Документ подписан простой электронной подписью Информация о владельце: ФИО: Ястребов Олег Алек**Giederval State Autonomous Educational Institution of Higher Education** Должность: Ректор PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA Дата подписания: 23.05.2025 16:39:52 NAN ED AFTER PATRICE LUMUMBA Уникальный программный ключ: са953a0120d891083f939673078ef1a989dae18a

academy of engineering

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

Approved at the meeting of Academic Counsil of RUDN University Protocol № 2022-08/24-11/1 29.11.2024 (date, month, year)

PROFESSIONAL EDUCATION PROGRAMME OF HIGHER EDUCATION

Field of Studies / Specialty:

1.6.10. Geology, prospecting, and exploration of solid minerals, minerageny

(scientific speciality code and title)

Profile / Specialisation

Geology, prospecting, and exploration of solid minerals, minerageny (PhD program title)

The Educational Programme is developed in compliance with:

Educational Standard of RUDN University, approved by order of the Rector of RUDN University No. <u>139</u> dated <u>March 9, 2022</u>.

Length of Educational PhD Programme:

3 years (full-time education)

Educational PhD Programme Features: programme is implemented in English

AGREED by:

Head of Educational Programme Georgievskiy-A.F.

(signature)

Head of Educational Policy Department Vorøbyeva A.A.

(signature)

Head of Faculty Yu.N. Rasoumn (signature) Head of PhD Study Department Borisova A. S. (signature)

1. EDUCATIONAL PROGRAMME GOAL

The goal of the PhD program is to prepare and defend a dissertation for the degree of Candidate of Sciences in the scientific specialty 1.6.10. Geology, prospecting, and exploration of solid minerals, minerageny.

2. BRIEF SUMMARY OF THE PROGRAMME

The program is focused on the training of highly qualified specialists in the direction of training 1.6.10. Geology, prospecting, and exploration of solid minerals, minerageny. The curriculum is designed in such a way that it allows students to form professional competencies that are currently in demand. The purpose of the program is to create conditions for acquiring the necessary level of knowledge, skills, experience and experience for the implementation of professional activities and preparing for the defense of a scientific qualification work (dissertation) for the degree of candidate of sciences, as well as conducting scientific research in the interests of the development of science, mankind and humanitarian values. Research activities within the framework of the educational program cover the field of science and technology, which studies:

- Earth and its main geospheres lithosphere, hydrosphere, atmosphere, biosphere, their composition, structure, evolution and properties;
- geological and production facilities of subsoil development; prospecting and exploration of mineral resources;
- methods and technologies to ensure safe and environmentally friendly exploration and exploitation of mineral deposits;
- methods and systems of design of prospecting, exploration and typing of ores of solid minerals;
- software tools to study the geological structure of deposits, modeling of their formation processes, as well as prospecting and exploration; processing and analysis of research results.

In the process of studying, postgraduate students receive theoretical and practical training and skills in research and scientific and pedagogical work, which allow them to work effectively after completing the study of the educational program in enterprises of various fields and industries in senior positions, as well as in research and educational organizations.

3. LABOR MARKET NEEDS FOR PERSONAL TRAINING IN EDUCATIONAL PROGRAMME PROFILE

Graduates who have mastered this program are focused on work in Russian and international companies, enterprises, educational institutions, research organizations in various fields of industry related to geology, prospecting, and exploration of solid minerals. State and commercial structures of science-intensive industries are interested in graduates, in particular, enterprises related to the Earth sciences and other leading industries.

Graduates who have mastered this program are oriented to work in the Russian and international companies specializing in geology, prospecting, and exploration of solid minerals, minerageny: design and development, production, operating organizations, research centers, higher educational institutions.

Analysis of the status and trends of development of research and educational activities in the field of general and regional geology shows that the training of researchers in this industry is one of the necessary conditions for increasing the capacity and competitiveness of domestic educational institutions of higher education, research organizations and enterprises of mining and geological industry, carrying out within their activities scientific and educational.

