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**Federal State Autonomous Educational Institution of Higher Education  
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA  
NAMED AFTER PATRICE LUMUMBA  
RUDN University**

**Agrarian and Technological Institute**

educational division (faculty/institute/academy) as higher education programme developer

Approved at the meeting of the Academic Council of RUDN University

Opened by order of the Rector of RUDN University No. 458

Protocol No. 8

April 24, 2014

(date, month, year)

July 04, 2014

(date, month, year)

**PROFESSIONAL EDUCATION PROGRAMME OF HIGHER EDUCATION**

Field of Studies/ Speciality:

**35.04.09 Landscape Architecture**

field of studies / speciality code and title

Profile/Specialisation:

**Management and Design of Urban Green Infrastructure**

higher education programme title

The Educational Programme is developed in compliance with:

**Educational Standard of RUDN University**, approved by Order of the Rector No. 371

dated May 21, 2021

(day, month, year)

Level of education:

master's

(bachelor's / specialist's / master's – to fill in the required)

Graduate's Qualification:

Master

(graduate's qualification in compliance with the order of the Ministry of Education and Science of Russian Federation dated September 12, 2013, No. 1061)

Length of Educational Programme:

2 years

(full-time education)

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(part-time education)

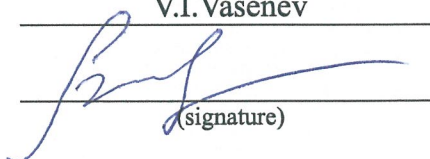
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(correspondence education)

AGREED by:

Head  
of Educational Programme

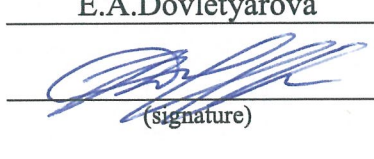
V.I. Vasenev



(day, month, year)

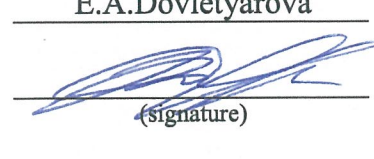
Chairperson  
of Didactic Council

E.A. Dovletyarova



(day, month, year)

Head  
of Educational  
Department  
E.A. Dovletyarova



(day, month, year)

## **1. EDUCATIONAL PROGRAMME GOAL (MISSION)**

The professional educational program of higher education “Management and design of urban green infrastructure” (direction of training 35.04.09 "Landscape Architecture", qualification (degree) "Master"), implemented by the Federal State Autonomous Educational Institution of Higher Education "Peoples' Friendship University of Russia named after Patrice Lumumba" (RUDN University) is a system of documents designed in accordance with the requirements of the Educational Standard of RUDN University.

The purpose of this educational program is the development of personal qualities, as well as the formation of general cultural (universal), general professional and professional competencies in accordance with the requirements of the Educational Standard of RUDN University in this area preparation. The goal of the program «Management and Design of Urban Green Infrastructure», is to train qualified personnel in the design, implementation, and management of urban green infrastructure.

## **2. EDUCATIONAL PROGRAMME RELEVANCE, SPECIFICITY, AND UNIQUENESS**

The disciplines of the program provide theoretical knowledge and practical skills in the field of landscape design and architecture of cities, as well as in environmental monitoring, assessment, standardization and modeling of urban ecosystems and their components that meet Russian and international educational standards and are adequate to modern market requirements. Particular attention is paid to the development of advanced technologies of rational land use and green building, allowing to significantly improve the environmental quality of the urban environment and the comfort of living of citizens.

## **3. LABOUR MARKET NEEDS FOR PERSONNEL TRAINING IN EDUCATIONAL PROGRAMME PROFILE**

A graduate may hold the following positions:

- in leading organizations working in the field of landscape architecture and design;
- forestry;
- authorities for the protection of specially protected natural territories;
- nurseries and botanical gardens; design institutes and workshops;
- construction organizations;
- management of landscape gardening;
- committees on city planning and protection of monuments, improvement and road economy, urban planning and architecture.

Approximate level of remuneration of graduates without work experience:

- Landscape designer from 90 000 ruble.
- Assistant landscape architect from 50 000 ruble

- Gardener from 50 000 ruble
- Gardener-grower from 40 000 ruble
- Florist in the flower shop from 40 000 ruble
- Foreman (foreman) from 40 000 ruble

Graduates apply their knowledge, practical skills and abilities internship abroad. They practice in large design institutes and workshops.

