

15.04.02 TECHNOLOGICAL MACHINES AND EQUIPMENT

Field of professional activity of graduates areas of training Technological machines and equipment:

- application of modern methods of design, calculation, mathematical, physical and computer modeling;
- use of computer-aided design tools; creation of quality management systems for specific production conditions based on international standards;
- conducting marketing research with the search for optimal solutions when creating products, taking into account the requirements of quality, reliability and cost, as well as the timing of its production, life safety and environmental cleanliness.

Where will they teach you?

Технол Technological machines and equipment is one of the areas of the USTU Faculty of Technology.

What will they teach you?

A graduate who has completed the Master's program in Technological Machines and Equipment is ready to solve the following professional tasks:

- design machines, drives, systems, technological processes using automated systems of technological preparation of production of machines, drives, systems;
- develop production standards, technological standards for the consumption of working materials, fuel and electricity, as well as select equipment and technological equipment;
- develop technical specifications for the design and manufacture of machines, drives, systems, non-standard equipment and technological equipment of machines, drives, systems;
- ensure the manufacturability of products and manufacturing processes of mechanical engineering products;
- evaluate the economic efficiency of technological processes;
- to investigate and analyze the causes of defects in the design, manufacture, testing, operation, disposal of technical products and systems and to develop proposals for its prevention and elimination;
- develop measures for the integrated use of raw materials, replacement of scarce materials and find ways to dispose of industrial waste;
- choose systems for ensuring environmental safety during work;
- perform technical control and quality management in the design, manufacture, testing, operation, and disposal of technical products and systems;
- ensure a given level of product quality, taking into account international standards;
- organize the work of a team of performers, make executive decisions in the face of different opinions, determine the order of work.

Within the framework of the direction, training is conducted according to the following program:

Training in the direction of Technological machines and equipment is conducted in full-time under the program "Engineering of technological machines, aggregates and processes".

The duration of full-time training is 2 years.

Number of seats:

17 budget places of full-time education,

15 places under the contract for the provision of paid full-time educational services.

Future professions:

- Engineer
- Design Engineer, - Designer
- Technologist
- Engineering and technical workers and senior positions.

Prospects:

It is impossible to imagine the modern world without dynamically developing cars. Specialists in the field of technological machines and equipment are in demand in all branches of production: machine-building, oil production, metallurgy, road construction, forestry and many other industries.