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# Welcome

Dear Student,

I am delighted that you are considering becoming an international student at Bern University of Applied Sciences BFH.

Experience abroad is experience for life. While studying abroad you will encounter a different culture and a different language. You will learn to look at things from other perspectives, and to be open to new ideas. Far away from friends and family, you will face the challenge of becoming independent in a new environment. These are skills that you will find extremely useful in the future.

There are many reasons why you should consider gaining this invaluable experience at BFH.

- Its size: with just 7000 students spread across 52 study programmes, BFH offers a family atmosphere
- Several languages: BFH is multilingual; there are courses in German, French and English
- Excellent support: BFH helps foreign students to integrate successfully and is involved in the Erasmus Student Network
- Practical approach: BFH offers superb practice-oriented links to industry, public institutions, culture and administration
- High standard: BFH is committed to the highest Swiss educational standards and offers some courses of study that are unique on a national scale
- Attractive surroundings: BFH is situated in an attractive region in the heart of Switzerland, with the Alps and all major cities within easy reach

See for yourself. This guide gives you an overview of the content of our bachelor's and master's programmes. It also contains information about BFH, its facilities for international students, and introduces you to the advantages of living in Bern.

Our aim is to ensure that your time at BFH is successful and stimulating. I hope to be able to welcome you as a student soon.



**Prof. Dr. Herbert Binggeli** President Bern University of Applied Sciences

# The Bern Region

2 The Bern University of Applied Sciences BFH sites are located in the heart of Switzerland, in the idyllic Canton Bern. Because of its location, it fulfils an essential bridging function between the German-speaking and French-speaking areas of the country. The Canton Bern is consequently bilingual and brings together different cultures. It can be divided into three geographical areas: the wooded hills of the Bernese Jura, the open plateau with its magnificent lakes and the majestic mountains of the Bernese Oberland. The Canton Bern is an area of fascinating contrasts: between town and country, cultivated and the natural landscape, and the traditional and the modern. The thoughtful bear is Bern's heraldic animal. A certain down-to-earth approach, serenity and reliability are recognised as typically Bernese attributes.

Nowhere is very far from anywhere else in Switzerland, and the public transport network is very well designed. The cities of Basel, Zurich, Lucerne and Lausanne can all be reached from Bern in an hour or so. Ski resorts are less than two hours away, as are the borders with Germany, France and Italy.

Switzerland Tourism: myswitzerland.com Bern Tourism: bern.com



Distance from Bern to: Zurich: 50 min, Basel: 1 h, Geneva: 1 h 45 min, Milan: 3 h, Frankfurt: 4 h, Munich: 6 h, Paris: 4 h 50 min

### The five BFH sites

### Bern

The 800-year old city of Bern is both the cantonal and the Swiss national capital. It is the country's political centre and the Old Town is a UNESCO World Heritage Site. With around 140 000 inhabitants, it is a manageable size. Its many green spaces and the River Aare, which is popular for swimming in the summer, make for a high quality of life. A great variety of cultural, sport and leisure facilities ensure that there is always plenty to do.

bern.ch

### Biel

Biel is the second-largest town in the Canton Bern and Switzerland's largest bilingual centre. 60% of the inhabitants speak German, 40% French. The town lies on the shores of Lake Biel and at the foot of the Jura Mountains; it has a reputation as a world centre for watch-making and high-tech industry. Biel is a cosmopolitan und culturally diverse city with good transport connections to the larger Swiss cities.

biel-bienne.ch

### Burgdorf

The small town of Burgdorf lies 20 km north-east of Bern and is the gateway to the picturesque Emmental valley, a favourite holiday location with its rolling green hills, stately farmsteads and lively traditions. The tranquil town of Burgdorf has a well-preserved Old Town and an imposing castle, and various other places of interest.

burgdorf.ch (in German)

### Magglingen

Magglingen is a bilingual town with around 600 inhabitants, situated in the Bernese Jura about 900 meters above sea level. On a fine day the Alps can be seen across the Bernese plateau from Magglingen.

