

MSc in Computer Science Engineering

Program description:

The MSc Program in Computer Science Engineering is designed to give students a thorough understanding of the tools, methods, applications and practice of computer science and information technologies. It is both theoretical and practical in its orientation, with the goal to provide an education that is directly applicable to positions in industry.

The program has an integrated curriculum. Out of the 120 credits to earn during the 4 semesters, 110 credits are dedicated to computer engineering and the underlying knowledge. On one hand, this is provided through lecture courses for the apprehension of the theoretical background. On the other hand, there are several practical and laboratory courses for acquiring the necessary proficiency and skills. In addition to these compulsory subjects, 6 credits are to be obtained from elective subjects related to the field, and another 6 credits from electives in human and economic sciences.

The program mainly comprises foundation and core subjects (24 credits), specialization subjects supplemented by project work and laboratory work (56 credits), and thesis design work (30 credits). To earn the degree, students should take a final exam and defend their thesis.

Specialized studies start either in the 2nd semester (in case of autumn enrolment), or right in the 1st semester (in case of spring enrolment). Students should CHOOSE both a main and a secondary SPECIALIZATION when writing the ADMISSION TEST. Any main specialization can be combined with any secondary specialization.

Main specializations:

- “Applied Informatics” deals with different aspects of the design and development of data-driven applications, and with the model-based and object-oriented design and development principles.
- “Internet Architecture and Services” focuses on networks allowing flexible and efficient information transfer and processing. These form the basis of implementing a huge variety of services in informatics, telecommunications, and distributed service provider systems.

Secondary specializations:

- “Smart City”
- “Cloud and Parallel Systems”

Entry requirements:

- 1) Completed BACHELOR’S studies with an overall result of min. 70%. This should be proven by the DEGREE* awarded AND the TRANSCRIPT of all corresponding records.
Applicants still doing the BSc should upload, IN ADDITION to the transcript, an official certificate of the EXPECTED date of graduation.
- 2) Appropriate knowledge of ENGLISH, proven by *EITHER*
 - a) a recent certificate of an internationally recognised, INTERNATIONAL language EXAM of overall B2 level, covering ALL the 4 basic SKILLS (reading, listening, writing, speaking), as detailed below**;

OR

 - b) an official medium-of-INSTRUCTION certificate of the BACHELOR’S studies (only if the FULL programme is given in English)***.
- 3) Sufficient knowledge in COMPUTER ENGINEERING, proven at an online TEST during the admission procedure. (There is a minimum entry score set for the test.)

* NO PROVISIONAL degree certificate is accepted!

** ONLY the following language exams and results are accepted:

- IELTS min. 5.5
- TOEFL IBT min. 80
- Cambridge FCE min. 162
- Pearson PTE min. 51

Exams of LOCAL language schools or educational institutions or NATIONAL organisations are **NOT** accepted as proof of English proficiency!

LATER uploading of the language exam certificate is accepted **ONLY IF** at the application, it is substituted by a DECLARATION of the planned exam!

*** The medium-of-instruction certificate **CANNOT** be uploaded later!

Admission procedure:

During the admission procedure, applicants should write an online test in computer engineering. (The language of the test is English.) Practice tests are available beforehand.

Applicants should **consider the available main and secondary SPECIALIZATIONS beforehand**, and GIVE their preference IN THE TEST.

If requested, applicants should demonstrate their English speaking skills through an online conversation or presentation. The focus is on fluency and not on the topic or the contents, so there is no need to prepare for that.

During the selection process, the admission test result, the submitted documents, and the potential conversation / presentation are all evaluated.

Selection criteria:

- the total score at the TEST should reach the entry minimum;
- the LANGUAGE CERTIFICATE should be uploaded on time and should be appropriate*;
- the documents of the BACHELOR'S studies (transcript + degree/diploma OR certificate of expected graduation date) should be uploaded on time, and should show an overall result of min. 70%;
- the potential CONVERSATION / PRESENTATION should be a convincing evidence of proper English speaking skills.

** Accepted language certificates:*

a) medium-of-INSTRUCTION certificate of the BACHELOR'S studies done FULLY in English → **only IF** uploaded AT THE APPLICATION;

OR

b) *EITHER* of the below exam certificates → **only IF** the CERTIFICATE itself, OR a substitute DECLARATION is uploaded AT THE APPLICATION:

- IELTS overall band score min. 5.5
- TOEFL IBT min. 80
- Cambridge FCE min. 162
- Pearson PTE min. 51

NO certificates of LOCAL or NATIONAL language exams are accepted!

Contact:

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