Bioinformatics and Computational Biology

**Degree conferred**
Master of Science in Bioinformatics and computational Biology
Universities of Fribourg and Berne

**Languages of study**
Study in English

**Commencement of studies**
Commencement of studies only in the Autumn Semester (September)

**Access to further studies**
Ph. D.

Fascinated by biological questions and intrigued by the opportunities Big Data and high computer power offers to tackle them? Jump right into it with our master programme in Bioinformatics and Computational Biology!

**Profile of the study programme**

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 with the goal to describe and understand how cells, complex organisms or entire ecosystems function. But this tsunami of data generates new challenges: How can we unearth and retrieve the exciting knowledge hidden in such data? How can we make such massive amounts of data available to the scientific community? A proper analysis of this trove of data does not only require massive amounts calculation power, but also talented people with knowledge in both biology as well as in computer science and statistics to develop adequate and computationally fast analysis tools.

The Master of Science in Bioinformatics and Computational Biology is an interdisciplinary programme taught exclusively in English and jointly organised between the Universities of Fribourg and Bern. All involved departments offer outstanding conditions for research and training and highly competitive researcher-student ratios.

The study programme of the first semester builds upon your training and highly competitive researcher-student ratios. Involved departments offer outstanding conditions for research and jointly organised between the Universites of Fribourg and Bern. All

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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. Bachelor degrees that are considered for admission without any preconditions to the MSc in Bioinformatics and computational Biology are:

- Biology
- Life Sciences
- Mathematics/Statistics
- Informatics/Bioinformatics
- Computational Sciences
- Physics

Contact

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