Masters - graduates of the program “Management and design of urban green infrastructure” can develop a further career in one of the following areas: 1) continuing education and research in postgraduate studies at Russian and international organizations with a PhD degree; 2) work in international organizations and institutions; 3) work in Russian-Italian companies and corporations focused on the international market (Barilla, EuroChem and others). The list of potential employers in Moscow, with whom working contacts have been developed, includes administrative organizations (the Department of Environmental Management and Environmental Protection of the City of Moscow, Rosprirodnadzor), production companies and design organizations (Moszelenstroy CJSC, GUP Mosproekt), scientific and applied laboratories (Laboratory of Agroecological monitoring, modeling and forecasting of ecosystems, Mosomcomonitoring) and educational institutions (RSAU-Moscow Agricultural Academy named after KA Timiryazev, RUDN and others).

#### **4. SPECIAL REQUIREMENTS FOR POTENTIAL APPLICANTS**

Admission is conducted on a full-time basis (paid places) according to the results of entrance examinations (portfolio competition on 35.04.09 “Landscape Architecture”) and interview in English. To enter the program, you must have: the document of the state sample of higher education with the appropriate annex to it, confirming your qualifications: bachelor, specialist or master.

#### **5. FEATURES OF EDUCATIONAL PROGRAMME IMPLEMENTATION**

5.1. The Educational Programme is implemented with elements the use of e-learning distance learning technologies (esystem.rudn.ru/).

5.2. The language of the Educational Programme implementation is English.

5.3. The Educational Programme is does not provide for education of people with disabilities.

5.4. The information on the planned introductory/advanced field internships and (or) research & development internships

<b>Internship*</b>	<b>Internship location</b> ( <i>organisation name and location</i> )
Orientation internship (introductory, intramural)	Laboratory of Agroecological Monitoring, Forecasting and Modeling of Ecosystems RSAU-Moscow Agricultural Academy named after KA Timiryazev
Technological (advanced field internship, industrial, extramural)	Institute of Physico-Chemical and Biological Problems of Soil Science of the Russian Academy of Sciences, Pushino

## 6. CHARACTERISTICS OF EDUCATIONAL PROGRAMME GRADUATE'S PROFESSIONAL ACTIVITIES

Code and title of occupational standard	Generalised labour functions			Labour functions		
	Code	Title	Qualification level	Type	Code	Qualification level (sublevel)
10.010 Landscape architect	A	Performance of pre-project and survey work, development of a project of individual elements in projects of new, reconstructed and restored objects of landscape architecture	6	Collection, preparation, processing and documentation of initial data for design	A/01.6	6
				Preparation and implementation of certain types of work on landscape analysis of the territory	A/02.6	6
				Development of individual elements and fragments of the project of landscape architecture objects as part of the overall design documentation	A/03.6	6
				Graphic and text design of design and estimate documentation	A/04.6	6
	B	Implementation of a complex of works on the development of project documentation, construction and maintenance of landscape architecture objects, their reconstruction and restoration	6	Preparation of pre-project data for the provision of expert and consulting services on landscape and architectural design and the implementation of a landscape construction project	B/01.6	6
				Ensuring the development of a conceptual design for the landscape organization of the territory	B/02.6	6
				Conducting pre-project studies and preparing data for the development of a section of design documentation for landscape architecture objects	B/03.6	6
				Ensuring the development of sections of design (and working) documentation for	B/04.6	6

Code and title of occupational standard	Generalised labour functions			Labour functions		
	Code	Title	Qualification level	Type	Code	Qualification level (sublevel)
				objects of landscape architecture		
				Carrying out architectural supervision activities for the section of design documentation for landscape architecture objects and measures to eliminate defects during the operation of the object	B/05.6	6
	C	Management and management of a complex of works on landscape design	7	Management of design and survey work and the provision of expert advisory services at the pre-project stage of designing a landscape architecture object	C/01.7	7
				Management of design work, organization and general coordination of work on the development of design documentation for landscape architecture objects	C/02.7	7
				Preparation and protection of design documentation for landscape architecture objects	C/03.7	7
				Carrying out activities for architectural supervision of the project of a landscape construction object and a set of works related to the maintenance and maintenance of landscape architecture objects	C/04.7	7
				Consulting services and design work at the stage of implementation of landscape architecture objects	C/05.7	7
				Operational management of the	C/06.7	7

Code and title of occupational standard	Generalised labour functions			Labour functions		
	Code	Title	Qualification level	Type	Code	Qualification level (sublevel)
					process of designing and implementing objects of landscape architecture	
				Preparation of tender documentation for the construction of landscape architecture objects	C/07.7	7
				Carrying out activities to protect copyright for a landscape and architectural project	C/08.7	7
				Management of employees of the landscape and architectural division of the organization and / or creative team	C/09.7	7

## 7. REQUIREMENTS FOR EDUCATIONAL PROGRAMME OUTCOMES

7.1. Upon completion of the Educational Programme, the graduate is expected to acquire the following Generic Competences (GCs):

