MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE ODESA STATE ACADEMY OF CIVIL ENGINEERING AND ARCHITECTURE



EDUCATIONAL AND PROFESSIONAL PROGRAM

Construction and Civil Engineering first (Bachelor's) degree of higher education specialty 192 Construction and Civil Engineering field of knowledge 19 Civil Engineering and Architecture Qualification: Bachelor's degree in Construction and Civil Engineering

APPROVED

By the Academic Council of the Odesa State Academy of Civil Engineering and Architecture Protocol No8 of 25.04.2024

2015

INTRODUCTION

1. DEVELOPED

The educational and professional programme Construction and Civil Engineering was developed in accordance with the Standard of Higher Education of the first (bachelor's) degree of higher education in the field of knowledge 19 Civil Engineering and Architecture, specialty 192 Construction and Civil Engineering, approved and enacted by the Order of the Ministry of Education and Science of Ukraine dated 18.03.2021 No. 333, by the working group of the Odesa State Academy of Civil Engineering and Architecture:

Yuliia Somina	PhD, Assoc. Professor of the Department of Metal Wooden and Plastic Structures, guarantor of the educational program
Olga Ahaieva	PhD, Assoc. Professor of the Department of Reinforced Concrete Structures and Transport Facilities
Oleksander Gara	PhD, Assoc. Professor, Acting Director of Institute of Construction and Technology
Volodymyr Kersh	PhD, Professor of the Department of Urban construction and infrastructure
Olga Lapina	PhD, Assoc. Professor, Acting Director of Institute of Hydraulic Construction and Civil Engineering
Serhii Dmitriev	PhD, Assoc. Professor of the Department of Hydraulic Construction
Yurii Elkin	PhD, Assoc. Professor, Head of the Department of Heat and Gas Supply and Ventilation
Oksana Korobko	ScD, Assoc. Professor, Head of the Department of Architectural Structures
Viktor Progulnyi	ScD, Professor of the Department of Hydraulic Construction
Mylola Khlytsov	PhD, Assoc. Professor, Head of the Department of Processes and Devices in Constructional Materials Technology

Vladislav Shekhovtsov	PhD, Assoc. Professor of the Department of Reinforced Concrete Structures and Transport Facilities
Oleksandr Chuchmay	PhD, Assoc. Professor of the Department of Structural Mechanics
Alla Bespalova	ScD, Assoc. Professor, Head of the Department of Organisation of Construction and Labour Protection
Iryna Posternak	PhD, Assoc. Professor of the Department of Organisation of Construction and Labour Protection
Oleksandr Meneylyuk	ScD, Professor, Head of the Department of Construction Production Technology
Oleksii Nikiforov	PhD, Assoc. Professor of the Department of Construction Production Technology
Vadym Daneliuk	PhD, Assoc. Professor, Vice-head of PC Budova, Stakeholder from employers
Oleksandr Kozytskyi	Director of AFB ASPECT Limited Liability Company, Stakeholder from employers
Nadiia Petrenko	Student of the educational and professional program Construction and Civil Engineering
Oleksander Chernyavskii	Student of the educational and professional program Construction and Civil Engineering

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2. APPROVED AND ENTERED INTO FORCE

By the Academic Council of the Odesa State Academy of Civil Engineering and Architecture, Protocol No. 8 of «25» April 2024

3. ENTERED into force on September 01, 2024

to replace the Educational and Professional Program «Construction and Civil Engineering» of the first (Bachelor's) degree of higher education, specialty 192 Construction and Civil Engineering, approved by the Academic Council of the Odesa State Academy of Civil Engineering and Architecture on 30.06.2022, protocol No. 12, as amended by clause 4 of Order of the Ministry of Education and Science of Ukraine No. 1583 dated 29.12.2023 On Amendments to Certain Higher Education

Standards (Barrier-Free Strategy), clause 1 of Order of the Ministry of Education and Science of Ukraine No. 842 dated 13.06.2024 On Amendments to Certain Higher Education Standards, and Order of Odesa State Academy of Civil Engineering and Architecture No. 28/од dated 14.02.2024 On Improvement of Educational Programmes in the Academic Year 2023-2024.

4. INFORMATION ON ACCREDITATION

Certificate of accreditation of specialty АД №16005629, valid until 01.07.2028.

