

Profile: Digitalization of urban engineering systems and building equipment

Direction: 08.04.01 Construction

Form: Full-time

Stage: Master

About the program

The master's program "Digitalization of urban engineering systems and equipment of buildings" provides an opportunity to acquire fundamental knowledge in the basics of mathematical modeling, programming and optimization of urban, intra-building and intra-industrial systems of electricity, heat, gas, water supply and wastewater disposal.

In the course of training, the master will study and learn how to work in certified software systems, databases and knowledge bases, get acquainted with modern means of automation and dispatching, intellectualization of the work of urban engineering systems. Learn to independently develop electronic models, calculate and optimize engineering systems, accumulate, store, generalize information and predict the behavior of the system and modes of its operation.

Places of internship: in construction organizations, management companies, city administrations, heat and energy sales companies, at land improvement enterprises, water treatment plants and heating networks, in particular: the Ministry of Construction, Roads of the Irkutsk Region, VostSibStroy LLC, Specialized Developer JSC Financial and construction company "New City", LLC "Enterprise Irkut-Invest", LLC "Velesstroy".

The main specialized disciplines: "Hydrogasdynamics"; "Graph theory and modeling of urban facilities"; BIM Management; "Information modeling of life support systems"; "Intellectual Property Management"; "Urboecosystems and their modeling".