Code and descriptor of generic competence	Code and competence level indicator
GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC--1.1 Able to apply systematization to solve problems; GC--1.2. Capable of searching and analyzing information;
GC-2 Able to manage a project at all stages of its life cycle	GC--2.1. Able to lead the project at all stages; GC--2.2. Able to plan and analyze the project at all stages;
GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC--3.1. Able to organize team work on a project; GC--3.2 Able to interact with executive authorities to coordinate all stages of design;
GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC--4.1. Able to prepare all the necessary documentation for the project in Russian and foreign languages; GC--4.2. Able to communicate on the project in Russian and foreign languages;
GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC--5.1 Able to delve into the peculiarities of the social organization of society, the specifics of the mentality and moral outlook of the cultures of the West and East; GC--5.2 Able to overcome cultural barriers by perceiving intercultural differences;

<b>Code and descriptor of generic competence</b>	<b>Code and competence level indicator</b>
GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem	GC--6.1. Able to plan his life activities for the period of study in an educational organizations; GC--6.2. Able to determine the tasks of self-development and professional growth, distribute them into long-term and short-term ones with justification of their relevance and determination of the necessary resources;
GC-7 Able to apply a systematic approach in the field information culture.	GC--7.1. Able to systematically analyze the state of the project in the information field; GC--7.2. Able to work within the information field to promote the project;
GC-7.1 Able to search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems;	GC—7.1.1. Able to apply angorite to effectively evaluate the data obtained to solve the tasks; GC—7.1.2. Able to use open and closed sources of information to collect and analyze data;
GC-7.2 Able to evaluate information, its reliability, build logical conclusions based on incoming information and data.	GC—7.2.1. Able to verify the accuracy of the information received; GC—7.2.2. Able to logically evaluate the reliability of the information received;

8.2. Upon completion of the Educational Programme, the graduate is expected to acquire the following general professional competences (GPCs):

<b>Code and descriptor of general professional competence</b>	<b>Code and competence level indicator</b>
GPC-1 Able to analyze modern problems of science and production, solve complex (non-standard) tasks in professional activities	GPC-1.1 Able to solve complex (non-standard) tasks in professional activities; GPC-1.2. Able to analyze modern problems of science and production;
GPC-2 able to transfer professional knowledge with using modern pedagogical techniques	GPC-2.1. Capable of transferring professional knowledge; GPC-2.2 Able to transfer professional knowledge using information technology;
GPC-3 Able to develop and implement new effective technology in a professional activities	GPC-3.1. Able to solve complex (non-standard) tasks in professional activities; GPC-3.2. Able to develop new effective technologies in professional activities;;

<b>Code and descriptor of general professional competence</b>	<b>Code and competence level indicator</b>
GPC-4 Able to conduct research, analyze the results and prepare reporting	GPC-4.1 Capable of doing scientific research; GPC-4.2 Able to prepare reports;
GPC-5 Able to carry out a feasibility study of projects in professional activities	GPC-5.1. Able to carry out the economic justification of projects; GPC-5.2. Capable of carrying out technical and economic Able to carry out technical justification of projects;
GPC-6 Able to manage teams and organize production processes	GPC-6.1 Ability to organize production processes; GPC-6.2. Ability to manage a team
GPC-7 Ability to manage a team "Able to critically analyze, apply system approach in the field of digital economy"	GPC-7.1 Ability to apply a systematic approach; GPC-7.2 Ability to perform critical analysis.

8.3. Upon completion of the Educational Programme, the graduate is expected to acquire the following professional competences (PCs)\* :

<b>Code and descriptor of professional competence</b>	<b>Code and competence level indicator</b>	<b>Code and title of occupational standard for relevant PC</b>
PC-1 Readiness to design technological processes for engineering preparation of the territory, construction and maintenance of landscape architecture objects	PC-1.1. Ability to manage the construction and maintenance of landscape architecture objects; PC-1.2. Ability to design technological processes for engineering preparation of the territory;	FSES 35.04.09 Landscape architecture Order of the Ministry of Education and Science of Russia dated July 26, 2017 N 712 (as amended on February 8, 2021) Registered with the Ministry of Justice of Russia on August 15, 2017 N 47800
PC-2 The ability to assess the efficiency of the use of materials, equipment, technological processes at landscape architecture objects	PC-2.1 Capable of evaluating the efficiency of equipment use; PC-2.2. Able to assess the effectiveness of the use of technologies and materials	
PC-3 The ability	PC-3.1. Able to organize sustainable management of the	



