

Computer Science

Specialists who work in the field of computer and information technology change our lives and shape the future of our world. IT has limitless applications: new technologies based on advanced software and artificial intelligence are sought-after in medicine and the financial sector, agriculture and education. To become a specialist in computer and IT technologies means to secure an interesting and well-paid job for a long time.

Computer Science subject area tracks deal with the matter of design, development and testing of software systems.

A wide range of subjects is covered - from the concepts typical for modern programming languages (type deduction, reflection, etc.) to widespread programming practices - popular coding patterns or approaches such as Test Driven Development.

Successful completion of the tasks requires familiarity with such programming languages as C, C++, Java, C#. Tasks in the Information Security track test participants' knowledge of discrete maths, probability theory, numbers theory and group theory.

Knowledge of basic cryptographic algorithms, in-depth knowledge of asymmetric and symmetric encryption, understanding of the operation and principles of hash functions, signatures and elliptic curve encryption.