

1. PURPOSE OF THE POSTGRADUATE PROGRAM

The aim of the postgraduate program is to prepare and defend a dissertation for the degree of candidate of science in the scientific specialty 1.5.15. Ecology.

2. BRIEF SUMMARY OF THE PROGRAM

The program is implemented in the Department of Landscape Design and Sustainable Ecosystems of the Agrarian-Technological Institute within the framework of the scientific specialty 1.5.15. Ecology.

The program takes 4 years to complete in full-time education.

As part of the postgraduate program, the student masters disciplines (modules) and practical training aimed at preparing for the candidate exams and orienting the postgraduate student towards the development of an academic and teaching career, and conducts scientific research under the guidance of a supervisor on the approved dissertation topic.

Possible research areas for implementation under the program:

- analysis and forecasting of environmental consequences of urbanization;
- analysis, assessment and mapping of ecological functions and ecosystem services of urban green infrastructure;
- monitoring the ecological functions of urban soils, soil grounds and their components to create sustainable urban ecosystems ;
- analysis of ecological functions and forecasting of risks associated with the accumulation and transfer of man-made sediments and cultural layers in cities;
- conditions and prospects for agricultural production in cities;
- assessment of spatio-temporal dynamics and analysis of factors in the formation of urban micro- and mesoclimate, including modeling and monitoring of climatic anomalies;
- development and application of remote sensing methods for monitoring and assessing the quality of urban ecosystems and their components;
- development of microbiological and ecotoxicological approaches to the assessment of soils and surface environments;
- assessment of spatial and temporal trends in urban soil pollution;
- analysis, forecasting and assessment of risks associated with the sealing of territories;
- integrated methods for assessing the ecological state of ecosystems;
- development of integrated methods for assessing the ecological state of ecosystems;
- development of Internet of Things (IoT) methods for monitoring the condition and sustainability of urban green infrastructure.

3. LABOR MARKET NEED FOR GRADUATES WHO HAVE COMPLETED A POSTGRADUATE PROGRAM

Graduates who have completed the postgraduate program are in demand in organizations performing work in the field of urban ecology as research workers and in higher education organizations as teachers.

4. REQUIREMENTS FOR APPLICANTS APPLYING TO THE PROGRAM

The applicant's previous level of education is higher education (specialist, master's degree) in the field of biological or agricultural sciences.

An applicant must have a state-issued document on higher education (specialist's diploma, master's diploma) or an equivalent document from a foreign country and successfully pass the entrance exam.

5. STRUCTURE AND SCOPE OF THE POSTGRADUATE PROGRAM

Duration of completion of the postgraduate program: 4 years.

Form of study: full-time.

One credit unit corresponds to 36 academic hours.

Item No.	Structure of the postgraduate program	Labor intensity in credit units
1	Scientific component	209

2	Educational component	25
2.1	Disciplines (modules)	19
2.2	Practice	6
3	Final certification	6
The scope of the postgraduate program:		240

6. CHARACTERISTICS OF THE GRADUATE'S PROFESSIONAL ACTIVITIES

Areas and/or spheres of professional activity of a graduate who has completed a postgraduate program in which he/she can carry out his/her professional activity:

- teaching activities in vocational training, vocational education, additional vocational education;
- organization and implementation of fundamental and applied research in the field of urban ecology .

Types of professional tasks that a graduate is preparing to solve as part of mastering a postgraduate program:

- research;
- pedagogical.

Tasks of professional activity:

a) research activities:

- development of plans and programs for conducting scientific research;
- collection, processing, analysis and systematization of information on the research topic, selection of methods and means for solving the problem;
- preparation of scientific and technical reports, reviews, abstracts, publications based on the results of completed research, preparation and presentation of reports at scientific conferences and seminars.

b) pedagogical activity:

- teaching courses, disciplines (modules) or conducting individual types of educational classes;
- organization of scientific research, project, educational, professional and other activities of students;
- development of scientific and methodological support for the implementation of supervised educational courses, disciplines (modules) of programs.

7. PLACE OF IMPLEMENTATION OF THE POSTGRADUATE PROGRAM

The postgraduate program is implemented by the Patrice Lumumba Peoples' Friendship University of Russia.

Information on the planned bases for conducting internships and/or performing scientific research:

Practices and research	The base of the event
Teaching practice (full-time)	RUDN University, Moscow
Scientific activity aimed at preparing a dissertation for defense (full-time)	RUDN University, Moscow; Third-party organizations performing scientific research and development, depending on the focus of the research

8. FEATURES OF THE IMPLEMENTATION OF THE POSTGRADUATE PROGRAM

The postgraduate program is implemented with elements of distance learning technologies (conducting classes in disciplines in a distance format, using the RUDN University's EOS TUIS).

The language of implementation of the postgraduate program is Russian.

The program does not provide training for people with disabilities and people with limited health capabilities.