

Ecology and Natural Resource Management (05.03.06)

The qualification:

- Academic Bachelor Degree;
- Applied Bachelor Degree.

Forms and terms of education:

- Full-time: 4 years.
- Distance: 5 years.

Language of study:

Russian language.

Area of professional activity of graduates of Bachelor's programs with qualification in "Academic Bachelor Degree" includes:

- Project, research, production, marketing, consulting, economic, juridical, educational, expert divisions, departments, bureaus, centers, firms, companies, institutions which are involved in environmental protection activity;
- Federal and regional governments of environmental protection and environmental management (Ministry of Natural Resources and Environment of the Russian Federation, other environmental agencies and institutions);
- Federal and regional establishments of Ministry of Regional Development of the Russian Federation, the Ministry of Emergency Situations of the Russian Federation, the Ministry of Economic Development and Trade of the Russian Federation, Federal Agency for Construction and Housing and Utilities of the Russian Federation, Ministry of Health and Social Development of the Russian Federation, Ministry of Culture and Mass Communications of the Russian Federation, Ministry of Education and Science of the Russian Federation, Ministry of Agriculture of the Russian Federation and their subordinate federal services and agencies; and Federal Service for Hydrometeorology and Environmental Monitoring, Federal Atomic Energy Agency, Federal Agency for Tourism, Federal Security Service of the Russian Federation and other departments and agencies;
- State authorities and administrative bodies of subjects, municipalities;
- academic research organizations;
- educational institutions of higher, secondary professional and general education, also public education;
- environmental departments of enterprises and organizations;
- mass media;
- public organizations and foundations;
- subsidiaries of foreign firms.

Area of professional activity of graduates of undergraduate programs with qualifications "Applied Bachelor Degree" includes:

- Project, research, production, marketing, consulting, economic, juridical, educational, expert divisions, departments, bureaus, centers, firms, companies, institutions which are involved in environmental protection;

- Regional bodies of environmental protection and environmental management departments and agencies;
- services for hydrometeorology and environmental monitoring, ecological safety and environmental political services, environmental monitoring system services, industrial environmental services and local authorities, chemical laboratories, farms, bodies of protected areas of different levels of subordination, environmental management and other departments and institutions;
- environmental departments of enterprises and organizations;
- educational institutions of higher, secondary professional and general education, also public education;
- mass media;
- organizations and foundations.

Objects of professional activity of graduates of undergraduate programs with qualifications in "Academic Bachelor Degree" are natural, anthropogenic, natural-economic, ecological and economic, industrial, social, public territorial systems and structures at global, national, regional and local levels, as well as governmental planning, control, monitoring, expertise of environmental components of all forms of economic activity; education, education and health, demographic changes, sustainable development.

Objects of professional activity of graduates of undergraduate programs with qualification in "Applied Bachelor Degree" are:

- engineering and environmental systems;
- enterprise for production of remediation works and creation of cultural landscapes, work with conservation of agricultural settlement, recreation systems, agricultural landscapes;
- monitoring systems and treatment facilities to prevent and eliminate environmental pollution;
- means and methods that are used to reduce emissions into the environment;
- drafting of documentation in the field of environmental management, environmental safety, holding activities to protect environment from adverse impacts, rational nature use.

Professional activities which prepare graduates with undergraduate qualification "Academic Bachelor Degree" are prepared for:

- research activities;
- design and production activities;
- audit activities;
- organizational and management activities;
- pedagogical activities.

Types of professional activities which graduates with undergraduate qualification "Applied Bachelor" are prepared for:

- production and technology;
- production, control and audit.

Graduate with qualifications "**Academic Bachelor Degree**" according to the type (types) of professional activity will be ready to solve **the following professional tasks:**

Research activities:

- participation in conduction of scientific research in the field of ecology, environmental protection in academic institutions and universities under the guidance of professionals and skilled researchers, including:
 - carrying out laboratory researches;
 - collecting and primary materials processing.

Design and production activities:

- collection and processing of primary documentation for assessment of impacts on environment;
- participation in design of standard measures for environmental protection;
- design and expertise of socio-economic and economic activities in implementation of projects;
- practical recommendations for environmental protection.

Control and revision of activities:

- Preparation of documentation for environmental assessment of various types of project analysis;
- participation in the control and revision work, environmental audits;

Organizational and managerial activities:

- participation in the work of administrative management bodies;
- ensuring environmental safety of national economy and other spheres of human activity;

pedagogical activity:

- training and educational work at educational institutions.

Graduates with qualification in "Applied Bachelor Degree" according to the type (types) of professional activity will be ready to solve **the following professional tasks:**

Production and technological activities:

- define level of influence of the most important objects and types of economic activities on environment and population; identification of sources, types and scale of anthropogenic impact;
- conducting chemical analysis level of emissions into environment;
- studying disasters and their consequences, ways for elimination of environmental disasters;
- environmental rehabilitation of natural geosystems; development of landscape design of rural settlements, development of recreational areas;
- providing reliable environmental information for various economic sectors;

Production and control and revision of work:

- conduction of environmental control in organizations and providing regulatory water-air regime for reclamation area ;
- preparation of documentation for ecological expertise for various types projects;

- participation in control and revision of work, environmental audits, ecological regulation and environmental control of environment;
- carrying out of the impact assessment of economic activity on environment and public health;
- development of preventive measures to protect public health from the adverse impacts of economic activity;
- holding engineering and environmental studies for the environmental impact assessment for different types of economic activity;
- participation in the work of administrative authorities of enterprises, firms and organizations;
- ensuring environmental safety of production technologies, environmental policy at workplace.