09.04.04 Software Engineering

Management and Technologies of Knowledge-based Software Projects

Partner university: Al-Farabi Kazakh State University (Kazakhstan)

The program studies technologies for the implementation and management of science-intensive software projects. In particular, students examine applications of methods of formal semantics of computer programs in the design process in order to control the properties of the resulting software. In addition, students research the use of semantic technologies in domain modeling and information systems design.

Curriculum features

- Software engineering methodology (software development technology, verification and certification)

- Fundamentals of automated information technologies

- Modern architectures of intelligent systems

- Software lifecycle management

- Cybernetic systems programming technology

- Designing databases for cybernetic systems

- Semantic configuration of software systems

- Formalisms in information technologies

Future professional opportunities

- Education and science (general, secondary vocational, further vocational education; research);

- Information and communication technologies (industrial production of software for information and computing systems);

- Nuclear and other high-tech industries (software development and maintenance)

- R&D in informatics and computer technology.