1. Profile of the educational and professional program Construction and Civil Engineering by specialty 192 Construction and Civil Engineering

1 – General information	
Full name of the higher education institution and	Odesa State academy of Civil Engineering and Architecture, Institute of Civil Engineering, Institute of Hydraulic Construction and Civil Engineering,
structural unit	Institute of Construction and Technology
Educational level	first (Bachelor's) level
Degree of higher education and title of qualification	Bachelor's degree in Construction and Civil Engineering
Forms of education and the estimated period of completion of the educational program	For <i>full-time</i> higher education -3 years 10 months. For persons who receive higher education at the cost of the state (regional) order, the period of study may be increased by 25 percent compared to the estimated period of completion of the educational programme on a full-time basis. In the <i>part-time form</i> of higher education -4 years 10 months.
Official name of the study program	educational and professional program Construction and Civil Engineering
Type of diploma and volume of the educational program	Bachelor's Diploma, singular. The volume of the bachelor's degree programme on the basis of complete general secondary education is 240 ECTS credits. On the basis of the degree "professional junior bachelor", "junior bachelor" (educational qualification level "junior specialist"), a higher education institution may transfer ECTS credits obtained within the previous educational program of preparation of a professional junior bachelor, junior bachelor (junior specialist), in the amount of no more than 60 ECTS credits. 72% of the volume of the educational program is aimed at ensuring general and special (professional) competences in the speciality defined by the higher education standard. Certificate of accreditation of specialty AЛ №16005629, valid
Accreditation status	until 01.07.2028
Cycle / level	HSC of Ukraine – level 6, FQ-EHEA – first cycle, EQF-LLL – level 6
Background	Complete general secondary education, educational level "junior bachelor" or educational and professional degree "professional junior bachelor" (educational qualification level "junior specialist") in accordance with the rules of admission

	for the current year
Language of	Ukrainian, English
teaching	
The validity period	Until the next edition comes into force
of the educational	
program	
Internet address for	https://odaba.edu.ua/academy/educational-activities/constructio
permanent location	n-and-civil-engineering
of the description of	
the educational	
program	

2 - The purpose of the educational program

Training of highly qualified and competitive specialists in the labour market with a set of knowledge, skills and abilities necessary to solve complex specialised problems and resolve practical issues in the field of construction and civil engineering.

3 - Educational program characteristics		
Description of	Field of knowledge 19 Civil Engineering and Architecture	
subject area	Specialty 192 Construction and Civil Engineering	
	EPP Construction and Civil Engineering	
	<i>Objects of study and activity</i> : technology buildings and	
	engineering structures processes of its design creation	
	erection operation serviceability and reconstruction	
	Theoretical content of the subject area: concepts principles	
	methods and techniques for the creation and in-service of	
	huildings and engineering structures	
	Methods techniques and technology: experimental methods of	
	researching materials and processes methods of physical and	
	mathematical modelling design methods technology for	
	manufacturing structures materials and products technology for	
	for the greation of buildings and angingaring structures	
	for the election of buildings and engineering structures,	
	destruction of construction objects and waste disposal.	
	Instruments and equipment: experimental and measuring	
	equipment, hardware and software required for field,	
	laboratory and virtual research in construction and civil	
	engineering.	
Orientation of the	The program is aimed at acquiring theoretical and practical	
of the educational	knowledge of the concepts, principles, methods and techniques	
program	of creating and in-service of buildings and engineering	
	structures.	
	Professional, taking into account the possibility of further	
	career as a specialist in the field of construction and civil	
	engineering: - Industrial and Civil Engineering,	
	- Bridges and Transport Tunnels,	

