

# Course offerings 24/25 | AS24

## Study programme description

Master

## **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. Students will therefore gain not only theoretical knowledge, but above all know-how. They will be capable of programming in different languages (R, Python, etc.), setting up and managing databases, extracting relevant information from them and carrying out statistical analysis of them. They will learn the modern methods of artificial intelligence and classification which today, in a «digitalised» world, play a role in all kinds of decision-making. A practical complement to a master's degree, this programme will be a major asset in the job market. It will also provide excellent preparation for students wishing to pursue a doctorate. This study programme is under the responsibility of the Department of informatics, which provides the content and monitoring.

### **Studies organisation**

Structure of studies

30 ECTS credits as a minor study programme

#### Curriculum

http://studies.unifr.ch/qo/U0SRs (French)

Admission

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

Faculty of Management, Economics and Social Sciences Dean's Office decanat-ses@unifr.ch http://studies.unifr.ch/go/en-sesm