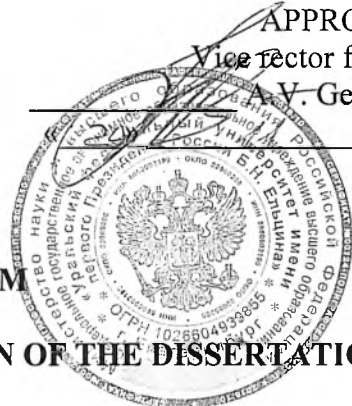


MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION
 Federal State Autonomous Educational Institution
 Higher Education
 "Ural Federal University named after the First President of Russia B. N. Yeltsin"
 Graduate School of Economics and Management

APPROVED BY
 Vice rector for science
 A. V. Germanenko
 2023





WORKING PROGRAM

RESEARCH ACTIVITIES AND PREPARATION OF THE DISSERTATION

List of information about the working program	Credentials
Doctoral Program <i>«Control in organizational systems»</i>	Code DP 2.3.4.
Group of specialties <i>«Information sciences and telecommunications»</i>	Specialty group code 2.3.
Federal State requirements (FSR)	Order of the Ministry of Science and Higher Education of the Russian Federation No. 951 dated 20.10.2021
Self- approved requirements (SAR)	Order "On the implementation of the "Requirements for the development and implementation of training programs for scientific and scientific-pedagogical personnel in the graduate school of UrFU" No 315/03 dated 31.03.2022

The working program is compiled by the authors:

No	Full name	Academic degree, academic title	Position	Department	Signature
1	Dmitry B. Berg	Doctor of Physical and Mathematical Sciences, Professor	Professor	Department of Big Data Analysis and Video Analysis Methods	
2	Svetlana N. Lapshina	Candidate of Technical Sciences, Docent	Associate Professor	Department of Systems Analysis and Decision Making	
3	Irina D. Turgel	Doctor of Economics Sciences, Professor	Head of Department	Department of Theory, Methodology and Legal support of State and Municipal Administration	

Recommended:
by Ural Federal University Academic Council
Protocol No. 9 dated 27.11.2023

Director of School of Economics and Management



Irina D. Turgel

Agreed by:

Head of the Department of
Science and Pedagogical training



Elena A. Butrina

1. GENERAL CHARACTERISTICS OF THE RESEARCH ACTIVITIES AND PREPARATION OF A DISSERTATION

1.1. Objectives of the discipline

Research activities and preparation of a dissertation for the degree of Candidate of Sciences is a key goal of postgraduate studies. The content of the research work is determined jointly with the supervisor in accordance with the chosen profile and the topic of the candidate's thesis.

The main objectives of the discipline are:

- development of skills in working with information sources
- development and improvement of skills in setting a research problem and formulating research hypotheses;
- independent conduct of original research;
- development of skills in drawing up research reviews, reports and preparing publications;
- gaining skills in presenting research results, discussing research in the process of free discussion in a professional environment.

When preparing a dissertation, postgraduates are guided by the Regulations on Awarding Academic Degrees in the Federal State Autonomous Educational Institution of Higher Education "Ural Federal University named after the First President of Russia B. N. Yeltsin", approved by the Government of the Russian Federation (Order No. 590/03 dated 19.07.2021).

1.2. The language of the discipline - English.

1.3. Planned results of research

Research activities and preparation of a dissertation of a postgraduate student is main activity and is carried out on an ongoing regular basis during the entire period of postgraduate study. As a result of conducting research activities, a postgraduate student should:

Know:

- theoretical and methodological foundations of research in the field of control in organizational systems;
- current problems and trends in the development of the relevant research field and field of professional activity;
- ways, methods and forms of conducting research discussion, the basics of effective research and professional communication;
- the results of modern research in the field of control in organizational systems;
- methods of collecting, processing and interpreting quantitative and qualitative information necessary for organizational systems area and socio-economic research;
- regulatory documents, methods and techniques for drawing up applications, grants, and research projects;
- requirements for the preparation of academic texts: publications, reports, etc.;

Be able to:

- develop your own point of view in professional matters and defend it during the discussion;
- independently carry out comprehensive research in the field of control in organizational systems.
- systematize the results of research to identify trends and patterns of development of control in organizational systems;
- work with public reports of business entities and analytical materials of public sector organizations for their effective use in research;
- to form a system of socio-economic indicators that reflect the essence of the phenomena under study;
- submit research results on the topic of the dissertation work in the form of publications in peer-reviewed publications;
- present research results (including dissertation work) to the academic and business community.

