Faculty of Geography and Geoinformation Technology in Higher School of Economics: New Generation of Geographic Education in Russia

N.K. Kurichev [1,2], nkurichev@hse.ru
[1]National Research University Higher School of Economics, Moscow, Russia;
[2]Institute of Geography RAS, Moscow, Russia

In 2019, Higher School of Economics launched the Faculty of Geography and Geoinformation Technology. It is the first case of greenfield project of Faculty of Geography in Russia in several decades. In September 2020, the first wave of undergraduate students has started to study. This case allows us to consider the problems of contemporary geographic education in Russian universities. Modern geography may be regarded as the triad of physical geography, human geography and geoinformatics. Geographical science is the intersection of social sciences and Earth sciences, studying spatial systems that have developed under the influence of both natural and socio-economic factors. Therefore, it is very important for us to cooperate with representatives of various disciplines, from geophysics and biology to sociology and anthropology.

We tried to develop our program as next generation of Russian geographical education and to make it as different from the existing geographical programs at Russian universities as possible. First of all, we tried to get away from narrow specialization in one of the special geographical disciplines, i.e. hydrology, geomorphology, biogeography etc. Our program includes three broad areas: Geoinformation technologies and spatial modeling; Global environmental and climate change (the assemblage point for all branches of physical geography); Human geography and spatial decisions. For the first two years, all students study together, and they choose one of three aforementioned areas for specialization only by the beginning of the 3rd year. This provides the common base for all students and gives them the opportunity to consciously choose their future field of work. At the same time, in third and fourth years of study, up to 50% of courses are chosen by students, so they get the flexibility of education for their own values and interests.

In addition to structural changes, we were striving for deep changes in content of geographical education. In digital era we are obliged to provide a high level of training in the field of geoinformatics to all students, and not just cartographers, as is now typical in Russian universities. Young professionals in the field of physical or human geography should be proficient in basic tools of big spatial data processing, they should also understand their limitations and prospects. Otherwise, their applied work and scientific research are doomed to methodological and conceptual failures.

Modern climate modeling is deeply linked to oceanology, to land use change and its contribution to greenhouse gas emission and absorption, to the impact of climate change on ecosystems, etc. Professionals with skills both in the field of climatology and in the field of ecosystem studies, as well as in wide range of modern methods for collecting and analyzing geodata (geophysical, geochemical, biological etc.) and mathematical modeling are the most sought-after.

In human geography, we strive to apply modern theoretical and methodological approaches, since in this field Russian education lags far behind the global level. This requires, first of all, laying a strong foundation in the related social sciences and humanities. Almost all existing educational programs in geography in Russia have strong bias toward physical geography. This approach is absolutely viable for single university, but nationally it must be counterbalanced by the cases of geographical education with an emphasis on human geography. Such a case is being implemented at Higher School of Economics, a university with a tradition of dominance of economics, social sciences and humanities (contrasting sharply with Russian classical universities).

The key partner of new faculty is the Institute of Geography of the Russian Academy of Sciences, the most important Russian research center in geography. It provides scientific projects and world-class scientists. At the same time, we plan to build a cloud of applied courses around the core of fundamental disciplines, which will give our graduates the skills that are in demand in the labor market. We will involve experts from companies in key areas of applied geographical studies (environmental expertise, geomarketing, spatial data management, regional consulting etc).

The geographic community is also an ecosystem – from school through university to academia and business, so we plan to collaborate with all members of this ecosystem. In the future, the faculty will have a full line of educational programs – bachelor's, master's, postgraduate, as well as continuing professional education and online courses. We are planning to create centers of applied studies in the field of geodata and spatial decisions in public and corporate governance. There are also plans to create an international laboratory for modeling of socio-ecological systems in the Arctic, as well as other research units.

The Faculty of Geography and Geoinformation Technology of Higher School of Economics is interested in developing international partnerships, attracting foreign professors and experts (offline and online), promoting international academic mobility of students, and implementing joint research and educational projects. We invite interested partners to cooperate.