

Preparing specialists for the future

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As with any other higher educational institution, Gubkin University's overall goal is to supply society with a steady stream of the best graduates. Our area of expertise is upstream, mid- and downstream sectors of petroleum industry, and we strive to graduate the best specialists. However, to achieve this result without international cooperation in education is simply impossible.

In 2010 Gubkin University acquired a new and very high level status – that of a National Research University – which has brought with it a number of challenging responsibilities. One of them is to establish and implement standards in education and research in petroleum related areas of knowledge.

Russia's strategy of innovative development is, to a great extent, based on state policy in education fostering international integration; extensive training together with the leading international education centres; and adoption of international standards in education, research, and greater mobility for students and teachers.

The rationale of international collaboration also stems from a certain lag of technology development in some sectors of industry including petroleum. International collaboration based on cooperation between universities and research centres is one of the effective tools to close this gap. It is vital, however, that this collaboration is supported by the industry. Among all the forms of collaboration perhaps, the most efficient are knowledge exchange programmes – joint programmes with partner universities at master and PhD level and post-doctoral internship programmes. The benefit of such collaboration is multiplied when it is supported by energy and service companies.

Gubkin University has established a number of international master programmes in different areas of expertise in order to compensate for the gap with the international pool of knowledge and of new trends, approaches and technologies. In order to be efficient, a programme requires an exchange of students and teachers, joint research projects, and short- and long-term internships at the partner university.

The university established joint programmes with the leading international higher education institutions, which cover the areas of strategic focus for both the university and the industry. These include Applied Petroleum Geoscience, Reservoir and Production

Engineering, Offshore Field Development Technology, Energy Saving Technologies for Gas Transportation Systems, International Management of Resources and Environment, Project Economics and Management.

The perestroika transition period in Russia had a damaging effect on the quality of Russian higher education. Since then it has to catch up with leading international management, competence, experience and standards. Joint activity is the best way to learn the new trends and accumulate new experience and knowledge.

Other important reasons for running joint degree programmes are to gain insight into different cultures with different values, and to be able to talk the language and understand future partners from other countries. Joint degree programmes also focus on forming up the proper moral and ethical attitudes of their students. Joint programmes lead to fuller understanding of technological developments. Technology itself can be bought, but wider understanding of how to use it, to its full capacity, has to be taught.

Re-establishing Russia's reputation

High priority is given to fundamental courses at Gubkin University (Math, Physics, Chemistry, Statistics and Stochastic Processes), while our partners focus more on applied courses. Combining the two types of course creates a heavy workload for students, but it equips them with unique combination of knowledge and skills, which makes the graduates of joint degree programmes proud of their achievement. Russia has to re-establish its professional reputation in the world. Education is the best way to do that. Many of the strengths of the Soviet education are lost now, but some remain and could be used as the basis for its revival.

International contacts require permanent attention – they have to remain live to remain fruitful and productive. But everyone has a limited capacity for establishing and maintaining productive relations – a management system is needed to support active international cooperation. Modern education is team work, and professional management at universities is equally important to high quality teaching and research. There are a lot of challenges ahead in developing international programmes, but we believe that we have paved the road for the education of responsible professionals for the future. ■