

# TEACHING SUBJECTS IN DEPARTMENT

Bachelor's program

<b>No</b>	<b>Name of the discipline</b>	<b>The summary of the discipline</b>
1.	Pumping and pumping stations	All pumps differ in operating principles, designs and development directions, characteristics of pumping stations, their hydraulic structures, auxiliary and auxiliary hydromechanical and hydropower equipment and hydropower equipment.
2.	Well pumping devices	Teaches the device, principles of operation, areas of application and principles of their construction and operation of the existing pumping equipment of wells.
3.	Use of pumping stations	The procedures for maintenance and repair of hydraulic structures and all hydromechanical and hydropower equipment used at pumping stations are being trained.
4.	Use of hydropower equipment	The structure of hydroelectric power plants is analyzed and the laws of their use are taught.
5.	Hydropower facilities	Students will be trained in the types, designs, applications and uses of hydropower facilities.
6.	Hydraulic machines	Teaches the principles of operation, design, application of pumps, turbines and hydraulic turbines.
7.	Renewable energy sources	Total energy resources on Earth and their estimation, energy sources and their types used in countries around the world. The current state and prospects for the future development of hydropower in the Republic of Uzbekistan will be studied.
8.	Irrigation networks use water energy	Training in design and construction of hydroelectric power plants, design and construction of hydroelectric power plants in irrigation networks, design and construction of hydroelectric power plants in river basins, design and construction of hydroelectric power plants.
9.	Pumping and hydroelectric power plants	Feasibility study in the selection of pumps and pumping stations, design and construction of pumping stations and stations in river beds; technical and economic comparison in the selection of hydroelectric power plants, design and construction of pumping stations and hydroelectric power plants.
10.	Hydroelectric power plants	Training in design and construction of hydroelectric power plants, design and construction of hydroelectric power plants in irrigation networks, design and construction of hydroelectric power plants in river basins, design and construction of hydroelectric power plants.

11.	Introduction to the specialty	Organization of the use of hydropower equipment, hydromechanical and hydropower equipment, management of complex services and their improvement. concentration and economics are taught.
12.	Mini hydroelectricity	The importance and development of mini- and micro-hydroelectric power plants in the Republic of Uzbekistan, calculation methods, types and designs, principles of operation of small, mini- and micro-hydroelectric power plants in irrigation networks, methods of design and construction of hydroelectric power plants on the channels of small rivers, canals and collectors.

### Master's program

	<b>Name of the discipline</b>	<b>The summary of the discipline</b>
1.	Pumping stations and devices	All types of pumps and devices, principles of operation, design and application, types of pumping stations, hydraulic structures, design, construction and operation of the main and auxiliary hydromechanical and hydropower equipment have been studied.
2.	Operation and diagnostics of pumping stations	Training in the use and diagnostics of hydraulic structures and equipment at existing pumping stations.
3.	Hydropower device	Students will be trained in the types, design, application and use of hydroelectric power plants.
4.	Irrigation networks use water energy	Training in design and construction of hydroelectric power plants, design and construction of hydroelectric power plants in irrigation networks, design and construction of hydroelectric power plants in river basins, design and construction of hydroelectric power plants.
5.	Design of pumping stations and testing of pumping equipment.	Students will be trained in the basics of pumping station design, testing, technical and economic comparison when choosing equipment and structures for pumping stations, technical design of irrigation pumping stations, testing of pumping equipment.
6.	GES. Pumping stations	The main directions of scientific and technical development in the field of hydropower and pumping stations, problems of design, construction, reconstruction and operation, design, construction and operation of hydroelectric power plants and pumping stations have been studied.
7.	Hydropower	The current state, problems and ways of development of the world hydropower industry are described, theoretical and experimental studies are carried out in the design and operation of hydropower plants of various types.
8.	Small hydroelectric power plant	Students will be taught how to calculate the design, construction and operation of small hydropower plants.