magglingen.ch (in German/French)

### Zollikofen

Zollikofen is a suburb of Bern with around 10 000 inhabitants. It has very good transport connections to the city of Bern, which is 10 minutes away by train.

zollikofen.ch (in German)

### Leisure

The Canton Bern offers you nature at its finest. The imposing Alpine panorama of the Bernese Oberland is the ideal backdrop for a great variety of outdoor activities, from hiking to skiing and bungee jumping. The unique mountain environment around the famous peaks of the Eiger, Mönch and Jungfrau has been included by UNESCO on its list of World Heritage Sites. As well as the Alps, the Jura and the Emmental offer a great many opportunities for excursions.

The Canton Bern also has much to offer by way of culture. The Paul Klee Centre in Bern and the museum of contemporary film and photography in Biel are well-known national institutions. Music fans, for example, can meet at the Gurten Festival in Bern, an open-air festival with 80 000 visitors, or at the classical Menuhin Festival in Gstaad. The city of Bern has a lively music scene and is home to a variety of small theatres, galleries, concert halls and clubs.

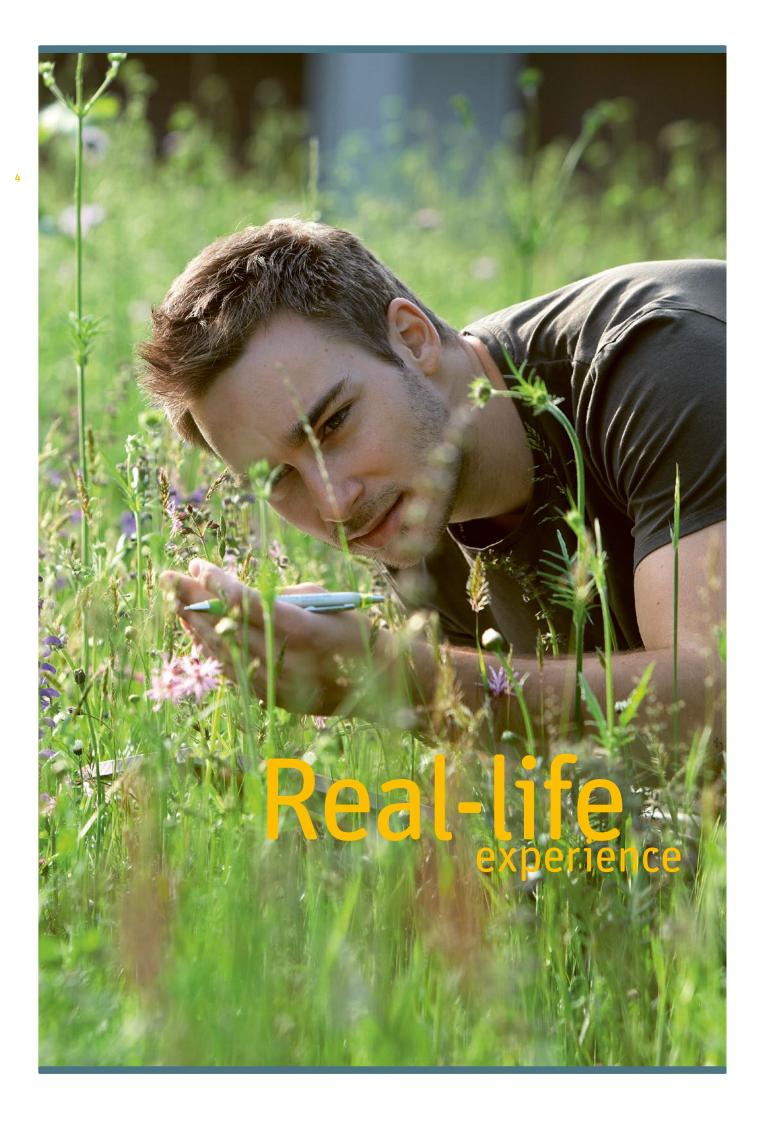
Sports fans also have plenty to choose from in Bern: major international events such as the Lauberhorn downhill in Wengen, the Swiss Open tennis championships in Gstaad, or the Bern Grand Prix running event draw thousands of spectators every year. Bern has a football stadium and is also home to one of Europe's largest ice hockey stadiums.

