Министерство науки и высшего образования РФ Федеральное государственное автономное образовательное учреждение высшего образования «СИБИРСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»



ПРОГРАММА

вступительного испытания для поступающих в аспирантуру 2.1 Construction and Architecture

шифр и наименование группы научных специальностей

2.1.13 Urban Design and Rural Planning

шифр и наименование научной специальности

1. Regulatory and content bases of the entrance examination

The program of the entrance test for applicants to postgraduate studies in the group of scientific specialties 2.1 "Construction and architecture", scientific specialty 2.1.13 "Urban planning, planning of rural settlements" is formed on the basis of federal state educational standards of higher education for master's programs (directions 07.04.01 "Architecture", 07.04.02 "Reconstruction and restoration of the architectural heritage", 07.04.04 "Urban planning") was compiled in accordance with the rules for admission to the Siberian Federal University for study in educational programs of higher education - programs for the training of scientific and scientific-pedagogical personnel in graduate school.

The content of the program of entrance examinations corresponds to the passport of the nomenclature of specialties of scientific workers.

2. The purpose of the entrance test

Applicants to graduate school must demonstrate knowledge of the context of modern problems of urban planning, understanding of the architectural and planning organization of cities and rural settlements, district planning, territorial settlement systems of regions and the country, patterns of development and problems of improving urban planning systems in modern conditions of urbanization; understanding the foundations of scientific thinking, the main methods of organizing scientific research in the field of architecture and urban planning. The main purpose of the entrance test is to identify the applicant's readiness for independent research, experimental and scientific-pedagogical activities in the field of architecture and urban planning; the ability of the applicant to think in an original and scientific way, using the knowledge already accumulated in science.

3. Form of entrance examination

The entrance examination for applicants for postgraduate studies in the group of scientific specialties 2.1 "Construction and architecture", scientific specialty 2.1.13 "Urban planning, planning of rural settlements" is carried out in the form of an oral exam.

4. The content of the entrance test

The entrance test consists of two parts: the answer to the question on the ticket and the interview on the planned research on the topic of the presented essay.

Applicants who submitted an article by the Higher Attestation Commission on the topic of the proposed research are exempted from writing an abstract.

Requirements for written work (essay)

The topic of the abstract is determined by the applicant independently, in accordance with the passport of the scientific specialty.

The abstract should be of a research nature, the presentation of the material should represent the author's vision of the problems under consideration; contain: detailed substantiation of the topic; literature review on the chosen topic; identified problems and setting research objectives; conclusion and conclusions.

Recommended essay structure:

Introduction (explanation of the relevance of the research topic, its area, goals and objectives).

Section 1. Statement of problems (review of literature on the subject of research and description of existing solutions).

Section 2. The author's approach to solving problems (the author's assessment of existing solutions is presented and the author's proposals are formulated with a description of the proposed research methods).

Conclusion (expected scientific results, scientific novelty).

References (included in the total volume of pages) at least 15 sources. If available, include the author's articles on the research topic published in scientific journals.

The volume of the abstract: 10-12 typewritten pages.

Attach the conclusion of checking the text for the use of borrowed material (antiplagiarism) to the abstract.

During the interview, the applicant may be asked one of the questions from the list of topics (questions) of the program.

List of sections for essays

- Topic 1. Theory and history of urban planning
- Topic 2. Modern problems of urban planning
- Topic 3. Regulatory support of urban planning activities in the Russian Federation Topic 4. Problems of improving engineering and transport systems in modern conditions of urbanization.

List of topics / sections and questions for the entrance test

Section 1. Urban planning for the development of territories, resettlement and regional planning

- 1.1 Principles, practice and problems of application of the Town Planning Code of the Russian Federation.
- 1.2 Urban planning: the general scheme of settlement on the territory of the Russian Federation, territorial schemes for urban planning of the territories of the constituent entities of the Russian Federation and parts of their territories.
- 1.3 Settlement forecasts and urban planning for the development of territories in theory and practice in the Russian Federation and abroad. The concept of sustainable spatial development of Russia, Europe, the world.
- 1.4 Types, types and forms of settlement at the present stage. Planning organization of social infrastructure: inter-settlement public services, recreational areas.
- 1.5 Goals and objectives of the district planning: the formation of an architectural and planning structure and functional zoning in order to ensure optimal conditions for the development of agricultural areas, the preservation and improvement of the natural environment, historical and cultural monuments, subject to the effective and integrated use of natural, economic and labor resources.
- 1.6 Socio-economic development of rural areas: economic, transport, socio-cultural and other components of the connection of rural areas with the administrative, industrial and cultural centers of the regions. Principles of sustainable rural development. Regional engineering and technical infrastructures.
- 1.7 Principles of organization of the system and implementation of environmental protection in the region.

Section 2. Urban planning for the development of territories of urban and rural settlements

- 2.1 General plan of the city, agricultural settlement: formation of the living environment; development, zoning of territories of settlements; development of engineering, transport and social infrastructures, urban planning requirements for the preservation of historical and cultural heritage sites and specially protected natural areas, environmental and sanitary well-being.
- 2.2 Urban planning regulation: residential zones, public and business, industrial, engineering and transport infrastructure zones, recreational zones, agricultural use zones, special purpose zones, military facilities zones, other zones of sensitive territories
- 2.3 Urban reconstruction: protection of cultural monuments, architecture, especially valuable landscapes by means of urban planning, design and regulation.
 - 2.4 Urban cadastre: structure, principles, activities.

Section 3. Problems of improving engineering and transport systems in modern conditions of urbanization

- 3.1 Engineering infrastructures of cities and agricultural settlements: development planning, reconstruction, solution of environmental and aesthetic problems.
- 3.2 Goals and objectives of the urban planning solution of the street and road network. Organization of public and off-street transport. The problem of the formation of parking lots and garages in various urban areas. Organization of pedestrian zones in the central areas of cities. New technologies in solving engineering and transport systems. Modern Russian and

foreign experience.

3.3 Problems of engineering preparation of territories for urban development. Problems of water supply and sewerage, fuel and energy economy, disposal of solid household waste, communications and telecommunications in the reform of housing and communal services in cities and rural settlements.

List of sample questions for the planned research

Tell us in detail about the research that you plan to do in graduate school (what problem do you plan to solve, on what theoretical basis, what methods of data collection and analysis do you plan to use, what results do you plan to get). - How does the planned study fit into the agenda of current research conducted in Russia, the Krasnoyarsk Territory, SibFU? - What developments on the planned research do you have? What do you lack for the implementation of the planned research?

Bibliography:

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5. Criteria for evaluating the results of the entrance test

The submitted written assignment (an essay on the planned research topic), answers to questions during the interview, presenting the content of entrance examination are evaluated by the commission on a 100-point scale.

Criteria for assessing the entrance test (no more than 100 points).

Parts of the entrance test	Points
Question about the entrance exam	50 points
Questions about the planned study, including:	50 points, including
 relevance of the chosen topic; 	20
- the applicant's ability to think	30
in an original and scientific	
way	