

System Analysis, Control and Information Processing

Far Eastern Federal University

Degree or qualification is awarded: **Candidate of Sciences**

Language of study: **Russian**

Mode of study: **full-time, part-time**

Duration: **4 years**

Availability of free education: **yes**

Price: **320 000 rub a year (full-time) / 160 000 rub a year (part-time)**

Programme curator: **Artem Grachev**

Tel.: **+74232652424 (#2206)**

E-mail: interadmission@dvfu.ru

The program aims to acquire mandatory qualifications for a professional occupation, establish new scientific results, and prepare a Ph.D. thesis.

The corresponding tasks of the education program are as follows:

- mastering the methodology of scientific research in the area of system analysis, management, and information processing in compliance with the standards adopted in scientific communities when working in Russian and international research teams;
- creating conditions for scientific work and obtaining new scientific results in the field of system analysis, management, and information processing;
- training of research teachers capable of teaching within major educational programs of higher education;
- acquiring skills for practical applications of the obtained theoretical knowledge to improve the efficiency of process and object management using modern methods of information processing and advanced computer technology.

The field of graduates' professional activity includes the development of theory, creation, implementation, and operation of advanced computer systems, networks, and complexes, mathematical methods, and software products.

The objects of the professional activity of graduates are

- the chosen field of scientific knowledge, as well as scientific problems of an interdisciplinary nature related to the analysis and optimization of complex systems and networks;
- software for computer equipment and automated systems (programs, software complexes, and libraries);
- mathematical, information, software for automatic information, computing, design and control systems;
- high-performance computing and software engineering.

The developed methods and tools can be applied to technical, economic, information, and control systems.

Graduates are prepared for the following types of professional activity

- research activities in the field of mathematical methods and tools of intelligent data processing, development of information and automated design and control systems;
- analytical and management activities related to information processing and decision-making;

- teaching in higher education programs.

The specifics of the professional activity of graduates of the educational program, as specialists of the highest category, include the study and solution of system analysis problems of complex applied research objects, information processing, and man-machine interaction. Within this direction, analysis, modeling, optimization, improvement of management, and decision-making are considered.

The relevance of the postgraduate program is determined both by the growing need to develop the methodology for studying complex systems and the great demand for applications of this methodology in various industries, improving the efficiency of managing complex systems using modern analysis and information processing methods. The demand for postgraduate graduates who have mastered the educational program "System analysis, management, and information processing" is determined by specialists' great need for such competencies.

All disciplines of the variable part ("System analysis, management, and information processing," "Fundamentals of scientific research," "Theoretical foundations and methods of optimization in problems of system analysis, management and information processing," "Decision theory," "Analysis and modeling of transport systems," "Optimization and management of network systems") fully ensure the formation of all professional competencies. Their choice is justified by acquiring the necessary knowledge, skills, and abilities to carry out professional activities, prepare for the defense of a scientific qualification work (dissertation) for the degree of candidate of Sciences and further professional development.

Employment prospects for postgraduate students who have mastered the educational program "System analysis, management and information processing": in scientific institutes of the Russian Academy of Sciences, in departments of natural-mathematical and information-technological profile of higher education institutions in Russia and abroad, in information and analytical departments of public administration, as business analysts of companies in the real sector of the economy, financial and commercial institutions.

Period of study: full time – 4 years, part time – 5 years

Specializations within this programme