



Bern University of Applied Sciences

School of Agricultural, Forest and Food Sciences

Master of Science in Life Sciences

with specialisation in Applied Agricultural and Forestry Sciences



Life Sciences



Master of Science in Life Sciences Applied Agricultural and Forestry Sciences

Since 2009, Bern University of Applied Sciences – School of Agricultural, Forest and Food Sciences (HAFL) in Zollikofen has been offering a unique Life Sciences Master's degree programme in Applied Agricultural and Forestry Sciences. While the Bachelor, as a first degree, gives a broad base for professional life, the Master, as a post-graduate degree, forms a second academic level and leads to a higher qualification. The Master's degree programme extends and deepens knowledge and skills in a specialist area. It lasts at least one-and-a-half years and is completed with an in-depth, application-oriented research project (Master's thesis). Graduates of this Master's degree are qualified for scientific positions or for responsible leadership positions.

The Master's degree programme in Applied Agricultural and Forestry Sciences is part of a Swiss-wide-coordinated Master in Life Sciences, offered in different academic fields by four universities of applied sciences: Bern University of Applied Sciences BFH (School of Agricultural, Forest and Food Sciences HAFL, Zollikofen), Zurich University of Applied Sciences ZHAW (School of Life Sciences, Wädenswil), the University of Applied Sciences and Arts Northwestern Switzerland FHNW (School of Life Sciences, MuttENZ) and the University of Applied Sciences Western Switzerland (sites at Fribourg, Lullier, Changins and Sion).

Four Majors – Four Approaches

The School of Agricultural, Forest and Food Sciences has for years been a leading centre of education and applied research in the areas of agriculture and forestry. It offers the Master in Life Sciences with four complementary “major fields of study” in the specialisation Applied Agricultural and Forestry Sciences:

- **Management of Value Chains – the economic approach**



This major focusses on the path a product takes from primary production right through to the consumers. In addition to the optimisation of the value chain, questions relating to product quality and product security are also addressed. Typical subjects of Master's theses range from the marketing of cheeses from mountain regions, through fair trade coffee and the quality of potatoes to the marketing of timber products from overseas countries.

- **Sustainable Production Systems – the technical / ecological approach**



Applied research in sustainable agricultural and forestry production systems, scientific trials and political and economic consultancy are at the centre of this major. It teaches methods and competences to find innovative and practical solutions for the future. The case studies range from domestic animal and plant production systems, through scientific trials to the cultivation of organic cotton or the care of protective forests.

- **Agriculture and Forestry in Transition – the social- and policy-related approach**



This major examines the interdependencies between nature, economy and society. At the forefront is the analysis of agriculture and forestry and how their roles have changed over the course of time. Social science aspects will be given considerable attention. Most of the issues relate to developing and transition countries, but rural development in Europe as well as the new tasks of multifunctional agriculture in Europe are examples of other current issues.

- **International Management of Forest Industries – the cross-border approach**



This major builds on collaboration between HAFL and the Faculty of Forests and Forestry, Weihenstephan University of Applied Sciences in Germany, where students spend their first semester. In addition to classical forest management competences such as enterprise management and international law, students gain an overview of the players and mechanisms in the international forest and timber industry. The links between forestry and climate agreements, bioenergy, certification and non-timber forest products are covered. Student exchange between Weihenstephan and Zollikofen is organised in the context of the Erasmus programme. Students may obtain degrees from both universities of applied sciences.

Detailed information about the module contents and examples of current research projects at HAFL can be found on the website: www.hafl.bfh.ch

The Degree Programme: The Master Thesis at its Heart

The Master's degree comprises 90 ECTS credit points and usually lasts one-and-a-half years full-time.

The Master's thesis is at the heart of this degree programme and represents a third (30 ECTS) of the degree. At the very beginning of the programme, students work with their adviser to determine the subject of their thesis and start to plan the project. The thesis is usually carried out within the framework of a research project but topic suggestions from students are welcomed. HAFL has a wide network of partner organisations around the world where Master's projects can also be carried out.

A further 30 ECTS are earned by studying the specific principles of the major chosen. The study programme will be individually determined at the beginning of the programme depending on the topic of the thesis. Teaching is carried out by HAFL specialists and external lecturers – usually at the HAFL campus in Zollikofen, near Berne.

