

**Bakalaviatura:**

| № | Training Code | Educational direction   | About the direction of education  |
|---|---------------|---|---|
| 1 | 60812300      | <b>Water and Land Reclamation Sector</b>  | <p>The educational direction Water resources and melioration forms students' knowledge, skills and professional competencies on the theoretical foundations and methods for designing perfect reclamation systems, taking into account resource-saving technologies and environmental requirements, developing and consolidating academic and social and personal competencies.</p> <p>The learning process is aimed at: assessment of the role, needs and resources of land reclamation for agricultural production; substantiation of rational types, methods and ways of land reclamation in various natural and economic conditions; acquisition of theoretical foundations and practical skills in designing and engineering calculations of modern reclamation systems; application of cost-effective and environmentally friendly design solutions for land reclamation.</p>   |
| 2 | 60812600      | <b>Meliorative hydrogeology</b>   | <p>The field of ameliorative hydrogeology includes field of irrigation and melioration education, with taking into account exploration activities, exploitation and protection of groundwater resources. Water resources in the upper part of the lithosphere monitoring the quality and quantitative changes in groundwater, as well as assessing the factors affecting these changes and forecasting of anthropogenic processes in the zone of irrigation and drainage systems and drainage wells, as well as groundwater as drinking water, studies effect of groundwater on land reclamation.</p>   |
| 3 | 60813000      | <b>Innovative technologies in water management and their use</b>                  | <p>This educational direction is an educational direction in the field of science, technology and education. (dropping, raining, creating fog, using portable flexible pipes, watering by laying a film on the egates, automating water measurement and distribution, dispatching control methods) to introduce into agricultural production, rational use of internal water reserves in the conditions of water shortage observed in our region, the advantages of advanced innovative technologies in solving existing problems, the economic efficiency achieved in agriculture and water management when using them, methods of applying the world's modern advanced water-saving technologies in farms learns In order to further develop this educational direction, new modern disciplines were introduced, i.e. "Resource-saving irrigation technologies", "Engineering service in hydromelioration systems", "Automation of the use of hydromelioration systems", "Use of innovative technologies in melioration systems" were formed.</p> |
| 4 | 60530800      | <b>Hydrology</b>  | <p>In the field of study the main focus is water management, which includes a set of methods and tools aimed at carrying out complex researches, on water issues, especially, in water reservoirs and other objects of dryland waters, analysis of water resources problems, assessment and forecast of their quantitative and qualitative changes which started under natural and anthropogenic causes, creation of recommendations for the environmental safety and protection of land waters from depletion and pollution, hydrological and water management calculations for the construction projection and planning of water conservation measures, as well as the organization and providing observations of hydrological regime; conducting operational hydrological forecasting</p>  |
| 5 | 60112400      | <b>Vocational Education (Water Management)</b>                                    | <p>Education in the field of science, technology and education covers a set of methods and tools aimed at professional skills in the construction and operation of excellent land and water resources, improvement of land reclamation, excellent management of water resources, irrigation systems and structures, in order to obtain high yields of irrigated lands in the field of educational sciences, tools, methods and pedagogical activities. Objects of professional activity - in the educational process in the relevant professional colleges, the educational process includes water resources, water supply systems for agricultural and drinking purposes, objects of management of hydro-reclamation systems.</p>  |
| 6 | 60720600      | <b>Material science and technology of new materials</b>                           | <p>New materials acquisition systems in the field of electric power, new materials in power supply networks, new materials in internal irrigation and reclamation systems, materials in the renewal of energy systems of water supply networks, non-traditional energy sources and systems, materials and materials technology that form the basis of electrotechnological units are directed to study.</p>   |
| 7 | 60812400      | <b>Mechanization of water management and reclamation works</b>                    | <p>Education in the field of Science and technology is the direction of education in the field of Science and technology, it is the direction of mechanization of water management and reclamation works, the analysis of technical means and technologies, reclamation, improvement of construction machines and equipment, rational use of Reclamation machines, development of solutions for organizational issues of service provision on the basis of modern innovative concepts, engineering link complex with the assignment of equipment engineering accounts, services to reclamation and construction machines used in the performance of water management and reclamation work, the exchange of working equipment, the definition of repair strategies</p>   |
| 8 | 61020200      | <b>Labor protection and technical safety</b>                                      | <p>The educational direction Occupational health and safety includes ensuring life safety, creating comfortable conditions in the technosphere (human-made environment) to ensure life and work, minimizing the impact of man-made factors on the environment, solving life safety problems through the rational use of control methods and forecasts , as well as the use of modern technical means.</p>   |
| 9 | 60713300      | <b>Aerospace Technologies and Sustainable Development (in fields and sectors)</b> | <p>Based on this undergraduate program, students will acquire knowledge and skills in the applications of aerospace technologies for providing sustainable development in the different fields and sectors of the countries' economies. This program includes key subjects such as Aerospace Technology, Global Navigation Satellite System (GNSS), Remote Sensing (Practical modules based on Erdas Imagine), Geoinformation Systems (Practical modules based on: ArcGIS/ArcGIS Pro, QGIS), Internet of Things, Machine Learning, Deep Learning, Artificial Intelligence, Environmental Science, Sustainable Development which will later on be applied to develop best practice in order to address global challenges in the areas related to the SDGs.</p>   |