## 09.04.04 Software Engineering

## **High-Tech Development of Complex Software Systems**

**Partner university:** Almaty University of Power Engineering and Telecommunications (Kazakhstan)

In addition to the development of simple components, knowledge of complex systems and approaches is always required for the active productive maintenance of large software and hardware systems. Within the framework of this program, students examine methods of high-tech development of complex software systems. Together with our partners, we are doing our best to give students an opportunity to get acquainted with the tasks and challenges of a specialist in this field and try to solve them. The interaction of colleagues from partner universities allows us to give our students the opportunity to look at the same problems from different angles and to determine for themselves the principled approaches to solving certain issues.

## **Curriculum features**

- discrete mathematics
- database systems and technologies
- AI systems and technologies
- cybernetic systems development technologies
- models of physical processes in nuclear systems

## **Future professional opportunities**

- Education and science (general, secondary vocational, further vocational education; research);
- Information and communication technologies (industrial production of software for information and computer systems);
- Nuclear and other high-tech industries (software development and maintenance).