

08.04.01 CONSTRUCTION

The field of professional activity of graduates of the specialty "Heat supply of settlements and enterprises" includes:

- * research, design, construction and operation of technical means, methods and systems of heat and fuel supply, ventilation and air conditioning, as well as other heat engineering equipment in accordance with technical specifications and using advanced design automation tools;

- * creation and operation of efficient and environmentally friendly heat and fuel supply systems for settlements and enterprises, heat networks and installations for the purpose of obtaining, converting, transporting and using heat, monitoring and managing processes, diagnostics and maintenance in compliance with environmental protection requirements;

- * development and implementation of energy-saving technologies and measures to improve the energy efficiency of heat, gas and microclimate systems for buildings and structures.

The duration of training is 2 years and 5 months.

The number of places under the contract for the provision of paid full-time and part – time educational services is 15.

What will they teach you?

- * formulate research goals and objectives, identify priorities for solving problems, select and create evaluation criteria;

- * apply knowledge to the development and implementation of projects, various processes of heat and gas supply, as well as for production control;

- * use modern information technologies, databases and application software packages when performing calculations;

- * understand the main problems in their subject area, the choice of methods and means to solve them;

- * knowledge of the design and operation of heating equipment, heat and gas supply to populated areas and enterprises;

- * manage the design, analysis and operation of engineering networks of buildings and structures

- * analyze technical data, indicators and results of work, summarize and systematize them, carry out the necessary calculations using modern technical means and software;

- * analyze scientific and technical information, domestic and foreign experience on the subject of research;

- * form a complete view of the decisions taken and the results obtained in the form of reports with its publication (public protection);

- * use modern and promising computer and information technologies.

Future professions:

- design engineer

- operation engineer

- Head of the Energy Department

- Head of the Building and Structure Maintenance Department.

Career prospects are based on the following factors:

1. Population growth and infrastructure development. As the population increases and cities expand, there is a growing need for new buildings and structures, as well as for their maintenance.

2. Increasing energy efficiency requirements. Modern buildings must be energy efficient, which requires maintenance engineers to constantly monitor and optimize the operation of engineering systems.

3. Technology development. The introduction of new technologies in the construction and operation of buildings requires engineers to develop new skills and knowledge.

4. Compliance with norms and standards. Maintenance engineers must monitor compliance with building codes and safety requirements.

5. Sustainability and environmental friendliness. The growing interest in sustainability and environmental responsibility makes the profession of an operational engineer even more relevant.