<b>Code and descriptor of professional competence</b>	<b>Code and competence level indicator</b>	<b>Code and title of occupational standard for relevant PC</b>
to assess the impact of measures for the rational use and management of landscapes, taking into account the improvement of the quality and safety of the human habitat	facility PC-3.2. Able to monitor the state of the improvement object	
PC-4 The ability to implement measures for external improvement and landscaping of territories to create favorable sanitary and hygienic conditions, increase the level of comfort of a person's stay in an urban environment, and its general aesthetic enrichment	PC-4.1 Able to assess the environmental condition of the design object PC-4.2. Able to create a project for the sustainable development of the territory	
PC-5 the ability to develop and implement a system of measures for the conservation of plantations in the interests of ensuring the right of every citizen to a favorable environment	PC-5.1. Able to make decisions on carrying out activities to preserve green spaces in the city PC-5.2. Able to analyze the condition of tree plantations	
PC-6 Readiness to organize work on urban monitoring and inventory at landscape architecture objects,	PC-6.1 Able to carry out certification of green spaces at design facilities PC-6.2. Able to conduct engineering and environmental surveys at the facility	

<b>Code and descriptor of professional competence</b>	<b>Code and competence level indicator</b>	<b>Code and title of occupational standard for relevant PC</b>
compiling a cadastre of green spaces		
PC-9 Ability to organize and carry out all types of work on landscape architecture objects	PC-9.1 Able to find contractors to carry out project work PC-9.2. Able to organize team work	
PC-10 Readiness to manage objects of landscape architecture in the field of their functional use, protection and protection	PC-10.1. Ability to manage objects of landscape architecture in the field of protection and protection PC-10.2. Ability to manage objects of landscape architecture	
PC-16 Willingness to acquire new knowledge and conduct applied research in the field of landscape architecture	PC-16.1 Capable of acquiring new knowledge PC-16.2. Capable of conducting applied research	
PC-17 the ability to develop work plans and programs for scientific research in the field of landscape architecture, the ability to organize the collection, processing, analysis and systematization of scientific and technical information on the research topic, the choice of methods and means of solving problems	PC-17.1 The ability to develop work plans and programs for scientific research in the field of landscape architecture, the ability to organize the collection, processing, analysis and systematization of scientific and technical information on the research topic, the choice of methods and means of solving problems PC-17.2. Able to develop work plans and programs for scientific research in the field of landscape architecture	
PC-18 ability to prepare scientific and technical	PC-18.1 ability to prepare scientific and technical reports, reviews, publications based on the results of research in the field of landscape architecture	

<b>Code and descriptor of professional competence</b>	<b>Code and competence level indicator</b>	<b>Code and title of occupational standard for relevant PC</b>
reports, reviews, publications based on the results of research in the field of landscape architecture	PC-18.2. Capable of preparing scientific and technical reports	
PC-21 the ability to carry out planning organization of open spaces, design of the external environment, design of landscape architecture objects, develop projects for the restoration and reconstruction of territories of cultural heritage sites	PC-21.1 Able to develop a planning solution for the development of the territory PC-21.2. Able to develop a project for the restoration and reconstruction of the territory	
PC-22 readiness to participate in the project activities of organizations, to work in a team of specialists related to the sustainable development of territories at the stage of territorial planning and preparation of master plans for settlements and urban agglomerations	PC-22.1 Capable of participating in the development of urban sustainability plans PC-22.2. Able to participate in project activities	
PC-24 Readiness to develop (based on existing standards) methodological and regulatory documents for the design of	PC-24.1 Readiness to develop (based on existing standards) methodological and regulatory documents for the design of landscape architecture objects PC-24.2. Capable of conducting environmental surveys	

<b>Code and descriptor of professional competence</b>	<b>Code and competence level indicator</b>	<b>Code and title of occupational standard for relevant PC</b>
landscape architecture objects		

**8. MATRIX OF COMPETENCES that students acquire** when mastering the Educational Programme “Management and Design of Urban Green Infrastructure”, implemented under the RUDN University Academic Council decision dated "24" April, 2024 (Protocol No.8) in the field of studies / speciality 35.04.09 Landscape Architecture

Code	Courses/modules that form students' competences	GENERIC COMPETENCES					
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem
<b>Block 1.</b>	<b>Disciplines (modules)</b>						
<b>B1.O</b>	<b>Mandatory part</b>						
<b>B1.O.01</b>	<b>Core component</b>						
B1.O.01.01	Data analysis and statistics	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.01.02	International regulation in city planning and environmental protection	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.01.03	Landscape planning and sustainable development	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.03.02	Foreign Language in Professional Practice	GC-1.1, GC-1.2	GC-2.1, GC-2.2	GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
<b>B1.O.02</b>	<b>Variable component</b>	GC-1.1, GC-1.2					

