#### **DEPARTMENT "ECOLOGY"**

The history of the Department of Ecology begins in 2005. Since its formation, it has been called the Department of "Ecology and Environmental Protection" In the history of the university, environmental students were accepted in 2002, and the first graduates of the department received a diploma in "Ecology and Environmental Management". In 2004, the first admission was held in the specialty 0506080-Ecology (bachelor's degree). In 2008, 98 students graduated in this specialty. Since 2001, the Master's program has been conducted. In 2013, the Department of Ecology was joined by agricultural specialties and the department was called the Department of "Ecology and Agricultural Disciplines". In 2015, the Department of Ecology was joined to the Department of "Chemistry "and became known as the Department of "Chemistry and Ecology". In September 2017, the Department of "Ecology"was separated. The teaching staff of the department is formed by 2 candidates of sciences, 3 doctors of philosophy (PhD) in the specialty 6D060800-Ecology, 2 masters.

## MISSION OF THE DEPARTMENT OF ECOLOGY

- Training of specialists for organizations, oil producing, oil refining, construction and other enterprises whose activities are aimed at protecting the environment;
- Participation as public listeners in the public life of the city and the region and close cooperation with non-governmental organizations, the scientific and international community, etc.
- Continue the policies and ideas of the heads of state to continue the "green economy".

The Department of Ecology prepares specialists for the following educational programs: Undergraduate:

• 6B05201-Applied Ecology

Master:

- 7M05201- Applied ecology (scientific and pedagogical direction).
- 7M05202- Natural Resource Management and Environmental Inspection (specialized area)

In the direction of bachelor's degree in the specialty "Ecology" Atyrau State University named after Kh.Dosmukhamedova, according to the rating of NCE "Atameken", took the 1st place among 37 universities in Kazakhstan for two years in a row in 2019 and 2020.



The bachelor's program in 6B05201- Applied Ecology is aimed at training a specialist in environmental research with strong knowledge of general and global ecology, new environmental and resource-saving technologies, environmental safety and sustainable development, environmental management and marketing, and environmental legislation. The training is conducted in accordance with a multilingual program, with the possibility of undergoing exchange training in academic mobility programs in foreign higher education institutions. In addition, students have the opportunity to attend conferences, seminars, public hearings and various meetings in order to be able to participate in scientific discussions at the regional, national and international level.

### 6B05201-Applied Ecology (6Bo52-Environment) Biology Geography environmental engineer; environmental inspector; ecologist by industry; environmental manager · environmental laboratory assistant at research, secondary and higher professional educational institutions; industrial enterprises, agricultural complexes, landfills, energy facilities. sanitary and epidemiological stations, · organizations and firms · as well as national parks, reserves, nature reserves, biosphere reserves, zoological parks, botanical parks, land, water and urban ecosystems, educational institutions, research institutes and centers

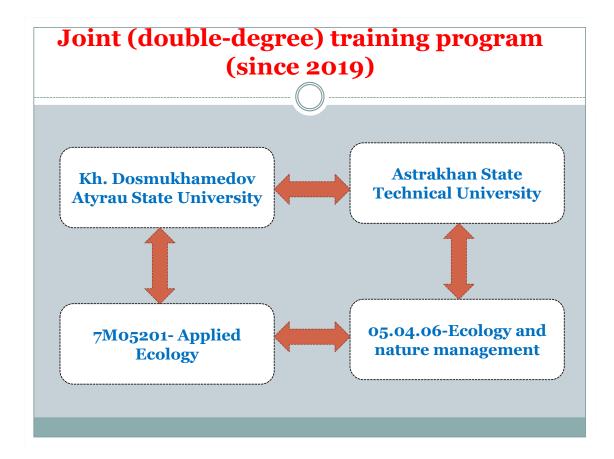
The Master's program in Ecology is aimed at training a specialist in environmental research with strong knowledge of general and global ecology, new environmental and resource-saving technologies, environmental safety and sustainable development, management and marketing in ecology, and environmental legislation. There are opportunities for exchange training in academic mobility programs in foreign higher education institutions. In addition, undergraduates have the opportunity to attend conferences, seminars, public hearings and various meetings in order to be able to participate in scientific discussions at the regional, national and international level.

