Environmental Sciences

Degree conferred
- Bachelor

Options
Various specialisation options available.

Languages of study
Study in two languages, in French and German

Access to further studies
- Study in two languages, in French and German
- Various specialisation options available.
- Degree conferred: Bachelor

Profile of the study programme
The interfaculty field Environmental Sciences offers two study programmes with 30 ECTS credits. All programmes are identically structured: the basic course, which is described above and which is also a part of the large study programmes, as well as the field trips are mandatory; thereafter, the students attend courses that they can choose freely from an extensive list. The courses correspond to the following main focal points:

Sustainability
The focal point «sustainability» begins with a factor that strongly influences the environment: human actions. Courses in ethics, behavioural psychology, geography and further disciplines locate the human being and his/her actions and movements in the environment and in society and discuss theories regarding behavioural mechanisms. They are supplemented by future-oriented courses and seminars that deal, for example, with nature protection and socio-economic changes or a sustainable economy, development and politics.

Ecology
In addition to the mandatory basic course, Environmental sciences offers individual lectures and field trips. Topics such as sustainability, the relationship between humans and the environment from a social anthropological point of view and the effects of electromagnetic radiation (for example mobile phone radiation) on the environment are dealt with in so-called special studies: a three-month full-time internship.

A field trip programme, which changes slightly every year, deals with issues such as energy, waste, nutrition, nature protection and urban development. Field trips are a valuable supplement to theoretical knowledge; students gain insight into technical facilities, get to know manufacturing and recovery processes, visit research laboratories, protected areas, exhibits, modernised flats and much more.

Those who wish to gain solid basic legal knowledge choose the specialisation in environmental law, which constitutes more than half the study programme and consists of lectures on public law and environmental law at the Faculty of Law.

In the study programme with a specialisation in management of the environment, students have the possibility of choosing those courses that interest them the most from a broad offering of courses from all faculties. Some study modules are offered at the University of Berne. In addition to field trips and seminars with group work, this study programme contains a feature that is unusual for university studies: a three-month full-time internship.

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Ecology

http://studies.unifr.ch/enbachelor/int/environmentalsciences
The focal point «ecology» builds on the ecological issues dealt with in the basic course; in-depth biological, geographical and geological knowledge is imparted that is relevant for the environment. Depending on one’s personal interest, the orientation can concentrate on one of these subjects or else a wider spectrum can be covered, combining biological and geo-scientific courses. It is recommended that students from non-scientific faculties attend at least one basic lecture in biology, geography or geology.

Environmental ethics
The focal point «environmental ethics» encompasses a range of courses (lectures, seminars and special events) from the Faculty of Arts and Humanities and the Faculty of Theology. On the one hand, the courses offer an in-depth introduction to ethics (basics, methods) and on the other hand they deal with the various topics of applied ethics (especially issues of environmental ethics and social ethics), as well as special ethical topics from a philosophical or theological perspective.

Environmental economy
The basic idea behind the focal point «environmental economics» is to make such aspects of economics and social sciences that deal with environmental problems, issues and effects within the framework of business economics (especially marketing and business management), political economics and social sciences, applicable to the subject of environmental science. The relationship to the environment is not always explicit. For example: while NPO (Non-Profit Organisations) marketing does not only apply to environmental organisations, it does still apply to them. An essential aspect of business management is, of course, the company’s relationship to its environment, etc. therefore all recommended and possible courses and events should relate to the economic point of view and rationale in relation to ecological topics and problems.

Resources
In the focal point «Resources», the basics of analytics are taught (general and organic instrumental analytics with internship), including how they are used in environmental science, for example to detect environmental pollutants, toxic gases, etc. Additionally, the two lectures «Chemistry in Everyday Life» and «Physics in Everyday Life», as well as «Radioactivity and Radiation» constitute a part of this focal point. The material that is taught in the basic lectures in physics and chemistry is necessary to understanding the course with the focal point resources.

Organisation des études
Structure of studies
60 ECTS credits as a minor study programme

Curriculum
http://www.unifr.ch/science/plans/plans_e.php

Alternatives
Also offered as a minor study programme with 30 ECTS credits.

Contact
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