Code	Courses/modules that form students' competences	GENERIC COMPETENCES					
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem
B1.O.02.01	Phytopathology and Plant Protection	GC-1.1, GC-1.2		GC-3.1, GC-3.2		GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.02.02	Landscape engineering and nature-based solution	GC-1.1, GC-1.2		GC-3.1, GC-3.2		GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.02.03.	Green infrastructure urban climate and carbon neutrality	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.02.04.	Principles of remote sensing and modeling	GC-1.1, GC-1.2		GC-3.1, GC-3.2		GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.02.05.	Advances in environmental monitoring	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.O.02.06.	Urban ecology	GC-1.1, GC-1.2		GC-3.1, GC-3.2		GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.V.DV.01.01.	Scientific writing skills	GC-1.1, GC-1.2		GC-3.1, GC-3.2		GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.V.DV.01.02	Introduction in scientific research			GC-3.1, GC-3.2			GC-6.1, GC-6.2
B1.V.DV.02.01	Research planning	GC-1.1, GC-1.2		GC-3.1, GC-3.2		GC-5.1, GC-5.2	GC-6.1, GC-6.2
B1.V.DV.02.02	Scientific research						

Code	Courses/modules that form students' competences	GENERIC COMPETENCES					
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem
<b>Block 2.</b>	Practice				GC-4.1, GC-4.2		
B2.O.01	Externship				GC-4.1, GC-4.2		
B2.V.01	Scientific research work						
B2.V.02	Research practice	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
B2.V.03	Undergraduate practice	GC-1.1, GC-1.2		GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2
<b>B3</b>	<b>Final State Examination</b>	GC-1.1, GC-1.2	GC-2.1, GC-2.2	GC-3.1, GC-3.2	GC-4.1, GC-4.2	GC-5.1, GC-5.2	GC-6.1, GC-6.2

Code	Courses/modules that form students' competences	GENERIC COMPETENCES		
		GC-7 Able to apply a systematic approach in the field information culture.	GC-7.1 Able to search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems;	GC-7.2 Able to evaluate information, its reliability, build logical conclusions based on incoming information and data.
<b>Block 1.</b>	<b>Disciplines (modules)</b>			
<b>B1.O</b>	<b>Mandatory part</b>			
<b>B1.O.01</b>	<b>Core component</b>			
B1.O.01.01	Data analysis and statistics	GC-7.1, GC-7.2	GC-7.1.1, GC-7.1.2	GC-7.2.1, GC-7.2.2
B1.O.01.02	International regulation in city planning and environmental protection		GC-7.1.1, GC-7.1.2	GC-7.2.1, GC-7.2.2
B1.O.01.03	Landscape planning and sustainable development		GC-7.1.1, GC-7.1.2	GC-7.2.1, GC-7.2.2
B1.O.03.02	Foreign Language in Professional Practice			
<b>B1.O.02</b>	<b>Variable component</b>			
B1.O.02.01	Phytopathology and Plant Protection			
B1.O.02.02	Landscape engineering and nature-based solution			
B1.O.02.03.	Green infrastructure urban climate and carbon neutrality			
B1.O.02.04.	Principles of remote sensing and modeling			
B1.O.02.05.	Advances in environmental monitoring			



Code	Courses/modules that form students' competences	GENERIC COMPETENCES		
		GC-7 Able to apply a systematic approach in the field information culture.	GC-7.1 Able to search for the necessary sources of information and data, perceive, analyze, memorize and transmit information using digital means, as well as using algorithms when working with data received from various sources in order to effectively use the information received to solve problems;	GC-7.2 Able to evaluate information, its reliability, build logical conclusions based on incoming information and data.
B1.O.02.06.	Urban ecology			
B1.V.DV.01.01.	Scientific writing skills			
B1.V.DV.01.02	Introduction in scientific research			
B1.V.DV.02.01	Research planning			
B1.V.DV.02.02	Scientific research			
<b>Block 2.</b>	Practice			
B2.O.01	Externship	GC-7.1, GC-7.2	GC-7.1.1, GC-7.1.2	GC-7.2.1, GC-7.2.2
B2.V.01	Scientific research work		GC-7.1.1, GC-7.1.2	GC-7.2.1, GC-7.2.2
B2.V.02	Research practice			
B2.V.03	Undergraduate practice			
<b>B3</b>	<b>Final State Examination</b>	GC-7.1, GC-7.2	GC-7.1.1, GC-7.1.2	GC-7.2.1, GC-7.2.2

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem	GC-7 Ability to manage a team " Able to critically analyze, apply system approach in the field of digital economy
<b>Block 1.</b>	<b>Disciplines (modules)</b>							
<b>B1.O</b>	<b>Mandatory part</b>							
<b>B1.O.01</b>	<b>Core component</b>							
B1.O.01.01	Data analysis and statistics	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	GPC-7.1, GPC-7.2
B1.O.01.02	International regulation in city planning and environmental protection	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	
B1.O.01.03	Landscape planning and sustainable development	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	
B1.O.03.02	Foreign Language in Professional Practice	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	
<b>B1.O.02</b>	<b>Variable component</b>							
B1.O.02.01	Phytopathology and Plant Protection	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem	GC-7 Ability to manage a team " Able to critically analyze, apply system approach in the field of digital economy
B1.O.02.02	Landscape engineering and nature-based solution	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	
B1.O.02.03.	Green infrastructure urban climate and carbon neutrality	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2		
B1.O.02.04.	Principles of remote sensing and modeling			GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2		
B1.O.02.05.	Advances in environmental monitoring		GPC-2.1, GPC-2.2					
B1.O.02.06.	Urban ecology	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2					
B1.V.DV.01.01.	Scientific writing skills							
B1.V.DV.01.02	Introduction in scientific research			GPC-3.1, GPC-3.2				

