## Meteorology, Climatology, Agrometeorology

## Far Eastern Federal University

Degree or qualification is awarded: Candidate of Sciences

Language of study: Russian

Mode of study: full-time, part-time

Duration: 3 years

Availability of free education: yes

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

## Programme webpage at the university website:

https://www.dvfu.ru/upload/medialibrary/a06/%D0%9F%D0%B5%D1%80%D0%B5%D1%87%D0%B5%D0%BD%D1%8C%20%D0%BF%D1%80%D0%BE%D0%B3%D1%80%D0%B0%D0%BC%D0%BC%20%D0%B0%D1%81%D0%BF%D0%B8%D1%80%D0%B0%D0%B0%D1%82%D1%88%D1%88%D1%88%D1%8B,%20%D0%BE%D0%B1%D1%8A%D1%8F%D0%B2%D0%BB%D0%B5%D0%BD%D0%BD%D1%8B%D1%85%20%D0%B2%20%D0%BD%D0%B0%D0%B1%D0%BE%D1%80%202020%20%D0%B3%D0%BE%D0%B4%D0%B0.pdf

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The purpose of the educational program is to acquire the level of competencies necessary for the implementation of professional activities and preparation for the defense of a scientific and qualification work (dissertation) for the degree of candidate of sciences and in the preparation of scientific and scientific and pedagogical personnel of the highest qualification of a geographic profile for science, education and practice. in the field of meteorology.

The objectives of the educational program are: preparation for the successful passing of examinations for the candidate minimum; preparation and writing of scientific papers necessary for the successful defense of a dissertation for a candidate of science degree in the specialty "Meteorology, climatology, agrometeorology" in accordance with the requirements of the Higher Attestation Commission; in-depth study of the theoretical and methodological foundations of meteorology; preparation and obtaining qualifications for conducting pedagogical activities in universities and specialized secondary educational institutions; improving knowledge of a foreign language in professional activities; improvement of theoretical and practical skills for obtaining new scientific results in the field of meteorology, climatology, agrometeorology and the practical use of theoretical knowledge.

The objects of professional activity of graduates are: Earth and its main geospheres - hydrosphere, atmosphere (air masses), their composition, structure, evolution and properties; natural and economic, anthropogenic, industrial, recreational, social, territorial systems and structures at different levels, nature management; geographic information systems; ecological expertise of all forms of economic activity; education and enlightenment of the population.

The area of professional activity of graduates who have mastered

postgraduate program, includes solving problems requiring the application of fundamental and applied knowledge in the field of Earth Sciences. Postgraduate graduates organize and conduct special meteorological observations; make operational weather forecasts of various lead times and collect the necessary information; assess the impact of the current and expected meteorological conditions on agriculture, fishing and production activities of all types of transport; assess the influence of meteorological factors on the state of the environment and develop recommendations for their rational accounting in order to protect nature; participate in the environmental expertise of projects and develop a meteorological justification for the projected structures, airports, construction sites. Participate in the development of physical and mathematical models of the general circulation of the atmosphere and climate, including the interaction of the atmosphere and the ocean; study the physical and chemical processes occurring in the atmosphere and during its interaction with the earth's surface and the biosphere; carry out geographical and physical analysis of atmospheric processes and phenomena, their classification, establish empirical dependence and patterns; investigate the transfer, transformation and removal of industrial and other pollutants emitted into the atmosphere.

The postgraduate educational program is aimed at mastering all types of professional activities for which the graduate

is preparing. The basic part includes History and Philosophy of Science, Foreign Language. The compulsory disciplines of the variable part include: Organizational and managerial foundations of higher education, Modern educational technologies in higher education, Dynamics of hydrometeorological processes, as well as Meteorology, climatology, agrometeorology. The choice of the variable part of the disciplines (Dynamics of hydrometeorological processes, Special chapters in meteorology, Stochastic modeling in meteorology, Numerical models of spatio-temporal fields in meteorology) is aimed primarily at in-depth study of physical processes in the atmosphere, ocean and forecasting hydrometeorological fields.

The main areas of professional activity are: bodies of the Federal Service for Hydrometeorology and Environmental Monitoring; bodies of the Ministry of Emergency Situations; bodies of nature protection and environmental management; institutions of the military-industrial complex; forecasting organizations serving various sectors of the economy (navigation, military application of meteorological services for the external environment; shelf development); academic and research institutes related to the study of the atmosphere and hydrosphere, with the assessment of climate change; institutions of higher and secondary specialized education.

## Specializations within this programme