# Scientific and pedagogical master (2 years) 7M05201- Applied Ecology

#### The objects of professional activity are:

- higher education institutions of state and non-state profile;
- research and production expert, environmental, medical, pharmaceutical, agricultural institutions;
- state, local, regional, foreign organizations and enterprises involved in environmental monitoring and the protection of natural resources; problems of modeling natural processes; environmental impact assessment of projects; environmental impact assessment; environmental audit of existing enterprises, etc.;
- government bodies in the field of ecology, environmental protection;
- private environmental companies, non-governmental nongovernmental organizations of environmental orientation; UN environmental funds; environmental research institutes;
- Central factory laboratories in the environmental field.

Starting from 2019, a two-degree program will be carried out in conjunction with the Astrakhan State Technical University under the educational program of the Master of Ecology (scientific and pedagogical direction).



In addition, undergraduates have the opportunity to attend conferences, seminars, public hearings and various meetings in order to be able to participate in scientific discussions at the regional, national and international level.

The objects of professional activity of the Master in the educational program 7M05202-Natural Resource Management and Environmental Inspection are research, production, expert, environmental, medical, pharmaceutical, agricultural institutions; state, local, regional, foreign organizations and enterprises involved in environmental monitoring and the protection of natural resources; environmental impact assessment, etc.; government bodies in the field of ecology, environmental protection; private environmental companies, non-governmental non-governmental organizations of environmental orientation; UN environmental funds; environmental research institutes; Central factory laboratories in the environmental field.

The objects of professional activity of the master in the educational program 7M05203-Environmental Management and Audit are research, production, expert, environmental, medical, pharmaceutical, agricultural institutions; state, local, regional, foreign organizations and enterprises involved in environmental monitoring and the protection of natural resources; environmental impact assessment, etc.; government bodies in the field of ecology, environmental protection; private environmental companies, non-governmental non-governmental organizations of environmental orientation; UN environmental funds; environmental research institutes; Central factory laboratories in the environmental field.

At the Department of Ecology, the Ekos circle is working. The aim of the circle is to promote the scientific creativity of students, cognitive abilities, support of literary and spiritual research, the importance of local history, social issues related to ecology.

The circle works in three directions:

- Ecological tourism,
- Applied Ecology,
- Environmental monitoring.

In these areas:

- various types of activities in the field of scientific knowledge (scientific writing, analysis,

intellectual competition, etc.)

- carrying out creative activities (contests, debates);
- meeting with scientists, conducting interviews;
- ownership of shares;
- conducting round tables on cognitive topics.

The Department of Ecology has agreements on cooperation in training personnel with the following organizations and institutions: Department of Ecology in Atyrau Region, Kazhydromet LLP, Department of Natural Resources and Environmental Management of Atyrau Region, Econormativ LLP, Republican State Institution Akzhaiyk State Nature Reserve of the Ministry environment and water resources of the Republic of Kazakhstan, Analytical Laboratory for Environmental Protection LLP, Republican Scientific Research LLP atmospheric air conservation center "for conducting practical and laboratory studies, research, defense of theses, holding joint conferences, round tables, etc.

The department conducts joint work with three branches of the department: the Department of Ecology of the Atyrau region, "Ekonormativ" LLP and "Republican Research Center for Atmospheric Air Protection" LLP.

Currently, graduates in the specialties of the Department of Ecology work in various industries of the city and region, such as: Econormativ LLP, Department of Ecology in Atyrau Region, Department of Natural Resources and Nature Management (in the regional Akimat), Akzhayyk Nature Reserve, RSE Kazhydromet, Regional and City Sanitary and Epidemiological Stations, Tengizchevroil LLP, North Caspian Operating Company (NCOC), Atyrau Oil Refinery, KazMunayGas JSC, Shindau LLP, Emergency Department, Modern Caspian College, Atyrau Agrarian and Technical College, Thermal Power Plant (CHP), etc.

### WHY SHOULD YOU CHOOSE THE EDUCATIONAL PROGRAM 6B05201-Applied Ecology:

- the ecologist is a specialty of the present and future generation,
- The ecologist is one of the sought-after specialties for our industrialized region,
- the possibility of obtaining practical skills during practical training,
- training is conducted according to a multilingual program, with the training of specialized disciplines in English,
- knowledge of the English language will allow you to work in foreign companies as environmental engineers and environmentalists in industries,
- knowledge of laboratory work will allow you to work as an environmental laboratory assistant in laboratories involved in environmental research,
- knowledge of environmental impact assessment, environmental monitoring will allow you to work as an environmental inspector, a researcher in the "National Center for Expertise" of the Public Health Committee,
- the possibility of continuing education in the magistracy in the specialty 7M05201-Applied Ecology, 7M05202-Natural Resource Management and Environmental Inspection, 7M05203-Environmental Management and Audit.