# Cartography and Geoinformatics

### Kazan (Volga Region) Federal University

Degree or qualification is awarded: **Master** 

Language of study: **Russian** Mode of study: **full-time** 

Duration: 4 years

Availability of free education: **no** Price: **160 800 RUB per year** 

Programme webpage at the university website:

https://kpfu.ru/eng/academic-units/economics/institute-of-management-economics-and-finance/studies

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#### The area of professional activity

The area of professional activity includes research, design, production and pedagogical work related to cartography, GIS mapping, surveying, and aerospace sensing of the earth's surface.

#### The most important professional competence areas

- possess basic knowledge of the fundamental branches of mathematics to the extent necessary for the ownership of mathematical geography and cartography, information processing and analysis of geographic and cartographic data;
- possess basic knowledge in the field of Informatics, geoinformatics and modern geoinformation technologies: has the skills to use software tools and work in computer networks, to be able to create databases and use Internet resources to use GIS technology;
- possess basic knowledge of the fundamental topics of physics, chemistry, ecology to the extent necessary for the development of the physical, chemical and biological basics in general, physical and economic geography;
- general skills: master basic professional theoretical knowledge of the geographical envelope, about the theoretical foundations of geography, geomorphology, meteorology and climatology, hydrology, biogeography, geography of soils with the basics of soil science, landscape study, topography);
- to know the theoretical foundations of social and economic geography, geography of population and demography, the concept of the territorial organization of society;
- know the basics of cartography, owns cartographic and aerospace methods in geographic research;
- be able to use in social activity, cognitive and professional skills of work with computer, own modern geo-information and telecommunications technologies are making maps, software products in the field of cartography, Geoinformatics and processing of aerospace images;
- to know means global positioning etc.
- the ability to use the skills of surveying and mapping instruments and publishing equipment in professional activity etc.

#### **Employment options of graduates**

Potential places of employment of graduates are:

- Department of public service, departments of cities and districts administrations.

- Organizations and departments of geological and environmental profile.
- Large industrial and commercial enterprises.
- Consulting firm.
- Research, design and survey institutes, bureaus, firms of different ownership forms on creating problem-oriented GIS.
- Institutions and organizations, carrying out the state cadastral mapping, maintenance of inventories at all levels, appointments.
- Engineering-geodetic and cartographic service.

Construction and transport organizations, companies and enterprises.

- Architectural planning, urban planning management.
- Hydrometeorological system, timber, and other services.
- Sphere of education. Teaching in secondary and higher educational institutions.

## **Specializations within this programme**