Demonstrate skills and experience:

- modern information and communication technologies;
- skills of critical analysis of current trends in the development of scientific knowledge in control in organizational systems;
- modern methods of collecting and processing information necessary for conducting socio-economic research;
- methods of planning, preparing, conducting research, analyzing the data obtained, formulating conclusions and recommendations on the chosen specialty;
- skills in systematizing the results of research conducted to form a statistical forecast in economics;
- skills in substantiating strategies for the behavior of economic entities.

1.4. Content of the discipline

No	Types of educational work	Distribution of the volume of discipline by semester (hours)						Total hours
		1 semester	2 semester	3 semester	4 semester	5 semester	6 semester	
1.	Individual work of postgraduate students, including all types of current attestation	828	828	1080	972	1080	864	5652
2.	Intermediate attestation	C	C	C	C	C	C	-
3.	Total volume according to the curriculum, hours	828	828	1080	972	1080	864	5652
4.	Total volume according to the curriculum, credit units	23	23	30	27	30	24	157

2. CONTENT OF RESEARCH ACTIVITIES AND PREPARATION OF A DISSERTATION

№	Section	Content
1	Program of research activity aimed at preparing a dissertation	<p>Selection of the research topic, formulation of the problem under study and hypotheses.</p> <p>Development and approval of the dissertation plan for the Candidate of Science degree.</p> <p>Analysis of the research development of the problem. Substantiation of the research theory and methodology.</p> <p>Formation of the information base of the dissertation research.</p> <p>Practical part of research. Information and mathematical support. Stages and methods of conducting the practical part of the study. Development of recommendations for economic policy.</p>
2	Program of preparation of research publications	<p>Preparation of s publication: abstracts, journal article, monograph. The structure of the theses of the report, articles, monographs</p> <p>Results:</p> <ul style="list-style-type: none"> - at least 3 publications on the research topic in publications included in the List of leading peer-reviewed scientific publications of the Higher Attestation Commission; - at least 5 publications in the proceedings of regional, all-Russian and international conferences on the topic of research; - publications indexed in Scopus, included in the core of the RSCI.
3	Program of participation in scientific events	<p>Technologies for preparing speech materials, structure and style of presentations depending on the target audience and duration of the speech. Result: participation with a report in scientific and practical conferences on the research topic (at least 5 regional, national or international conferences, considering the geography of participation).</p>
4	Preparation of applications and reports for research competitions on the topic of dissertation	<p>Design and structure of the grant application. Project description: methodology used; research materials and methods; conditions under which the project will be implemented; list of activities required to achieve the goals set; plan and technology for each activity; project implementation mechanism as a whole. Expected results; publications that will be made during the project implementation; the ability to use the project results.</p>
5	Preparation of the abstract	<p>Analysis of existing approaches to the formation of the abstract structure.</p> <p>Preparation of an abstract on the topic of the dissertation.</p>

3. ORGANIZATION OF PRACTICAL CLASSES, INDEPENDENT WORK ON RESEARCH ACTIVITIES AND PREPARATION OF THE DISSERTATION

3.1. Practical work

Not provided

3.2. Sample topic of independent work

3.2.1. Sample list of topics for research papers (essays, creative works)

Not provided

4. FUND OF EVALUATION FACILITIES FOR CURRENT AND INTERIM ATTESTATION

4.1. Evaluation criteria

The department applies the approved criteria for evaluating the achievements of postgraduate students for each control and evaluation event. The system of assessment criteria is based on three levels of mastering the components of competencies: threshold, advanced, and high.

Competence components	Signs of the level of development of competence components		
	Threshold	Advanced	High
Knowledge	The postgraduate student demonstrates knowledge-familiarity, knowledge-copy: learns objects, phenomena and concepts, finds differences in them, shows knowledge of information sources, can independently perform reproductive actions on knowledge by independently reproducing and applying information.	The postgraduate student demonstrates analytical knowledge: confidently reproduces and understands the acquired knowledge, relates it to a particular classification group, independently systematizes it, establishes relationships between them, and applies it productively in familiar situations.	A postgraduate student can independently extract new knowledge from the surrounding world, use it creatively to make decisions in new and non-standard situations.
Skills	The postgraduate student is able to correctly perform prescribed actions according to the instructions, algorithm in a known situation, independently performs actions to solve typical problems that require a choice from among known methods, in a predictably changing situation.	The postgraduate student is able to independently perform actions (techniques, operations) to solve non-standard problems that require a choice based on a combination of known methods, in an unpredictably changing situation situations.	The postgraduate student is able to independently perform actions related to solving research problems, demonstrates creative use of skills (technologies).
Personal qualities	The postgraduate student has a low motivation for learning activities, shows an indifferent, irresponsible attitude to learning, the assigned task.	The postgraduate student has a pronounced motivation for learning activities, demonstrates a positive attitude to learning and future work, shows activity.	The postgraduate student has a well-developed motivation for academic and work activities, shows perseverance and passion, hard work, independence, and creativity.