	- Urban Construction and Infrastructure,
	- Heating and Gas Supply and Ventilation,
	- Architectural and Structural Engineering.
	- Automobile Roads.
	- Water Supply and Sewerage.
	- Design in Industrial and Civil Construction
	- BIM-engineering
	- Technology of Building Structures Products and Materials
	- Organization of Technical Supervision in Construction
	- Additive Technology
	- Construction Project Management
	- Development of Construction
	- Energy Efficiency of Buildings and Energy Engineering
Main focus of the	Higher education in the field of 19 Civil Engineering and
educational program	Architecture speciality 192 Construction and Civil
and specialization	Engineering EPP Construction and Civil Engineering
	Key words: construction industry innovations structural
	design design reconstruction operation production of
	building structures organisational and technological solutions
	information technology in construction engineering systems
Program factures	L agraing of methods, techniques and technology: experimental
	methods of research of materials and processes methods of
	physical and mathematical modelling design methods
	technology of manufacturing structures materials and
	products technology of areation of buildings and angineering
	structures destruction of construction objects and waste
	management. The advantional programme is simed at practical
	training of applicants, which takes place in classrooms and
	laboratorios aguinned with modern aguinment and is supported
	hy coursework. In addition clements of dual education are
	by coursework. In addition, elements of dual education are
	provided, and internships and laboratory classes are need at
	leading construction companies, in particular at the fillars of
	graduate departments. There is a possibility of academic
	mobility under the Erasmus+, Meviana, Tempus projects on the
	basis of partner universities: the University of Western Attica,
	Athens, Greece, Polytechnic University of Valencia, Valencia,
	Spain, University of the North, Varazoni, Croana, etc.
4 - Suitability of grad	duates for employment and further education
Employment	Area of professional activity: creation of facilities in the field
suitability	of construction and civil engineering, including design,
	construction (new construction, reconstruction, restoration,
	renovation) and operation of facilities.
	Main places of work: general and special-purpose construction
	companies, design and research organisations.

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	Professions and professional job titles according to International Standard Classification of Occupations 2008
	(ISCO 08).
	(ISCO-00). 07 Engineering Manufacturing and Construction
	2112 Civil anging right tookniging
	5112 - Civil engineering technicians
	- Building inspector
	- Clerk of Works
	- Civil engineering technician
	- Fire inspector
	- Geotechnical technician
	- Surveying technician
	3118 - Draughts persons
	- Technical illustrator
	3119 - Physical and engineering science technicians not
	elsewhere classified
	- Engineering technician (production)
	- Time and motion study technician
	- Quantity surveying technician
	2142 - Civil engineers
	- Civil engineer
	- Geotechnical engineer
	- Structural engineer
Further education	Opportunity to study at the second (master's) level of higher
	education and obtain additional qualifications in the lifelong
	learning system
5 - Teaching and ass	essment
Teaching and	The approaches used in teaching include the methods and
assessment	technologies of modern learning provided by the educational
	programme, namely: student-centred learning, self-study,
	problem-based learning, independent work of students,
	including individual tasks: courseworks, calculation and
	graphic works, tests; educational, technological and
	professional practice.
	The main methods of teaching are explanatory and illustrative,
	problem-based, research, and visualisation methods.
	Teaching methods are implemented in the educational process
	in accordance with the level of higher education, speciality and
	goals of the educational programme, taking into account the
	Mission and goals of educational activities and the
	Development Strategy of the Odesa State Academy of Civil
	Engineering and Architecture.
	The formation of social skills of students is carried out through
	the study of both general and professional components:
	participation in conferences with reports; olympiads,

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	competitions of student research projects, practical training, academic mobility, cultural and sports activities; other activities that are determined by the objectives of the program, in particular, the further professional activity of the program graduate
	The overall organisation of international cooperation and foreign economic activity is delegated to the Department of International Relations.
	Higher education students enrolled in educational and professional program are provided with:educational support in the context of issues directly related to
	the organisation of learning and teaching, including the work of deans' offices, departments for the organisation of the educational process, other auxiliary units of the Academy and their interaction with students:
	 - advisory and social support in the relevant areas (employment counselling, psychological support, etc.) - organisational and informational support in the relationship
	between applicants and the Academy on administrative issues (obtaining information, certificates, confirmations, etc.); - information interaction of higher education applicants on
	educational and extracurricular issues, including the availability of relevant information in the public domain (timetable, consultations, other information on the official website of the Academy)
	Teaching is conducted in the form of lectures, lectures-presentations with the use of information and communication technology, practical classes, practical training,
	literature and consultations with teachers. There is also an opportunity to learn and teach using distance learning technology (including Google Workspace, Moodle).
Assessment methods	The system for assessing the quality of the educational and professional program includes: current and final (semester) control, certification.
	Current control is carried out in practical classes (oral or written questioning, express control, speeches of students during the discussion of issues, control works, test control,
	presentations, etc.) The final control is carried out in the form of an exam or credit, defence of course projects (works), defence of practice reports.
	Certification of higher education students is carried out in the form of a qualification exam or public defence of a qualification work.
	I me academic acmevements of ingher education students are

