



URBAN ECOLOGY

MASTER'S PROGRAMME DEGREE



PROGRAM ADVANTAGES

- ✓ **The Master's Degree program is aimed at training professionals** specializing in the field of urban ecology, which are in demand in the labor market.
- ✓ **The Master's program is perfect for those students who are planning to pursue an academic career:** knowledge of the urban ecology and, the geochemistry of urban landscapes, climatology, as well as the study of green spaces and protected areas allows students to fully immerse themselves in the scientific field.
- ✓ **The Master's degree program is also excellent for students** who want to be personally involved in the cities transformation into ecologically comfortable areas for the urban population.
- ✓ **The program advantage compared to others** is the opportunity to learn a professionally oriented foreign language in international student's groups
- ✓ **The peculiarity of training** is the application of the project method of education, work on their own research and projects.
- ✓ **Active participation of invited specialists from different fields of urban economy** in master classes, open lectures and student practices



STUDYING PROCCCESS

120 credits.

Lectures, workshops and self-study, laboratory work,
several practice types



GEOENVIRONMENTAL ASSESSMENT OF TERRITORIES

- Integrated approach in assessing geoecological conditions: climatic, soil and vegetation, orohydrographic, geological factors.
- Engineering and geological approach as a basis for regional geoenvironmental assessment of the territory.
- Change of different territories geological environment and its resistance to technological impact.
- Mapping and geoenvironmental zoning of the territory.
- GIS technologies.



URBAN GEOECOLOGY

- Foundations of city buildings.
- Techniques of changing properties of ground bases.
- Hydrogeology and hydrology of cities.
- Problems of water supply and wastewater in cities.
- Underground workings in cities.
- Urban soils.
- Geological processes and phenomena in cities.
- Nature monitoring in cities.
- Recreational zones.



SUSTAINABLE URBAN DEVELOPMENT

- The relationship between human society and nature, the emergence and development of cities.
- The areas assessment occupied by settlements and urban utility services communications.
- Ecological, economic and social aspects of sustainable development, specificity of sustainable development of urbanized territories.
- The influence of pavements and materials used in urban development on the abiotic factors of the urban environment.
- Influence of building structure on wind rose and moisture regime.
- Role of living organisms in the urban ecosystems functioning.
- Territorial urban planning and environmental management.



URBAN DEVELOPMENT AND ENGINEERING AND ENVIRONMENTAL SURVEYS

- Regulatory, logistical and information support for engineering and environmental surveys and environmental impact assessments.
- Interpretation of aerospace materials using different types of surveys (black and white, multizone, radar, thermal, etc.).
- Reconnaissance survey. Routine observations describing the natural environment components and landscapes in general, the state of land and aquatic ecosystems, possible sources and visual pollution signs.
- Engineering and environmental surveys and environmental impact assessments to substantiate project documentation by industry.



URBAN DEMOGRAPHY AND ECOLOGY

- The current demographic situation and its geographical aspects.
- Models of optimal location of urban population in cities.
- Population structure and dynamics.
- Demographic problems.



STUDENTS FEEDBACK

DRYGVAL ANNA, REPUBLIC OF CRIMEA

“ The program for masters “Urban ecology” is new, very interesting, includes a wide range of disciplines, which will allow the student to acquire all necessary competences for work in the study process. I am sure that specialists with such knowledge are needed now and their demand will only increase in the future. At the moment I am successfully working in the scientific sphere, and I can judge about it, by those problems that have to be solved in my work. ”

RATNA NINGSIH KUSWARA, INDONESIA

“ I graduated as «Bachelor of Marine Science and Technology» in Indonesia. My country-Indonesia is known as the biggest archipelago country in the world. I continued my master study in ecology Faculty. Management in the sea will become my main interest for my research. I was studied Master of Ecology at the RUDN and I am sure that I made the right choice to obtain competencies for my work. I see that the new master’s degree program “Urban Ecology” creative. It will be very useful to my compatriots, because in our country there are many environmental problems. And the knowledge that this program will give will help to solve these problems. ”



HEAD OF THE PROGRAMME

STANIS ELENA VLADIMIROVNA



Candidate of Technical Sciences, Head of the Geoecology Department. Academician of the International Academy of Sciences and Life Safety (IANEB), Professor of the Russian Academy of Natural Sciences (RAE).

The dissertation ецзщс : “Increasing the reliability of mining and geological information in the design and development of mines”.

SCIENTIFIC INTERESTS:

environmental education, geoenvironment, geoecology, environmental geochemistry, integrated assessment of the environment, geoenvironmental zoning of territories.

Author of scientific articles in peer-reviewed Russian and foreign scientific journals (HAC, SCOPUS, Web of Science).

4 patents in the field of geoenvironmental safety of underground works.

Head of several academic research projects: “Study of ecological features of landscapes in the middle belt of Russia”, “Study of geoenvironmental conditions of the territory of Central Russia”, “Anthropogenic transformation of urbanized territories ecosystems in the European part of Russia”.