4.2. Assessment tools for conducting current and interim attestation

4.2.1. List of sample attestation questions:

- Research problem and hypotheses of dissertation research.
- Substantiation of the research theory and methodology.
- Formation of the information base of the dissertation research.
- Development of a program for preparing publications.
- Development of a program for participation in scientific events
- Preparation of applications and reports for research competitions on dissertation topics
- Methods and approaches to the implementation of the main provisions of the dissertation research in the educational process.
- Methods and approaches to the implementation in practice of the main provisions of the dissertation research.
- Preparation of applications and reports for research competitions on dissertation topics.
- Abstract: structure, content, basic training requirements.

Reporting form - credit.

4.2.2. List of sample questions for the exam

Not provided

5. EDUCATIONAL AND INFORMATION SUPPORT

5.1. Recommended literature

5.1.1. Main literature

- Dunleavy, P. *Authoring a Postgraduate: How to Plan, Draft, Write and Finish a Doctoral Thesis or Dissertation*. Red Globe Press: 2003; p 297.
- MacSuga-Gage A. S., Simonsen B., Briere D. E. *Effective teaching practices: Effective teaching practices that promote a positive classroom environment //Beyond Behavior*. – 2012. – T. 22. – №. 1. – C. 14-22.
- Tamhane, A. C. *Statistical Analysis of Designed Experiments: Theory and Applications*. 1 ed.; Wiley- Interscience: 2009; p 720.

5.1.2. Additional literature

- McCarthy, P.; Hatcher, C. *Presentation Skills: The Essential Guide for Students (Study Skills)*. 1 ed.; SAGE Publications Ltd: 2002; p 228.
- Morgan, S.; Whitener, B. *Speaking about Science: A Manual for Creating Clear Presentations* led.; Cambridge University Press: 2006; p. 138.
- Silvia, P. J. *How to Write a Lot: A Practical Guide to Productive Academic Writing*. 2 ed.; American Psychological Association: 2018; p 110.
- Thomas, G. *How to Do Your Research Project: A Guide for Students*. 4 ed.; SAGE Publications Ltd: 2022; p. 368.

5.2. Methodological developments

Not provided

5.3. Software

- Microsoft: Windows Pro 10 operating system;
- Microsoft Windows 8.1 Pro 64-bit RUS OLP NL Acdmc;
- Office 365 EDUA3 ShrdSvr ALNG SubsVL MVL PerUsr B Faculty EES.

5.4. Databases, information and reference systems and search engines

- ScienceDirect Electronic Resources, available at: <http://www.sciencedirect.com>;
- Scopus electronic resources: available at the UrFU personal account
- Database of the UrFU Zonal Scientific Library, available at: <http://lib.urfu.ru/>
- Legal system "Consultant Plus", available at: <http://www.consultant.ru/>
- Garant legal system, available at: <http://www.garant.ru/>
- Official website of the Federal State Statistics Service, available at: <http://www.gks.ru>
- Organization United Nations System, available at: <https://www.un.org/ru/>;
- Organization for Economic Cooperation and Development (OECD), available at: <https://www.oecd.org/>.
- Official website of the International Monetary Fund, available at: <http://www.imf.org://www.imf.org/>.
- HSE Center for Academic Writing, available at: <https://academics.hse.ru/awc/>

6. LOGISTICS AND TECHNICAL SUPPORT OF THE DISCIPLINE

6.1. Information about the equipment of the discipline with specialized and laboratory equipment

- Material and technical support should facilitate the conduct of research activities, clearly and in an accessible form illustrate the research material.
- Classroom furniture with the number of working places for research reports.
- Workplace of the scientific supervisor.
- Classroom whiteboard.
- Peripheral device.
- Connecting to the Internet.