Purpose of and reason for The admission requirement for the admission requirements for the Information Security Technology (IST) track of the Computer Science and Engineering program

Subject-Related Knowledge & Skills

The criterion used is:

A bachelor in Computer Science or equivalent.

The norm is:

One or more passed courses on each one of the following subjects:3

- data structures and algorithms
- mathematics (linear algebra, calculus, logic & set theory)
- in group project work, that include the professional skills presenting and writing.
- basic programming

Important criteria are both the study load and academic performance.

Applicants should have in-depth knowledge concerning:

- basic security (authentication and authorization, security protocols, cyberattacks)
- mathematics (rings, finite fields, groups, modular arithmetic, quadratic reciprocity, lattices)
- introductory level cryptography (symmetric and asymmetric cryptography, DES, AES, Diffie-Hellman, RSA, secret sharing)

Note: Credits according to European credit transfer system (1 ECTS is 28 hours of student work/study). Credits need to be on a Bachelor level (level 6 in European Qualifications Framework).

Method of assessment (by the department admissions board):

Assessment of transcript of records displaying the content of previous course subjects and project work.

Score:

Sufficient/ insufficient/conditional; under the condition* that

- 1. the student completes a premaster (max 30 Credits) or
- 2. the student gets the defined requirement of homologation in the master (max 15 Credits).

^{*}The conditional situation always depends on educational feasibility.