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem	GC-7 Ability to manage a team " Able to critically analyze, apply system approach in the field of digital economy
B1.V.DV.02.01	Research planning	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	
B1.V.DV.02.02	Scientific research							
<b>Block 2.</b>	Practice		GPC-2.1, GPC-2.2					
B2.O.01	Externship		GPC-2.1, GPC-2.2					
B2.V.01	Scientific research work							
B2.V.02	Research practice	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	
B2.V.03	Undergraduate practice	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.	

Code	Courses/modules that form students' competences	GENERAL PROFESSIONAL COMPETENCES						
		GC-1 Able to search, critical analysis problem situations based on a systematic approach, develop an action strategy	GC-2 Able to manage a project at all stages of its life cycle	GC-3 Able to organize and manage the work of the team, developing a team strategy to achieve the goal	GC-4 Able to apply modern communication technologies in the state language of the Russian Federation and foreign language (s) for academic and professional interaction	GC-5 Able to analyze and take into account the diversity of cultures in the process of intercultural interaction	GC-6 Able to determine and implement the priorities of their own activities and ways to improve them on the basis of self-esteem	GPC-7 Ability to manage a team " Able to critically analyze, apply system approach in the field of digital economy
<b>B3</b>	<b>Final State Examination</b>	GPC-1.1, GPC-1.2	GPC-2.1, GPC-2.2	GPC-3.1, GPC-3.2	GPC-4.1, GPC-4.2	GPC-5.1, GPC-5.2	GPC-6.1, GPC-6.2	GPC-7.1, GPC-7.2

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES					
		PC-1 Readiness to design technological processes for engineering preparation of the territory, construction and maintenance of landscape architecture objects	PC-2 The ability to assess the efficiency of the use of materials, equipment, technological processes at landscape architecture objects	PC-3 The ability to assess the impact of measures for the rational use and management of landscapes, taking into account the improvement of the quality and safety of the human habitat	PC-4 The ability to implement measures for external improvement and landscaping of territories to create favorable sanitary and hygienic conditions, increase the level of comfort of a person's stay in an urban environment, and its general aesthetic enrichment	PC-5 the ability to develop and implement a system of measures for the conservation of plantations in the interests of ensuring the right of every citizen to a favorable environment	PC-6 Readiness to organize work on urban monitoring and inventory at landscape architecture objects, compiling a cadastre of green spaces
<b>Block 1.</b>	<b>Disciplines (modules)</b>						
<b>B1.O</b>	<b>Mandatory part</b>						
<b>B1.O.01</b>	<b>Core component</b>						
B1.O.01.01	Data analysis and statistics						
B1.O.01.02	International regulation in city planning and environmental protection						
B1.O.01.03	Landscape planning and sustainable development	PC-1.1, PC-1.2			PC-4.1, PC-4.2	PC-5.1, PC-5.2	
B1.O.03.02	Foreign Language in Professional Practice						
<b>B1.O.02</b>	<b>Variable component</b>						

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES					
		PC-1 Readiness to design technological processes for engineering preparation of the territory, construction and maintenance of landscape architecture objects	PC-2 The ability to assess the efficiency of the use of materials, equipment, technological processes at landscape architecture objects	PC-3 The ability to assess the impact of measures for the rational use and management of landscapes, taking into account the improvement of the quality and safety of the human habitat	PC-4 The ability to implement measures for external improvement and landscaping of territories to create favorable sanitary and hygienic conditions, increase the level of comfort of a person's stay in an urban environment, and its general aesthetic enrichment	PC-5 the ability to develop and implement a system of measures for the conservation of plantations in the interests of ensuring the right of every citizen to a favorable environment	PC-6 Readiness to organize work on urban monitoring and inventory at landscape architecture objects, compiling a cadastre of green spaces
B1.O.02.01	Phytopathology and Plant Protection			PC-3.1, PC-3.2			
B1.O.02.02	Landscape engineering and nature-based solution						
B1.O.02.03.	Green infrastructure urban climate and carbon neutrality						
B1.O.02.04.	Principles of remote sensing and modeling						
B1.O.02.05.	Advances in environmental monitoring						
B1.O.02.06.	Urban ecology		PC-2.1, PC-2.2		PC-4.1, PC-4.2		

