Bioinformatics

Degree conferred
Scientiarum doctor in bioinformatica / Doctor of Philosophy in Bioinformatics (PhD)

Commencement of studies
An application for admission may be submitted at any time.

Regulation
http://studies.unifr.ch/go/Pm-6g (French and German only)

Application procedure
Candidates with Swiss qualifications
http://studies.unifr.ch/go/0bJpN
Candidates with foreign qualifications
http://studies.unifr.ch/go/4a2qV

Fribourg profile

Fascinated by biological questions and intrigued by the opportunities Big Data and high computer power offers to tackle them? Jump right into it with a PhD Bioinformatics!

Why study bioinformatics and computational biology?

It took 13 years and 3 billion dollars to decipher the human genome. Today, sequencing a whole genome takes but a few hours on a machine that fits on a tabletop at a tiny fraction of the original costs. Similar technological revolutions are underway in biological imaging, mass spectrometry based proteomics and metabolomics or ecological remote sensing, just to name a few. Consequently, biological and medical sciences are now collecting enormous amounts of information. This tsunami of data generates new problems: it needs to be analyzed properly to unearth and retrieve the exciting knowledge it contains. And, most importantly, it also has to be made available to the scientific community in a useful way.

Scientists with skills in biology and in computer technology are challenged to extract the relevant information out of this phenomenal sea of data. Information technologies are essential for a proper understanding of the regulatory modalities of cells, organisms and even entire ecosystems. Developing algorithms and sound statistical tools to grasp the folding of macromolecules are the first steps on our way to model the mechanisms behind the pure DNA sequence. Ultimately, we want to understand how organisms that are as complex as a human being work.

Our PhD Programme in Bioinformatics

The University of Fribourg is proud to offer a PhD programme in Bioinformatics that will trim you fit to meet these huge scientific challenges and opportunities.
Structure of studies

ECTS credits can be earned.

Doctoral school

http://studies.unifr.ch/go/phd-fgls

Admission

In order to be admitted to a doctorate the candidate must have been awarded an academic Bachelor's and Master's degree or an equivalent qualification by an university recognised by the University of Fribourg.

Before applying for a doctorate the candidate must contact a professor who would be willing to supervise the thesis work.

There is no general right to be admitted to a doctorate.

The respective conditions of admission for each doctoral study programme are reserved.

Contact

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http://studies.unifr.ch/go/bioinformatics-research

Doc- Postdoc-portal

http://www.unifr.ch/phd