

Education

Being an international research organization, JINR has a great potential for education and training in the disciplines coinciding with the Institute's main directions of research. While providing a formal education, like that of a university, is not a purpose of the Institute, graduate and postgraduate students from the Member States can join the various research groups of JINR Laboratories to be trained in physics, engineering, computer science and other fields. It is the responsibility of the University Centre of JINR to ensure the effective use of JINR's facilities and expertise for education of highly qualified research scientists and engineers from the Member States. To implement this mission, UC shall pursue the following activities in the next seven years.

The first priority of UC remains the delivery of a high-quality service to the students from the Member States, who arrive at JINR Laboratories to prepare their BSc, MSc and PhD theses. UC takes care of their reception and accommodation and provides the necessary assistance during their stay in Dubna. Selected lecture courses are organized by UC in accordance with the curricula of the mother universities provided a mutual agreement on this matter between JINR and the university is concluded. Needless to say that the effective work in this direction is not possible without close collaboration and partnership with high schools, universities and research centres of the Member States. During the next seven years, UC will take efforts to further strengthen its relations with these scientific and educational institutions.

An important task of UC is to organize educational summer activities for undergraduate students. These include both a series of short-term (International Student Practice) and long-term (Summer Student Programme) stays of student groups from the Member States aimed at their joining the day-to-day work of research teams in JINR Laboratories. Visits to the accelerators and experimental areas are also part of these activities. It is an excellent opportunity to get familiar with the JINR environment and to make valuable contacts with other students and scientists. Having participated in the summer activities, many of the students return to the Institute to work on their MSc and PhD theses. In the coming years these activities will be continued and extended and more efforts to develop the optimal organization and contents of these programmes will be made.

An emerging activity of UC is the practical training in nuclear physics and accelerator technology for students and young scientists from the Member States. A series of training courses in the various fields from radiation protection, safety and basics of nuclear physics to particle detector physics, RF and vacuum technology, beam diagnostics and automation are being prepared. The ultimate goal is to extend the training to use dedicated beam lines of the linear electron accelerator with an energy of up to 800 MeV, which is being constructed in Building 118 to provide test beams to the JINR Laboratories. The practical training will allow the students and young researchers to improve the existing and to obtain new knowledge and skills in modern hardware and technology not only by learning about it from books and lectures, but also via personal hands-on experience. While some courses have existed since 2016, during the next seven years this practical training is planned to be fully deployed and become operational. It is equally important to ensure its permanent upgrade to keep the courses up to the overall progress of the technology in the world.

The outreach programmes of JINR aimed at school children and teachers from the Member States is an important part of the activity of the University Centre, which has already gained a very successful experience of interaction with these communities. Various events intended to bring the modern understanding of the nature and highlights of JINR achievements to the schools and colleges of the Member States remain a priority task for UC in the upcoming period of work.

Besides teaching and supervision of graduate and postgraduate students, UC is responsible for the academic and technical training of JINR personnel. Among others, this activity includes regular industrial safety courses governed by Rostekhnadzor (Russian Federal Service for Ecological,

Technological and Nuclear Supervision) according to the relevant regulations of the Russian Federation.

Since 2016, UC has been running the funds intended for the Association of Young Scientists and Specialists of JINR (AYSS), including annual grants for young specialists and scientists, regular international conferences and schools for youth organized by AYSS, sports and other social activities.