	assessed on a 100-point scale and the ECTS scale.	
6 - Program competencies		
Integral competence	Ability to solve complex specialised problems in construction	
(IC)	and civil engineering.	
General	GC1. Ability to think abstractly, analyse and synthesise.	
competencies	GC2. Knowledge and understanding of the subject area and	
(GC)	professional activities.	
	GC3. Ability to communicate in the state language both orally	
	GC4 Ability to communicate in a foreign language	
	CC5 Ability to use information and communication	
	technology	
	CC6 Ability to search process and analyse information from	
	various sources	
	GC7 Interpersonal interaction skills	
	GC8 Ability to communicate with representatives of other	
	professional groups of different levels (with experts from other	
	fields of knowledge / types of economic activity)	
	GC9 Ability to implement their privileges and responsibilities	
	as a member of society: awareness of the value of civil (free	
	democratic) society and the necessity for its sustainable	
	development the superiority of law human privileges and	
	freedoms in Ukraine	
	GC10 Ability to preserve and enhance moral cultural	
	scientific values and achievements of society based on an	
	understanding of the history and patterns of development of the	
	subject area its place in the general system of knowledge about	
	nature and society and in the development of society and	
	technology to use various types and forms of physical activity	
	for active rest and healthy lifestyle	
	GC11 Ability to make decisions and act in accordance with the	
	principle of inadmissibility of corruption and any	
	manifestations of dishonesty	
Special	PC1 Ability to use conceptual scientific and practical	
(professional)	knowledge of mathematics chemistry and physics to solve	
competencies	complex practical problems in the field of civil and structural	
	engineering	
	PC2 Ability to critically comprehend and apply basic theories	
	methods and principles of economics and management for the	
	rational organisation and management of construction	
	production.	
	PC3. Ability to design building structures buildings and	
	engineering systems (according to specialization) taking into	
	account engineering, technical and resource-saving measures.	

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Special (professional) competences determined by the higher education	 barrier-free space, legal, social, environmental, technical and economic indicators, scientific and ethical aspects, and modern requirements of regulatory standards in the field of architecture and construction, environmental protection and occupational safety. PC4. Ability to select and use appropriate equipment, materials, tools and methods for the design and implementation of construction production processes. PC5. Ability to apply computer-aided design systems and specialised application software to solve engineering problems in construction and civil engineering. PC6. Ability to carry out engineering activities in the field of construction, preparation and use of technical documentation. PC7. Ability to be responsible for the decision making process in the field of architecture and construction in unpredictable work contexts. PC8. Awareness of the principles of rural design. PC9. Ability to organise and manage the professional development of individuals and groups in the field of architecture and construction. PC10. Ability to analyse and apply the results of engineering surveys (geodesic, engineering and geological), work with surveying devices and use topographic materials for design.
7 - Program learning	L Foutcomes (PLOs)
7 - Program learning Program learning outcomes (PLOs)	 PLO1. Apply the basic theories, methods and principles of mathematical, natural, social, humanities and economics sciences, modern models, methods and software tools for decision support to solve complex problems of construction and civil engineering. PLO2. Participate in research in the field of architecture and construction. PLO3. Present the results of own work and justify one's position on professional issues to specialists and non-specialists, communicating fluently in the state and foreign languages. PLO4. Design and implement technological processes of construction production using appropriate equipment, materials, tools and methods. PLO5. Use and carry out technical documentation at all stages of the life cycle of construction products. PLO6. Apply modern computer technology to solve engineering and management problems of construction and