In addition to acquiring highly specialised knowledge within applied agricultural and forestry sciences, general and theoretical competences are

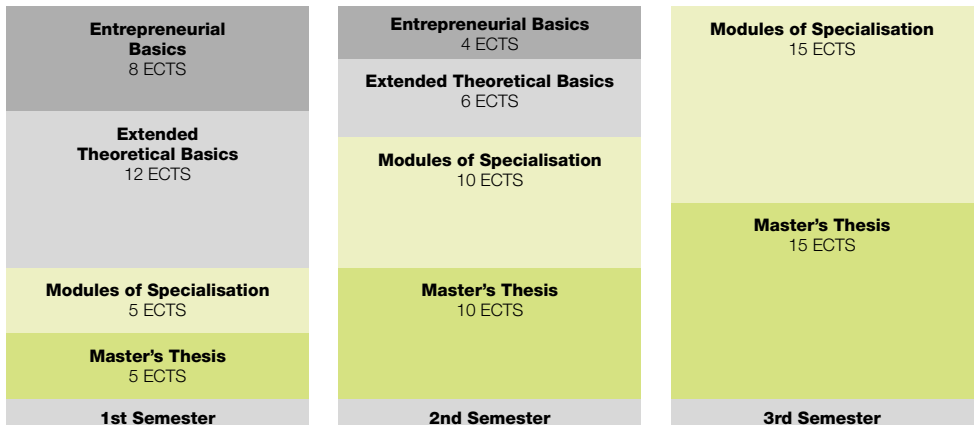
expanded while earning the remaining 30 ECTS. Modules on offer include Innovation, Leadership and Communication and also extended basic principles such as Statistics, Quality Management and Environmental Politics. These basic-principles modules are offered in conjunction with the three partner universities of applied sciences and take place in the Berne region.

Frequently Asked: Languages and Part-Time Study

The interchange of various professions and nationalities is part of the concept of this Master's degree programme and, as such, is encouraged. Foreign students are particularly welcomed. The teaching language is English. Most of the programme is carried out by self-study or by individual assignments, which can also be done in German or French. The Master's thesis may be written in English, German, French, Italian or Spanish.

The individualised programme and the high proportion of self-study enable part-time study with a customised programme. However, a workload equivalent to a 50 % job and regular presence at HAFL are recommended.

Example of a possible study programme (full-time)



Prospects: Research and Leadership

Students on the Master's degree programme acquire an in-depth, scientific knowledge of a specialist area. With the accompanying application-oriented thesis, they are thoroughly educated in their area and also benefit from HAFL's wealth of experience and extensive network.

As with graduates of HAFL Bachelor's degree programmes, graduates of the Master's degree have excellent career opportunities, be it in scientific work at a university or a research institution or in a highly demanding leadership position. A study carried out by HAFL has shown an annual need for more than forty Master's graduates in the Swiss agriculture and forestry industries. These positions are spread across government and associations, further and higher education, industry and commerce as well as development cooperation.

Graduates receive the title "Master of Science BFH in Life Sciences with specialisation in Applied Agricultural and Forestry Sciences".

The qualification and recognition comply with the European standards stipulated in the Bologna Declaration.

Entry Requirements: Individually Clarified

The Master's degree at HAFL is aimed at holders of a Bachelor's degree in a related subject area who also have relevant professional experience. Various Bachelor's degrees are accepted, depending on the major chosen for the Master's degree programme. Applicants with a Bachelor's degree in Agriculture and Forestry are generally accepted for all majors. Graduates from other disciplines such as Environmental Sciences, Economics, Geography or Biology, must pass an aptitude assessment and may have to improve their knowledge of the basic principles of specific subjects.

In order to maintain the high academic level, students are selected on the basis of their Bachelor's degree grades. Only the best 35 % are admitted without having to be assessed. All other students pass through a selection process and have an interview or an aptitude assessment. Applications from foreign students are individually considered.



Always Close to the Action

The School of Agricultural, Forest and Food Sciences HAFL in Zollikofen is the specialist university of applied sciences for agriculture, forestry and food technology. It offers three unique Bachelor's degree programmes in Agriculture, Forestry and Food Science & Management. The Master's degree programme in Applied Agricultural and Forestry Sciences complements these programmes.

Graduates are holistically educated and prepared to take responsibility for nature, people and resources in their professional field. Experience shows that, thanks to the application-oriented academic education they receive, they have excellent career opportunities.

In addition to further and higher education, HAFL conducts applied research and renders services – in Switzerland and around the world. The aim of

the projects is to make in-depth scientific knowledge of practical use. These projects often challenge accepted wisdom and test unconventional approaches. Sustainability is, for HAFL, more than a buzzword: it forms the basis of the degree programmes and projects, be it in agriculture, forestry or food technology.

With around 700 students, lecturers and employees, the campus close to Berne is a manageable size. Thus the synergies between education, research and services can be optimally leveraged.

HAFL is part of Bern University of Applied Sciences. It has an excellent national and international network. Flexible and open, HAFL strives to match its methods and services to the needs of the economy and society.

Registration

The Master's degree programme can be started in autumn (September) or in spring (February). Application must be made online:

www.bfh.ch/studium/anmeldung

The study guide can be downloaded from our website on www.hafl.bfh.ch

Fees are CHF 750.– per semester plus registration and examination fees. There may be additional costs for literature, documents, travel etc depending on the modules chosen.

Information

You can also contact our administrative team on +41 31 910 21 11 or at msc.hafl@bfh.ch