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES					
		PC-1 Readiness to design technological processes for engineering preparation of the territory, construction and maintenance of landscape architecture objects	PC-2 The ability to assess the efficiency of the use of materials, equipment, technological processes at landscape architecture objects	PC-3 The ability to assess the impact of measures for the rational use and management of landscapes, taking into account the improvement of the quality and safety of the human habitat	PC-4 The ability to implement measures for external improvement and landscaping of territories to create favorable sanitary and hygienic conditions, increase the level of comfort of a person's stay in an urban environment, and its general aesthetic enrichment	PC-5 the ability to develop and implement a system of measures for the conservation of plantations in the interests of ensuring the right of every citizen to a favorable environment	PC-6 Readiness to organize work on urban monitoring and inventory at landscape architecture objects, compiling a cadastre of green spaces
B1.V.DV.01.01.	Scientific writing skills						
B1.V.DV.01.02	Introduction in scientific research						
B1.V.DV.02.01	Research planning						PC-6.1, GPC-6.2
B1.V.DV.02.02	Scientific research						PC-6.1, GPC-6.2
<b>Block 2.</b>	Practice						
B2.O.01	Externship						
B2.V.01	Scientific research work						
B2.V.02	Research practice						



Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES					
		PC-1 Readiness to design technological processes for engineering preparation of the territory, construction and maintenance of landscape architecture objects	PC-2 The ability to assess the efficiency of the use of materials, equipment, technological processes at landscape architecture objects	PC-3 The ability to assess the impact of measures for the rational use and management of landscapes, taking into account the improvement of the quality and safety of the human habitat	PC-4 The ability to implement measures for external improvement and landscaping of territories to create favorable sanitary and hygienic conditions, increase the level of comfort of a person's stay in an urban environment, and its general aesthetic enrichment	PC-5 the ability to develop and implement a system of measures for the conservation of plantations in the interests of ensuring the right of every citizen to a favorable environment	PC-6 Readiness to organize work on urban monitoring and inventory at landscape architecture objects, compiling a cadastre of green spaces
B2.V.03	Undergraduate practice						
<b>B3</b>	<b>Final State Examination</b>	PC-1.1, PC-1.2	PC-2.1, PC-2.2	PC-3.1, PC-3.2	PC-4.1, PC-4.2	PC-5.1, PC-5.2	PC-6.1, GPC-6.2

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES				
		PC-9 Ability to organize and carry out all types of work on landscape architecture objects	PC-10 Readiness to manage objects of landscape architecture in the field of their functional use, protection and protection	P PC-16 Willingness to acquire new knowledge and conduct applied research in the field of landscape architecture technological processes at landscape architecture objects	PC-17 the ability to develop work plans and programs for scientific research in the field of landscape architecture, the ability to organize the collection, processing, analysis and systematization of scientific and technical information on the research topic, the choice of methods and means of solving problems in an urban environment, and its general aesthetic enrichment	PC-18 ability to prepare scientific and technical reports, reviews, publications based on the results of research in the field of landscape architecture
<b>Block 1.</b>	<b>Disciplines (modules)</b>					
<b>B1.O</b>	<b>Mandatory part</b>					
<b>B1.O.01</b>	<b>Core component</b>					
B1.O.01.01	Data analysis and statistics				PC-17.1, PC-17.2	
B1.O.01.02	International regulation in city planning and environmental protection				PC-17.1, PC-17.2	
B1.O.01.03	Landscape planning and sustainable development	PC-9.1, GPC-9.2	PC-10.1, PC-10.2	PC-16.1, PC-16.2		
B1.O.03.02	Foreign Language in Professional Practice					
<b>B1.O.02</b>	<b>Variable component</b>					

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES				
		PC-9 Ability to organize and carry out all types of work on landscape architecture objects	PC-10 Readiness to manage objects of landscape architecture in the field of their functional use, protection and protection	P PC-16 Willingness to acquire new knowledge and conduct applied research in the field of landscape architecture technological processes at landscape architecture objects	PC-17 the ability to develop work plans and programs for scientific research in the field of landscape architecture, the ability to organize the collection, processing, analysis and systematization of scientific and technical information on the research topic, the choice of methods and means of solving problems in an urban environment, and its general aesthetic enrichment	PC-18 ability to prepare scientific and technical reports, reviews, publications based on the results of research in the field of landscape architecture
B1.O.02.01	Phytopathology and Plant Protection		PC-10.1, PC-10.2			
B1.O.02.02	Landscape engineering and nature-based solution		PC-10.1, PC-10.2			
B1.O.02.03.	Green infrastructure urban climate and carbon neutrality		PC-10.1, PC-10.2			
B1.O.02.04.	Principles of remote sensing and modeling				PC-17.1, PC-17.2	
B1.O.02.05.	Advances in environmental monitoring					
B1.O.02.06.	Urban ecology					PC-18.1, PC-18.2
B1.V.DV.01.01.	Scientific writing skills					PC-18.1, PC-18.2
B1.V.DV.01.02	Introduction in scientific research					PC-18.1, PC-18.2

