

Mathematics

Degree conferred

Master of Science in Mathematics

Languages of study

Study in French, German and English

Commencement of studies

Commencement of studies in the Autumn Semester (September) or in the Spring Semester (February)

Access to further studies

Ph.D.

The study programme provides a high-level education in pure and applied mathematics and involves individualised curricula specialising in several domains of analysis, algebra and geometry, topology, statistics, numerical analysis or biomathematics. Previous course work can be extended in computer science, physics or economics. Master's level classes at the nearby universities of Bern and Neuchâtel are open to students registered at Fribourg and can be part of their curriculum. Activities from the «Swiss Doctoral Program in Mathematics» can equally be integrated into the course of study. The programme culminates in a master's thesis under the supervision of a thesis advisor with a final presentation of the results.

Profile of the study programme

The study programme in mathematics provides a high-level education in pure and applied mathematics. It is open to candidates holding a bachelor's degree in mathematics, and to well prepared and talented candidates with an equivalent degree. Because of the increasing use of advanced mathematical methods in a wide variety of fields, the study programme leads to a multitude of careers in private companies, government institutions, or teaching. Mathematicians generally have excellent prospects on the national and international job market. This master's degree also provides the necessary preparation for students planning to follow a doctoral programme in mathematics.

This master offers advanced classes in a broad spectrum of mathematical areas. Students follow highly individualised curricula specialising in several domains of analysis, algebra and geometry, topology, statistics, numerical analysis or biomathematics. It is also possible to extend previous course work in computer science, physics or economics at the master's level. Lectures and seminars introduce students to the world of mathematical research. The study programme culminates in a master's thesis carried out under the supervision of a thesis advisor, and a final presentation of the results.

Fribourg profile

In accordance with the multi-lingual and international profile of the University, mathematics classes at Fribourg are taught in French, German and English, while seminars are trilingual. Students may choose the language of their seminar talks, written works and exams between French, German and English.

The Department of Mathematics is well integrated into the international research landscape, and provides a particularly attractive learning environment.

Assistants and professors are easily accessible and ready to provide advice and help. Master's level classes at the nearby universities of Bern and Neuchâtel are open to students registered at Fribourg and can be part of their curriculum.

Activities from the «[Swiss Doctoral Program in Mathematics](#)» can equally be integrated into the course of study.

Studies organisation

Structure of studies

90 ECTS credits, 3 semesters

Curriculum

<http://studies.unifr.ch/go/vBvMa>

Admission

Master's degree programmes are built on the knowledge and abilities that were acquired when obtaining a bachelor's degree.

Holders of a bachelor's degree awarded by a Swiss university are admitted to a master's degree programme without any preconditions if they have earned 60 or 90 ECTS credits – depending on the chosen master's degree programme – within the corresponding discipline. However, additional requirements can be required. The same applies to holders of a bachelor's degree awarded by a foreign university, provided that the bachelor's degree is recognised and considered equivalent by the University of Fribourg.

Holders of a bachelor's degree awarded by a Swiss or a foreign university, provided that the bachelor's degree is recognised and considered equivalent by the University of Fribourg, who do not fulfil this condition can be admitted to a master's degree programme with preconditions (which must be successfully completed before starting the master's degree programme) and/or additional requirements (which can be completed during the master's degree programme). The preconditions and/or additional requirements may not exceed 60 ECTS credits in total. The same applies to holders of a bachelor's degree awarded by a Swiss university of applied sciences, according to existing agreements.

The respective conditions of admission for each master's degree programme are reserved.

Alternatives

Also offered as a minor study programme (30 ECTS credits) as part of the Diplôme d'Enseignement pour les Ecoles de Maturité

(DEEM)/Lehrdiplom für Maturitätsschulen (LDM).

Contact

Faculty of Science and Medicine

Department of Mathematics

Dr Livio Liechti

math-scimed@unifr.ch

<http://studies.unifr.ch/go/mathematics-en>