

Division: *Institute of Engineering and Technology*

Academic programme: *22.03.02 System Engineering in Metallurgical Technologies*

Mode of study: *full-time (or part-time)*

Programme length: *4 (5) years*

Programme level: *Bachelor's degree*

Language of instruction: *Russian*

Programme description: *Steel is the most wide-spread constructional material in the world. Cast-iron and steel products are the foundation of mechanical engineering, power engineering, construction, piping industry, etc. Russia is in the Top 5 major steel manufacturers. The enterprises of the South Ural region play a significant part in it.*

The “Metallurgy” educational programme aims at training the future holders a Bachelor's degree, who will be competitive in the regional, federal and international labour markets in the field of modern metallurgy. Using the up-to-date educational technologies, the Faculty's academic staff forms the students' knowledge on obtaining ferrous and non-ferrous metals, and manufacturing metals by foundry processes and treatment under pressure.

In the 21st century, in the context of the challenges of the new times, metallurgy is undergoing intensive transformations: digital technologies are being implemented, the ecological burden is decreasing (emissions are being reduced), and the work performance is growing (wages are increasing).

Main programme-specific classes:

- *Metallurgy and Electrometallurgy of Steel*
- *Cast Iron Metallurgy*
- *Metallurgy of Ferroalloys*
- *Technological Fundamentals of Foundry Production*
- *Computer Technologies in Foundry Production*
- *Design and Equipment of Metallurgical and Foundry Productions*

Programme manager: *P.A. Gamov, Candidate of Sciences (Engineering), Head of the Department of Pyrometallurgical and Foundry Technologies*