Computer Science

Degree conferred
Bachelor of Science in Computer Science

Languages of study
Study in French and German

Commencement of studies
Commencement of studies only in the Autumn Semester (September)

Access to further studies
Master

Informatics studies at the University of Fribourg provide in-depth theoretical knowledge while placing a strong emphasis in relation to practice.
Our approach to informatics is oriented towards problem analysis and solution; teaching takes place in a friendly atmosphere. Students carry out projects in which they learn to apply their acquired knowledge successfully in a variety of contexts. Examples of current projects are programming of robots and controlling processes.
The major study programme in informatics is complemented by minors which can be freely chosen. It is also possible to choose programmes from other university fields of study.
This bachelor's degree can give access to the *Swiss Joint Master in Computer Science* offered by the universities of Bern, Neuchâtel and Fribourg.

Profile of the study programme

This study programme lays the basic foundations of a university informatics education. In addition to the major study programme in informatics, minors are offered, which can be freely chosen: possible combinations range from informatics with mathematics to informatics with Catholic theology. Apart from the well-grounded education in informatics, emphasis is also placed on relevant practice. Studies take place in a very pleasant, friendly atmosphere. This applies to the way students interrelate with each other as well as to their relationships with their teachers and professors.

Fribourg profile
With computer science studies in particular, it is important for students to develop solutions to problems independently in order to accustom themselves to a solution-oriented way of thinking. Simply acquiring a sound fundamental knowledge is not enough: this knowledge also has to be applied in a variety of contexts. Student projects especially designed to address this aspect of study are integrated into the Fribourg computer science syllabus. Currently these projects are: programming of robots and controlling processes. This solution-oriented approach to informatics, as it is taught in Fribourg, has the advantage of being an excellent preparation for practical application in later working life. It also acts as a preparation for the continued study of computer science in the scientifically oriented master programme. The fact that our computer science courses have proved their worth in everyday practice has also been confirmed in independent surveys (swissUp Ranking study) conducted among computer science graduates from all Swiss universities and Swiss Federal Institutes of Technology. According to the informatics graduates who were questioned, Fribourg has an outstanding record from the point of view of practical experience.

Learning outcomes and career prospects
The Fribourg University Bachelor of Science degree in Informatics lays an excellent foundation for later employment. It enables direct entry into working life, or the possibility of earning further qualifications by pursuing the master's degree in computer science. The master's degree offers enhanced possibilities of obtaining even more attractive positions in companies or universities. This is why a high percentage of our Bachelor of Science graduates continue their studies in the *Swiss Joint Master in Computer Science* offered by the universities of Bern, Neuchâtel and Fribourg. This highly attractive computer science master programme in Switzerland is made possible by the cooperation of these three universities. Students can gain admission to other universities while remaining matriculated in Fribourg. There is a rising demand for computer scientists with optimum qualifications – and a growing scarcity of specialists in the field. As a computer scientist you help shape the future – in industry, commerce, administration, the service sector and research. All in all: you will receive the best basis for a successful start to your professional career.

Studies organisation

Structure of studies

120 ECTS credits + 60 ECTS credits in one or two minor study programmes freely chosen, 6 semesters

Curriculum

http://studies.unifr.ch/go/mjkY5 *(French)*
http://studies.unifr.ch/go/0fTFn *(German)*

Admission

The following **Swiss school-leaving certificates** grant **admission to bachelor programmes** at the University of Fribourg:

- Swiss academic Maturity Certificate
- Federal vocational or specialised Baccalaureate + supplementary examination of the Swiss Maturity Commission (passerelle)
- Bachelor Degree from a Swiss university, from an accredited Swiss university of applied sciences (HES/FH) or from a Swiss university of teacher education (HEP/PH)

A **complete list of all further recognised Swiss school-leaving**

certificates is to be found on the webpages of swissuniversities (*in French and German only*): https://studies.unifr.ch/go/fr-admission-swisscertificates; https://studies.unifr.ch/go/de-admission-swisscertificates
Foreign upper secondary school-leaving certificates are recognised only if they correspond substantially to the Swiss Maturity Certificate. They must qualify as general education. Foreign school-leaving certificates are considered to be general education if, among other things, the last three years of schooling include at least six general education subjects, independent from each other, in accordance with the following list:

1. Language of instruction (at the school)
2. Second language (a foreign language)
3. Mathematics
4. Natural sciences (biology or chemistry or physics)
5. Humanities and social sciences (geography or history or economics/law)
6. Elective (computer sciences or philosophy or an additional language or an additional subject from category 4 or 5)

The general **admission** requirements to the **bachelor programmes** at the University of Fribourg for holders of foreign school-leaving certificates as well as the **admission requirements for individual countries** are to be found on the webpages of swissuniversities: https://studies.unifr.ch/go/en-admission-countries
In addition, applicants with foreign school-leaving certificates must present **proof of sufficient language skills in French or German**.
All guidelines are available at *(only in French and German)*: https://studies.unifr.ch/go/adm-guidelines

The assessment of foreign school-leaving certificates is based on the «Recommendations for the Assessment of Foreign Upper Secondary School-Leaving Certificates» adopted by the Chamber of universities of swissuniversities on 21.11.2024 (https://studies.unifr.ch/go/swissuniversities24fr; https://studies.unifr.ch/go/swissuniversities24de). The admission requirements are valid for the respective academic year. The Rectorat of the University of Fribourg reserves the right to change these requirements at any time.

Alternatives

Also offered as a minor study programme (60/30 ECTS credits).

Contact

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