10.03.01 Information Security

Mathematical Methods of Information Security

Partner university: Daulet Serikbayev East Kazakhstan Technical University (Kazakhstan)

Program objective

The constant expansion of the world of IT technologies inevitably creates new threats to information security. The new emerging ways of committing crimes related to computer security violations require the development of new technologies for protecting information. The need to develop human resources in innovative areas of computer security determines the relevance of this program.

Key research areas

- automated systems that operate in the presence of threats in the information sphere and have protected IT resources;
- information technologies that form the information infrastructure in the presence of threats in the information sphere and attract resources that are subject to protection;
- information systems to ensure confidentiality, integrity, availability, data authenticity, non-repudiation of authorship through the use of cryptographic primitives;
- means of cryptographic information protection.