Data Analytics

Degree conferred

Languages of study
Study in English. Some courses in French or German can also be chosen.

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

Data Analytics is aimed at training experienced scientists in data analysis methods. This ranges from traditional statistical methods to machine learning and data mining techniques, including the computer skills (programming) required for database management, data processing, data analysis and data visualisation. The Data Analytics minor study programme is therefore extremely pertinent for students wishing to complement basic training acquired as part of a master's degree.

This minor study programme is open to students from all faculties.

Profile of the study programme

The programme's primary goal is to teach students a number of skills essential to data management and analysis in any field. The programme is designed to be balanced between theoretical and practical aspects, with courses in programming (R, Python, etc.), statistics, and data analysis. Students will be trained in the use of modern tools and techniques, such as artificial intelligence and machine learning, to solve real-world problems.

The programme is open to students from all faculties, and will be taught by experienced lecturers from the Department of Informatics.

Studies organisation

Structure of studies
30 ECTS credits as a minor study programme

Curriculum
http://studies.unifr.ch/go/U0SRs (French)

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.

Admission requires a bachelor's degree which covered the following courses at the Faculty of Management, Economics and Social Sciences of the University of Fribourg, or an equivalent range of courses at another faculty/university:

- Mathematics I (4.5 ECTS)
- Mathematics II (4.5 ECTS)
- Statistics I (4.5 ECTS)
- Statistics II (4.5 ECTS)
- Statistics III (4.5 ECTS)
- Information Systems I (6 ECTS)
- Information Systems II (6 ECTS)

Contact
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http://studies.unifr.ch/enmaster/digitinf/dataeco30