Bern University
of Applied Sciences



Master's programme in Agricultural Science

MSc in Life Sciences

▸ School of Agricultural, Forest and Food Sciences HAFL

Sought-after specialists with vision

The more than 1300 million people working in agriculture worldwide are facing a formidable challenge: to meet an increasing demand for agricultural products while using fewer resources. At the same time, they need to be competitive and must manage their agricultural production base responsibly. They also face major climatic, societal, agri-policy and economic changes.

Well-educated specialists who can offer innovative ideas and solutions are needed in this context. Their work makes an important contribution to a sustainable agricultural sector and to rural development, in Switzerland and around the world.



Daniel Bärtschi, Food and Agriculture Lead, Quantis Switzerland
"We need well-trained professionals with leadership qualities who have a theoretical understanding of systems but who are also familiar with real-life applications and are capable of joined-up thinking."

The master's degree programme in Agricultural Science at the School of Agricultural, Forest and Food Sciences HAFL of Bern University of Applied Sciences equips future managers with the requisite skills. The two majors in "Sustainable Production Systems" and "Value Chains and Rural Development" address technical-ecological and socio-economic aspects.



Our programme is grounded in practice at the interface of nature, people and technology

Well equipped for the future

The master's programme is both broad and in-depth. You will be introduced to a multitude of topics, methodologies and tools. In the modules as well as in your master's thesis you will apply the knowledge and skills acquired to an area of special expertise of your choice.

You will acquire precisely the expertise employers are calling for: you will develop the ability to combine science and real-life applications and to competently manage complex projects and multidisciplinary teams. You will therefore be very well prepared to take on demanding leadership roles in applied research and development, in companies, NGOs and administration, both at home and abroad.

HAFL's remarkable practice-orientation in teaching, research and consulting projects ensures state-of-the-art specialist knowledge and relevance to your future professional life. You will collaborate with experienced experts who operate nationally and internationally and are well connected in their fields. This will enable you to quickly build your own network.





Marcel Kaufmann

Sustainable production systems – technical-ecological approach

This major focuses on applied research in sustainable agricultural production systems in Switzerland and abroad. You will study production systems from field to farmyard, addressing the following topics:

- Analysis and optimisation of production systems
- Assessment and improvement of sustainability
- Refinement of production technology
- Innovation in the face of conflicting ecological and economic demands
- Natural resource management and climate change
- Research design and statistical analysis



Mariana Devault, Timac Agro USA, Plant Nutrition R&D Engineer
"Thanks to my master's thesis I have a precise understanding of environmental issues in agriculture. Today I'm developing more environment-friendly fertilisers."

Your area of special expertise

Topics for individual specialisation range from integrated crop health management to irrigation systems, livestock genetics and forage production all the way through to agroforestry and climate farming.



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Focusing on plant and animal production systems – in Switzerland and worldwide

Value chains and rural development – socio-economic approach

In this major you will study the paths taken by agricultural products, from primary production to consumers. Using market-based approaches, you will examine value chains which are a key driver of rural development. But you will also be concerned with other ways of promoting rural development. In so doing, you will consider the interactions between nature, the economy and society.



Walter Scheurer, Obermühle Boswil AG, Member of Management, Head of Feedstuffs Division
"Through the master's thesis I could gain in-depth technical knowledge of an area that was relevant for my job."

The following topics are at the core of the programme:

- Product quality and safety, quality management
- Logistics and supply chain management
- Strategic market positioning
- Economic and trade models
- International trade relations
- Analysis of the political and institutional setting
- Rural infrastructure and organisational development
- Rural development in practice
- Success factors for development and innovation
- Multifunctionality of agriculture

Your area of special expertise

Typical themes for individual specialisation in this major range from the marketing of Alpine cheese to potato quality or fair trade coffee and all the way to market access for smallholders.



Johanna Gysin, Advisor for Markets, Regional Development and Nutrition at Ebenrain Agricultural Centre
"The excursions and case studies during the programme gave me an insight into practical aspects of the agricultural industry and made me more aware of the various actors involved in a value chain."

Structure and methodology

The programme's flexible structure enables you to advance your personal strengths and interests. You will enjoy a great deal of freedom when it comes to choosing your modules. This allows you to assemble your individual course of study in alignment with the topic chosen for your master's thesis.

The programme runs in close cooperation with partners in the research community, the business world, and society. In the modules, you have the opportunity to make direct contact with players in research and practice through case studies, round tables and excursions. There will also be a considerable amount of self-study, which will enable you to structure your studies very flexibly.



Alan Storelli, PhD cand., University of Göttingen
"I particularly appreciated the programme's structure which is really centred around the master's thesis. It allows you to specialise in your chosen field."

Master's thesis – the core of your studies	30 credits
Specialisation modules	30 credits
Cluster-specific modules (Environment Cluster)	min. 9 credits
Core-competence modules (Data and Business Management)	min. 12 credits

The programme is made up of different module categories.

Overview

Target audience
The master's programme in Agricultural Science is aimed at graduates in agriculture, oenology, environmental engineering, natural resource management, landscape architecture, forest science, geography, Environmental and Resource Management or other related disciplines.

Admission
Bachelor degree from a Swiss higher education institution in above-mentioned disciplines with a grade of at least 5 and sufficient evidence of practical experience. Students holding other types of degrees or lower grade point averages may be admitted on the basis of an aptitude assessment. Students with no evidence of practical experience have to complete our preliminary work placement programme.

Degree
With the HAFL programme you will earn 90 ECTS credits and the degree of "MSc in Life Sciences with specialisation in Agricultural Science" from Bern University of Applied Sciences.

Duration
3–5 semesters of full-time study or
4–8 semesters if you study part-time

Teaching language
English, the "Regional Management in Mountain Areas" specialisation is partly in German. The master's theses may be written in English, German, French, Italian or Spanish.



Dominik Füglistaller, wissenschaftlicher Mitarbeiter BFH-HAFL
"Wenn man eine klare Vorstellung von einem Thema hat, das man vertieft bearbeiten möchte, kann ich das Masterstudium an der BFH-HAFL nur empfehlen. Mir hat es die individuelle Spezialisierung in einem Gebiet ermöglicht, indem es bisher kaum Expertise in der Schweiz gab."

Course fees
CHF 750 to 950 per term plus registration and examination fees.

Cooperation
The MSc in Life Sciences is a cooperation between four Swiss universities of applied sciences: BFH, FHNW, HES-SO and ZHAW.

Registration and deadline for registration
Studies may commence in autumn or spring. The deadlines for registration are April and September respectively prior to programme commencement.

Further information

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INSTITUTIONALLY ACCREDITED UNDER
HEdA 2024–2031

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