curriculum and explanatory note.</p> <p>Availability of a work program for each discipline in the curriculum.</p> <p>Availability of a complex of educational and methodological support for each discipline of the curriculum.</p> <p>Availability of a program of scientific and practical training.</p> <p>Provision of students with educational materials from each academic discipline of the curriculum.</p> <p>The availability of methodological materials for certification of applicants.</p>
Academic mobility	
National Credit Mobility	<p>Leading specialists of Ukrainian universities may be involved in the management of the scientific work of the applicants on the terms of individual contracts.</p> <p>Accreditation of prior learning at other universities of Ukraine is allowed, provided that the acquired competences are consistent.</p>
International credit mobility	-
Training of foreign higher education applicants	Training of foreign higher education applicants is conducted in Ukrainian and English.