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	civil engineering.
	PLO7. Collect, integrate and apply data, including by
	searching, processing and analysing information from various
	sources
	PLO8 Rationally apply modern building materials products
	and structures based on knowledge of its technical
	and structures based on knowledge of its technical
	DLOQ Design building structures buildings engineering
	PLO9. Design building structures, buildings, engineering
	systems and technological processes of construction
	production, taking into account engineering, technical and
	resource-saving measures, barrier-free space, legal, social,
	environmental, technical and economic indicators, scientific
	and ethical aspects, and modern requirements of regulatory
	standards, time and other restrictions in the field of architecture
	and construction, environmental protection and occupational
	safety.
	PLO10. To make and implement rational decisions on the
	organisation and management of construction processes in the
	erection of construction projects and its operation.
	PLO11. Assess the compliance of projects with the principles
	of designing urban areas and infrastructure and municipal
	services.
	PLO12. To have in-depth cognitive and practical skills,
	mastery and innovation at the level necessary to solve complex
	specialised problems in the field of construction and civil
	engineering (according to specialisation)
	PLO13 To organise and manage the professional development
	of persons and groups of people in the field of architecture and
	construction
Program learning	PLO14 Perform the calculation and design of buildings and
	structures using the results of angineering surveys (goodetic
datarminad by the	subclutes using the results of engineering surveys (geodetic,
determined by the	engineering and geological, etc.), demonstrate the ability to
nigher education	work with geodetic devices and use topographic materials to
institution	design and create construction objects and engineering
	systems.
8 - Resource support	for program implementation
Staffing support	Academic staff involved in the implementation of the
	educational and professional program work at the main place
	of work at the Academy, have an academic title and/or degree,
	meet the requirements of licensing and accreditation conditions
	for the implementation of educational activities in the field of
	higher education (Resolution of the Cabinet of Ministers of
	Ukraine "On Ensuring Licensing Conditions for the
	Implementation of Educational Activities of Educational
	Institutions" of December 30, 2015, No. 1187, as amended).

	In order to maintain competence at the proper level, all
	academic staff undergo advanced training/internships.
Material and	The material and technical support of the Odesa State
technical	Academy of Civil Engineering and Architecture complies with
support	the Licensing Conditions for Educational Activities in Higher
	Education and is sufficient to ensure the quality of the
	educational process under the educational and professional
	program, which includes: workshops, classrooms, computer
	and specialized classrooms, library, reading rooms, gyms,
	assembly hall, sports ground, recreation center, canteens, and
	simple shelters.
Information and	Use of electronic resources: electronic catalog, electronic
educational support	library, Internet resources, Open Access, the Academy's
	website, bibliographic resources, the Academy's repository
	(OSACEAeR http://mx.ogasa.org.ua/), Google Workspace and
	author's educational and methodological developments of
	scientific and pedagogical staff.
9 - Academic mobilit	ty
National credit	It is carried out on the basis of bilateral agreements between
mobility	the Academy and higher education institutions of Ukraine and
	existing national programs. It provides for the transfer of ECTS
	credits of the relevant educational program received in other
	higher education institutions of Ukraine.
International credit	International academic mobility is realized on the basis of
mobility	international cooperation agreements, international programs
	and projects, and cooperation agreements with foreign higher
	education institutions.
	The main international credit mobility is carried out under the
	ERASMUS+ and MEVLANA programs.
Training of foreign	The training of foreign applicants in the educational and
students of higher	professional program industrial and Civil Engineering is
education	carried out on the basis of the Order of the Ministry of
	Education and Science of Ukraine dated 18.0/.2019 No.944-1
	and in accordance with the Rules of Admission to the Odesa
	State Academy of Civil Engineering and Architecture and the
	from Equations of the Center for Training of Specialists
	Longuages of instruction Illerginian English
	Languages of instruction - Oktainian, English.

2. List of educational components of the educational and professional program Industrial and Civil Engineering and their logical sequence