In the professional sphere, the main consumers of the educational program are such organizations and enterprises in Russia as:

 a) in federal authorities - Ministry of Natural Resources and Environment of the Russian Federation, Federal Agency for Subsoil Use (Rosnedra) in the position of expert specialist, leading consultant, head of department, director of department, deputy minister, minister

- b) in the leading research institutes of the Russian Academy of Sciences of the country All-Russian Research Institute. A.P. Karpinsky (VSEGEI, St. Petersburg), Geological Institute (GIN RAS, Moscow), Institute of Geology and Mineralogy (IGEM RAS, Moscow), Institute of Geochemistry and Analytical Chemistry (GEOKHI RAS, Moscow), Institute of oceanology P.P. Shirshov (IO RAS, Moscow), Arctic and Antarctic Research Institute (AARI, St. Petersburg), Institute of Geology and Mineralogy named after. V.S. Sobolev (IGM SB RAS, Novosibirsk), Institute of Petroleum Geology and Geophysics. A.A. Trofimuk (INGG SB RAS), Institute of Geology. N.P. Yushkin (Syktyvkar), Institute of the Earth's Crust (Irkutsk), Far Eastern Geological Institute (Vladivostok), Institute of Tectonics and Geophysics. Yu.A. Kosygin (Khabarovsk), Institute of Volcanology and Seismology (Petropavlovsk-Kamchatsky) in positions from researcher to chief researcher, head of the laboratory, deputy director, director of the institute.
- c) in leading geological state and commercial organizations: Central Research Geological Exploration Institute (TsNIGRI, Moscow), All-Russian Scientific Research Institute of Mineral Resources named after Fedorov (Moscow). Russian Geological Holding (Rosgeologiya, Moscow), Yuzhgeologiya (Rostov on Don), All-Russian Research Institute Geology Foreign of of Countries (VNIIZARUBEZHGEOLOGIA, Moscow), Yuzhmorgeologiya (Gelendzhik), MMC Norilsk Nickel, UC RUSAL, RGK ALROSA, JSC Apatit, GK RossZoloto, PJSC Mechel, Severstal, etc. in positions from a manager to the head of the company.

In addition, a graduate will be able to successfully engage in teaching activities in leading universities in Russia (Moscow State University, St. Petersburg State University, Moscow State Geological Institute, Tomsk State University, National State University, KFU, South Federal University, UrFU, PFU, PFUR, Russian State University of Oil and Gas, FEFU, etc.) and abroad as an associate professor, professor, head of department, dean, vice-rector, and rector.

4. REQUIREMENTS FOR APPLICANTS APPLYING TO THE PHD PROGRAMME

For admission to the program, the Admission Rules apply, approved by the relevant local regulatory act and posted in the public domain on the official website of the RUDN University.

5. STRUCTURE AND WORKLOAD OF THE EDUCATIONAL PROGRAMME FOR PhD STUDIES

Duration of mastering the postgraduate program: 3/4 years. Form of education: full-time.

One credit unit corresponds to 36 academic hours.

No.	PhD programme structure	Workload, credit units
1	Scientific Component	150
1.1	Research activity aimed at preparing for a thesis defense	126
1.2	Preparation of publications and (or) patent applications	
	provided for in paragraph 5 of the Educational Standard of	18
	RUDN University	
1.3	Intermediate certification at the stages of scientific research	6
2	Educational Component	24
2.1	Disciplines (modules)	13
2.2	Internship	5
2.3	Intermediate certification in disciplines (modules) and	6
	internship	0

No.	PhD programme structure	Workload, credit units
3	Final attestation	6
PhD programme workload in credit units: 180		

6. CHARACTERISTICS OF EDUCATIONAL PROGRAMME GRADUATE'S PROFESSIONAL ACTIVITIES

The field(s) of professional activities of the Educational Programme graduate, where he/she can carry out his/her professional activities: in science and technology related to geology, prospecting, and exploration of solid minerals:

- study, modeling, design of methods of prospecting, exploration and development of resource potential of the subsoil;

- study, forecasting and modeling of structures of ore fields, areas and deposits;

- research and development of innovative solutions to improve the technical level of exploration and calculation of solid minerals reserves, selection of types and varieties of ores;

- engineering and geological support of human activities in the Earth's interior in the exploration, search for solid minerals.

- research, scientific justification of principles and ways to ensure industrial safety and environmental friendliness in prospecting, exploration and mineral processing;

- teaching activity in the field of geology, prospecting, and exploration of solid minerals.

7. LOCATION OF IMPLEMENTATION OF THE PHD PROGRAMME

The PhD program is implemented by the Federal State Autonomous Educational Institution of Higher Education Peoples' Friendship University of Russia named after Patrice Lumumba.

The information about partner organisations involved in the implementation of the PhD programme:

Internship and Scientific Research	Internship location
Pedagogical Training (stationary)	RUDN University, Moscow
Research activity aimed at preparing for a	RUDN University, Moscow;
thesis defense (stationary)	Third party organizations performing research
	and development, depending on the focus of
	the research

8. FEAUTURES OF EDUCATIONAL PROGRAMME IMPLEMENTATION

The PhD program is implemented with elements of DET (based on the TUIS platform). The language of implementation of the PhD program is English.

The program is *not adapted* for teaching the disabled and people with disabilities.