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 individualized curricula
specializing 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 individualized curricula
specializing 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 Mathematics Department 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 Programm 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/xZPll (French)
http://studies.unifr.ch/go/z3FE1 (German)

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 from a Swiss university
can be admitted to a Master's degree programme within the
corresponding branch of studies. A minor at 60 ECTS credits
may not be sufficient and must be accompanied by a supplement or
a pre-Master programme. 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.

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 Patrick Ghanaat
math-scimed@unifr.ch
http://studies.unifr.ch/go/mathematics-en