	Components of the educational and professional	Number of	Form of								
Code	program (academic disciplines, course projects	ECTS	final								
	(works), internships, qualification work)	credits	control								
1	2	3	4								
COMPULSORY COMPONENTS COMPONENTS											
General components											
CC1	History of Ukraine and Ukrainian culture	4,0	exam								
CC2	Ukrainian language (professional)	3,0	exam								
CC3	Philosophy	3,0	exam								
CC4	Foreign language (professional)	6,0									
CC4.1	Foreign language (professional) 1	2,0	credit								
CC4.2	Foreign language (professional) 2	2,0	credit								
CC4.3	Foreign language (professional) 3	2,0	exam								
CC5	Law	2,0	credit								
	Special (professional) components										
	Components of natural science training										
CC6	Higher Mathematics	13,0									
CC6.1	Higher Mathematics 1	4,0	credit								
CC6.2	Higher Mathematics 2	5,0	exam								
CC6.3	Higher Mathematics 3	4,0	exam								
CC7	Physics	7,0									
CC7.1	Physics 1	3,0	credit								
CC7.2	Physics 2	4,0	exam								
CC8	Chemistry	4,0	exam								
CC9	Informatics	3,0	credit								
CC10	Theoretical mechanics	8,0									
CC10.1	Theoretical mechanics 1	4,0	exam								
CC10.2	Theoretical mechanics 2	4,0	credit								
CC11	Basics of ecology	2,0	credit								
CC12	Numerical methods for solving engineering problems	2,0	credit								
	Components of professional orientation										
CC13	Engineering graphics	6,0									
CC13.1	Engineering graphics 1	4,0	exam								
CC13.2	Engineering graphics 2	2,0	credit								
CC14	Engineering geodesy (general course)	3,0	exam								
CC15	Regulatory control in construction	2,0	credit								
CC16	CAD in construction	3,0	credit								
CC17	Construction equipment	2,0	credit								
CC18	Electrical engineering in construction	3,0	credit								
CC19	Technical mechanics of liquid and gas	3,0	credit								
CC20	Construction materials science	4,0	exam								
CC21	Strength of materials	8,0									

2.1 List of educational components

1	2	3	4
CC21.1	Strength of materials 1	4,0	credit
CC21.2	Strength of materials 2	4,0	exam
CC22	Architecture of buildings and structures	4,0	exam
CC23	Engineering geology and fundamentals of soil mechanics	3,0	exam
CC24	Cities planning and transport	2,0	credit
CC25	Water supply and sewerage	2,0	credit
CC26	Basements and foundations	2,0	credit
CC27	Heating and gas supply and ventilation	2,0	credit
CC28	Construction mechanics	4,0	exam
CC29	Building structures	4,0	exam
CC30	Technology of building production	4,0	exam
CC31	Labor protection and life safety	4,0	credit
CC32	Industrial base of construction	2,0	credit
CC33	Organization of construction	3,0	exam
CC34	Economics of construction	3,0	credit
	Practices	13,0	
EP	Engineering geodesy (practicum)	3,0	credit
ТР	Technological practice	5,0	credit
PP	Professional practice	5,0	credit
OW	Qualification work	12.0	public
<u>v</u> "		12,0	defense
	Total amount of compulsory components	155,0	
	FACULTATIVE COMPONENTS		
FC1	Foreign language special course	4,0	
FC1.1	Foreign language special course 1	2,0	credit
FC1.2	Foreign language special course 2	2,0	credit
FC2	Physical training	12,0	
FC2.1	Physical training 1	3,0	credit
FC2.2	Physical training 2	3,0	credit
FC2.3	Physical training 3	3,0	credit
FC2.4	Physical training 4	3,0	credit
	OPTIONAL COMPONENTS		
	General components	6,0	
OC1	Optional discipline 1	2,0	credit
OC 2	Optional discipline 2	2,0	credit
OC 3	Optional discipline 3	2,0	credit
	Special (professional) components, including those from	11.0	
	other educational programs	11,0	
OC 4	Optional discipline 4	2,0	credit
OC 5	Optional discipline 5	3,0	credit
OC 6	Optional discipline 6	3,0	credit
OC 7	Optional discipline 7	3,0	credit
	Profiling by student choice		
P1	Industrial and Civil Engineering	68,0	credit
P2	Architectural and Structural Engineering	68,0	credit
P3	Water Supply and Sewerage	68,0	credit
P4	Organization of Technical Supervision in Construction	68,0	credit
P5	Heating and Gas Supply and Ventilation	68,0	credit

1	2	3	4
P6	Bridges and Transport Tunnels	68,0	credit
P7	Additive Technology	68,0	credit
P8	Design in Industrial and Civil Construction	68,0	credit
P9	BIM-engineering	68,0	credit
P10	Technology of Building Structures, Products and Materials	68,0	credit
P11	Automobile Roads	68,0	credit
P12	Urban Construction and Infrastructure	68,0	credit
P13	Construction Project Management	68,0	credit
P14	Development of Construction	68,0	credit
P15	Energy Efficiency of Buildings and Energy Engineering	68,0	credit
	Total amount of optional component	85,0	
	TOTAL EPP VOLUME	240,0	