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES				
		PC-9 Ability to organize and carry out all types of work on landscape architecture objects	PC-10 Readiness to manage objects of landscape architecture in the field of their functional use, protection and protection	P PC-16 Willingness to acquire new knowledge and conduct applied research in the field of landscape architecture technological processes at landscape architecture objects	PC-17 the ability to develop work plans and programs for scientific research in the field of landscape architecture, the ability to organize the collection, processing, analysis and systematization of scientific and technical information on the research topic, the choice of methods and means of solving problems in an urban environment, and its general aesthetic enrichment	PC-18 ability to prepare scientific and technical reports, reviews, publications based on the results of research in the field of landscape architecture
B1.V.DV.02.01	Research planning			PC-16.1, PC-16.2		
B1.V.DV.02.02	Scientific research			PC-16.1, PC-16.2		
<b>Block 2.</b>	Practice					
B2.O.01	Externship	PC-9.1, GPC-9.2				PC-18.1, PC-18.2
B2.V.01	Scientific research work					
B2.V.02	Research practice					PC-18.1, PC-18.2
B2.V.03	Undergraduate practice					
<b>B3</b>	<b>Final State Examination</b>	PC-9.1, GPC-9.2	PC-10.1, PC-10.2	PC-16.1, PC-16.2	PC-17.1, PC-17.2	PC-18.1, PC-18.2

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES		
		PC-21 the ability to carry out planning organization of open spaces, design of the external environment, design of landscape architecture objects, develop projects for the restoration and reconstruction of territories of cultural heritage sites	PC-22 readiness to participate in the project activities of organizations, to work in a team of specialists related to the sustainable development of territories at the stage of territorial planning and preparation of master plans for settlements and urban agglomerations	PC-24 Readiness to develop (based on existing standards) methodological and regulatory documents for the design of landscape architecture objects
<b>Block 1.</b>	<b>Disciplines (modules)</b>			
<b>B1.O</b>	<b>Mandatory part</b>			
<b>B1.O.01</b>	<b>Core component</b>			
B1.O.01.01	Data analysis and statistics			
B1.O.01.02	International regulation in city planning and environmental protection			PC-24.1, PC-24.2
B1.O.01.03	Landscape planning and sustainable development	PC-21.1, PC-21.2	PC-22.1, PC-22.2	
B1.O.03.02	Foreign Language in Professional Practice			
<b>B1.O.02</b>	<b>Variable component</b>			

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES		
		PC-21 the ability to carry out planning organization of open spaces, design of the external environment, design of landscape architecture objects, develop projects for the restoration and reconstruction of territories of cultural heritage sites	PC-22 readiness to participate in the project activities of organizations, to work in a team of specialists related to the sustainable development of territories at the stage of territorial planning and preparation of master plans for settlements and urban agglomerations	PC-24 Readiness to develop (based on existing standards) methodological and regulatory documents for the design of landscape architecture objects
B1.O.02.01	Phytopathology and Plant Protection			
B1.O.02.02	Landscape engineering and nature-based solution			
B1.O.02.03.	Green infrastructure urban climate and carbon neutrality			
B1.O.02.04.	Principles of remote sensing and modeling			
B1.O.02.05.	Advances in environmental monitoring			PC-24.1, PC-24.2
B1.O.02.06.	Urban ecology			
B1.V.DV.01.01.	Scientific writing skills			
B1.V.DV.01.02	Introduction in scientific research			
B1.V.DV.02.01	Research planning			PC-24.1, PC-24.2

Code	Courses/modules that form students' competences	PROFESSIONAL COMPETENCES		
		PC-21 the ability to carry out planning organization of open spaces, design of the external environment, design of landscape architecture objects, develop projects for the restoration and reconstruction of territories of cultural heritage sites	PC-22 readiness to participate in the project activities of organizations, to work in a team of specialists related to the sustainable development of territories at the stage of territorial planning and preparation of master plans for settlements and urban agglomerations	PC-24 Readiness to develop (based on existing standards) methodological and regulatory documents for the design of landscape architecture objects
B1.V.DV.02.02	Scientific research			
<b>Block 2.</b>	Practice			
B2.O.01	Externship			
B2.V.01	Scientific research work			
B2.V.02	Research practice			
B2.V.03	Undergraduate practice			
<b>B3</b>	<b>Final State Examination</b>	PC-21.1, PC-21.2	PC-22.1, PC-22.2	PC-24.1, PC-24.2