

Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Ястребов Олег Александрович  
Должность: Ректор  
Дата подписания: 24.06.2025 16:55:00  
Уникальный программный ключ:  
ca953a0120d891083f939673078ef1a989dae18a

**Federal State Independent Educational Institution  
higher education "Peoples' Friendship University of Russia named after  
Patrice Lumumba "**

**Academy of Engineering**

(name of the standard educational unit (SUE) - the developer of the postgraduate program)

Approved for US  
*engineering academy,*  
Protocol No. 2022-08/24-11/1  
from 29.11.2024

**TRAINING PROGRAM FOR SCIENTIFIC AND SCIENTIFIC AND PEDAGOGICAL STAFF  
IN POSTGRADUATE STUDIES**

Scientific specialty:

**2.5.6 Mechanical Engineering Technology**

(code and name of scientific specialty)

Orientation (profile):

**Mechanical Engineering Technology**

(name of postgraduate program)

The program for the training of scientific and scientific-pedagogical personnel in graduate school has been developed in accordance with the requirements:

**SUT RUDN University** , by random order of the rector No. 139 of March 09, 2022

The term for obtaining education under the postgraduate program:

**4 years**

(Full-time education)

Information about the features of the program implementation: *no*

AGREED:

*program manager*

**Malkova M.Yu.**

(signature)

Head of the OOP

**Vorobieva A.A.**

(signature)

Director of Engineering  
Academy

**Razoumny Yu.N.**

(signature)

Head of DPDS

**Borisova A.S.**

(signature)

2025

## **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 2.5.6 Mechanical Engineering Technology.*

*The program is focused on training highly qualified specialists.*

- *manufacturability of the machine design as an object of production;*
- *technological processes, operations, installations, positions, technological transitions and real moves that improve the quality of products and reduce their cost;*
- *mathematical modeling of technological processes and methods for manufacturing parts and products of mechanical engineering assembly;*
- *with obtaining results and obtaining new processing methods and in order to search for the quality of engineering products and to find the cost of their production;*
- *technological developments and technological processes;*
- *technological heredity in mechanical engineering;*
- *technological support and improvement of the quality of the explosive layer, stability and stability of machine parts;*
- *problems of control of technological processes in mechanical engineering;*
- *methods and reasons for the production of engineering products;*
- *digital technological processes and production in mechanical engineering.*

*The purpose of postgraduate study is a postgraduate student to develop an academic career, adapt in a scientific environment. The goal is to solve the problem of building a nationally oriented economy and the formation of the necessary quality of "human capital".*

*The goal is to prepare and defend a dissertation for the degree of candidate of sciences.*

## **2. BRIEF SUMMARY OF THE PROGRAMME**

The main professional educational program is implemented in accordance with the license for the right to carry out educational activities. The term of education under the program is 4 years. Volume - 240 credit units of the program (hereinafter - CU). The volume of the postgraduate program implemented in one academic year is 60 CU.

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

Socialized-researchers in this field is the subject of general conditions of scientific and educational activities.

Graduates who have mastered the developed program, focused on work in Russian and international educational institutions, research institutes, companies specializing in design, production and research in the field of mechanical engineering, machine tools and tools.

## **4. REQUIREMENTS FOR APPLICANTS APPLYING TO THE PHD PROGRAMME**

To receive an order-by-order Admission rules, random individual local regulations and access located in the office on the official website of RUDN University.

A potential applicant must be prepared for activities that require technical, research and pedagogical training.

Candidate for admission to postgraduate studies Has a diploma of higher education (specialist, master's degree) in a chosen or related specialty, and also receives training in the organization of research work, the procedure for conducting and processing the results of an experiment, knows the physical and mathematical foundations of the specialty; unified systemic approach to the process and phenomena. It is also desirable to have open works in the chosen specialty.

Entrance tests are held in the form of an exam, with the appropriate passing, which the applicant is enrolled in graduate school on a paid or budgetary basis.

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

Duration of mastering the postgraduate program: 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	210
1.1	Research activity aimed at preparing for a thesis defense	178
1.2	Preparation of publications and (or) patent applications provided for in paragraph 5 of the Educational Standard of RUDN University	24
1.3	Intermediate certification at the stages of scientific research	8
2	Educational Component	24
2.1	Disciplines (modules)	13
2.2	Internship	5
2.3	Intermediate certification in disciplines (modules) and internship	6
3	Final attestation	6
PhD programme workload in credit units:		240

The postgraduate program includes a scientific component, an educational component, as well as a final certification.

The scientific component of the PhD program includes:

- scientific activity of a graduate student aimed at preparing a dissertation for the scientific degree of a candidate of sciences for defense;

- preparation of publications that present the main scientific results of dissertations in peer-reviewed scientific publications, in scientific publications compared with them, indexed in the international databases Web of Science and Scopus and international databases adopted in accordance with the recommendation of the Higher Attic Commission under the Ministry of Science and higher education of the Russian Federation, as well as in scientific publications indexed in the scientometric database Russian Science Citation Index (RSCI), and (or) applications for patents for inventions, utility models, industrial actions, selective achievements, state state registration software for electronic computers, databases, topological integrated circuits;

- intermediate certification in the course of scientific research.

The educational component of the postgraduate program includes disciplines (modules) and pedagogical practice, as well as intermediate certification in disciplines (modules) and pedagogical practice.

## 6. 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 thesis defense (stationary)	RUDN University, Moscow; Third party organizations performing research and development, depending on the focus of the research

**7. FEATURES 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.