2.2 Structural and logical scheme of the educational and professional program Construction and Civil Engineering

3. Form of certification of higher education students

The certification of graduates of the educational programme Civil Engineering and Construction, speciality 192 Civil Engineering and Construction is carried out in the form of a qualifying examination or public defence of a qualification work and is completed by obtaining a standardised document on the award of a bachelor's degree with the award of qualifications: Bachelor of Civil Engineering and Construction dy the educational and professional program Civil Engineering and Construction.

The qualification work involves solving a complex specialised design problem in the field of construction and/or civil engineering.

The qualification work must not contain academic plagiarism, fabrication or falsification.

The qualification work must be posted on the website of the Odesa State Academy of Civil Engineering and Architecture or the websites of graduating departments, or in the repository of the Odesa State Academy of Civil Engineering and Architecture.

	GC	GC	GC	PC																	
CC1		2	+	4	5	6	/	8	9 +	+	11	1	2	3	4	2	6	/	8	9	10
CC 2			+					+									+			+	
CC 3	+						+			+				+							
CC 4				+				+									+				
CC 5							+		+		+			+				+			
CC 6	+											+		+							
CC 7	+											+		+							
CC 8												+		+							
CC 9	+			+	+	+										+					
CC 10	+											+		+							
CC 11										+		+		+					+		
CC 12	+											+		+							
CC 13												+		+			+				
CC 14														+					+		+
CC 15		+				+								+			+				
CC 16	+				+	+										+					
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CC 26														+			+				+
CC 27		+										+		+			+				
CC 28												+		+							
CC 29		+												+	+	+					
CC 30		+												+	+	+					
CC 31											+			+				+			
CC 32														+	+						
CC 33		+											+	+						+	
CC 34													+	+							

4. Matrix of correspondence of programme competences to components of the educational and professional programme Civil Engineering and Construction

5. Matrix of ensuring the programme learning outcomes (PLOs) for the relevant components of the educational and professional programme Civil Engineering and Construction

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PLO 13	PLO 14
CC1	+								+					
CC 2	+	+	+		+									
CC 3	+								+					
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CC 30		+		+	+				+			+		
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CC 32		+		+	+			+	+					
CC 33		+			+				+	+		+	+	
CC 34	+								+			+		

List of regulatory documents, on which the educational and professional program Construction and Civil Engineering is based

1. The Law of Ukraine on Higher Education No. 1556-VII from 01.07.2014.

URL: http://zakon5.rada.gov.ua/laws/show/2145-19. .

2. The Law of Ukraine on Education No. 2145-YIII from 05.09.2017.

URL: http://zakon5.rada.gov.ua/laws/show/2145-19.

3. Licensing regulations for educational activities. Resolution of the Cabinet of Ministers of Ukraine from 30.12.2015. No. 1187

URL: https://zakon.rada.gov.ua/laws/show/1187-2015-%D0%BF#Text

4. National Classifier of Ukraine: Classification of economic activities ДК 009:2010

URL: https://zakon.rada.gov.ua/rada/show/vb457609-10#Text

5. National Qualifications Framework.

URL: https://nqa.gov.ua/national-qualification-frame/

6. National Classifier ДК 003:2010 Classification of professions

URL: https://zakon.rada.gov.ua/rada/show/va327609-10#Text

7. About introduction of changes to some standards of higher education. Order of the Ministry of Education and Science of Ukraine from 13.06.2024. No. 842

URL:<u>https://mon.gov.ua/static-objects/mon/sites/1/vishcha-osvita/zatverdzeni%20sta</u>ndarty/2024/Nakaz-842.vid.13.06.2024.pdf

8. Standard of higher education in the specialty 192 Civil Engineering and Construction, field of knowledge 19 Architecture and Construction for the first (bachelor's) level of higher education. Order of the Ministry of Education and Science of Ukraine from 18.03.2021. No. 333

URL:https://mon.gov.ua/storage/app/media/vyshcha/standarty/2021/03/19/192-Budiv n.ta.tsyvil.inzhener-bakalavr-VO.18.01.pdf .