LEARNING AND STUDENTS

INRTU builds an educational policy aimed at equipping students with the competencies necessary for developing innovative infrastructure and industry. This is achieved by updating curricula, implementing project-based learning formats, and building close cooperation with industrial partners.

Development and Implementation of New Educational Programs

Within the "Priority 2030" program, INRTU launched the "Digital Department", which offers students the opportunity to obtain an additional IT qualification free of charge. This program is designed to train specialists for the digitalization of industry and the development of sustainable infrastructure.

Training Personnel for High-Tech Industries

In collaboration with industrial partners such as PAO "Rosseti Siberia" and AO "Poljus", INRTU organizes themed career days, competitions, and master classes. This allows students to work on relevant case studies and familiarize themselves with advanced production challenges during their studies, preparing them for work in modernized enterprises.

Educational Programs for Sustainable Development

In order to promote sustainable infrastructure, inclusive industrialization and innovation, the university implements a large number of educational programs in the STEM (Science, Technology, Engineering and Math subject area).

A number of programs are also taught in English, which makes it accessible to foreign students, mainly from Baikal School of BRICS, for instance, Artificial Intelligence and Computer Science, Power Electrical Engineering, IT in Geology.

RESEARCH

Conducting Comprehensive Research and Development

INRTU scientists are actively engaged in research in artificial intelligence, additive technologies, environmentally friendly exploration, and hydrogen energy. For example, sensors for "Russian Railways" and thermal fixatives for aircraft manufacturing have been developed, demonstrating the applied focus of science on modernizing infrastructure.

Publication Activity and Recognition

In 2024, INRTU's scientific activities were focused on conducting comprehensive research and developing technologies that contribute to the innovative development of the region and the country. The university serves as a key platform for creating and implementing research projects in the interests of industry. Research results are regularly published in high-ranking Russian and foreign journals, such as Journal of the American Chemical Society. Moreover, young scientists receive prestigious grants and scholarships (e.g., Presidential Scholarship, "UMNIK" grants), confirming the high level of research.

29 SCOPUS Publications on SDG 9

Organization of Scientific Events

The university hosts major conferences and championships, such as the International Engineering Championship "CASE-IN", and forums on chemistry, construction, and geosciences. These platforms bring together students, scientists, and industrialists to address current technological challenges.

Contribution to Local Community Development

University staff and students develop projects for the improvement of regional territories and create equipment for local needs, thereby strengthening local infrastructure. A great example is the work of architecture students who, as part of their project-based learning, developed comprehensive development concepts for the villages of Zama and Kocherikovo in the Olkhon district. Such projects practical, sustainable solutions for local communities, focusing on preserving cultural heritage while improving living conditions.

PUBLIC ENGAGEMENT

Road Assessment Software

INRTU has developed a specialized software program for comprehensive road quality evaluation The tool enables detailed analysis of road conditions to improve safety, maintenance planning, and infrastructure resilience. The road assessment software was created under the "Priority 2030" program, demonstrating how academic research directly contributes to sustainable and smart infrastructure development.

Organizing Events for Schoolchildren and City Residents

INRTU regularly holds "Open Days" and "Career Festivals", popular science lectures, robotics workshops, and engineering camps. Furthermore, the university runs continuous projects such as "Ticket to the Future", where schoolchildren engage in hands-on workshops. These events aim at early career guidance, promoting technical education, and fostering innovative thinking among young people.

OPERATIONS

INRTU strongly encourages and involves students to participate in various acceleration programs, scientific developments, improves laboratories and design bureaus.

Modern Infrastructure for Innovation

The University develops its Technopark and creates specialized laboratories. For instance, with support from ALROSA, a specialized laboratory was equipped, giving students and researchers direct access to industry-standard technology for solving real mining and engineering challenges.

Also, INRTU is enhancing its digital backbone by launching services like collective access to high-performance computing (HPC) resources. This dual investment in physical and digital infrastructure ensures that the university community has the necessary tools to drive technological innovation and research excellence.

Implementing Digital Services to Improve Educational Process

INRTU develops and implements digital solutions, such as the "Electronic Dean's Office" project and the use of domestic software in the BIM Competence Center. This increases the efficiency of university management and the quality of training specialists for the digital economy.

Supporting Student Initiatives and Projects

Through the rector's office and the Student Trade Union Committee, the university holds initiative competitions, awarding grants for the implementation of technological and social projects. Such support motivates students towards innovative activities and entrepreneurship.