Switzerland Tourism: myswitzerland.com Bern Tourism: bern.com Culture in Bern: agenda.derbund.ch (in German)









# **Bachelor's programmes**

### Agricultural, Forest and Food Sciences

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- 6 Food Science & Management
- 7 Forest Science

### Architecture, Wood and Civil Engineering

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### Design, Music, Theatre and other Arts

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- 11 Fine Arts
- 12 Literary Writing
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- 13 Music
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- 14 Theater
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### **Engineering and Information Technology**

- 15 Automotive Engineering
- 15 Computer Science
- 16 Electrical Engineering and Information Technology
- 16 Industrial Engineering and Management Science
- 17 Mechanical Engineering
- 17 Medical Informatics
- 18 Micro- and Medicaltechnology

### **Health Professions**

- 18 Midwifery
- 19 Nursing
- 19 Nutrition and Dietetics
- 20 Physiotherapy

# Social Work

20 Social Work

### Sport

21 Sport

Bern University of Applied Sciences BFH offers 30 bachelor's programmes (undergraduate programmes) in many disciplines. Some of these courses of study are unique in Switzerland, for example Sport, Agriculture, Wood Technology, Automotive Engineering, Conservation, Literary Writing as well as Nutrition and Dietetics (counselling in German). Other courses in turn have a similarly comprehensive range of specialist areas (e.g. Computer Science).

Courses at BFH are organised into two levels according to the European study model and comprise bachelor's and master's programmes. The bachelor's programme builds on students' previous professional knowledge and is essentially a general programme. The object is usually to provide graduates with a professional qualification. In some study programmes however, the professional qualification can only be obtained following completion of a further course of study leading to a master's degree.

The bachelor's programmes are composed of modules, i.e. study units that are self-contained in terms of content and topic. Compulsory modules must be taken, whilst compulsory elective modules may be freely chosen from a range of offer. As the level of specialisation increases over the duration of the course, students may choose from an increasing range of optional modules.

A module is completed once a certain number of ECTS credits have been obtained. A bachelor's degree comprises a total of 180 ECTS credits, corresponding to an overall study time of 5400 working hours.

Because of their modular structure, many study programmes may be completed on a full-time or part-time basis, possibly alongside a job. Bachelor's programmes usually take three years to complete on a full-time basis.

On the following pages you will find an overview of the key data and the main content of the individual courses of study. Please note that specific checks are made to ensure that the requirements for admission to the bachelor's degree are met. It is a condition of acceptance to all study programmes that the participants have sufficient knowledge of the language in which the course is taught. For the majority of courses this is German.

If you require further information about the admission requirements or content of a particular course of study, please get in touch with the international representatives in the relevant department. You will find these contact details on page 41. Applications for degree programmes should also be submitted to these offices. If you are interested in an exchange programme, please contact the International Relations Office at your home university.

# Agriculture

### 6 General

Languages: 90% German, 5% French, 5% English Site: Zollikofen Number of students: approx. 285 Course type: full-time or part-time / extra-occupational Only course of its type available at a Swiss university of applied sciences

### **Course content**

**Core modules** (60 ECTS) 1<sup>st</sup>-2<sup>nd</sup> semesters General and discipline-specific basics

### Specialisations (~45 ECTS each)

From the 3<sup>rd</sup> semester

- Agricultural economics (law, politics, markets, applied economics)
- Plant sciences (pedology, production and conservation of fodder, cultivation, plant breeding, plant protection)
- Animal sciences (genetics, husbandry, nutrition and meat production, feed, dairy-cattle and pig husbandry)
- Equine sciences (genetics, animal nutrition, animal husbandry and health, breeding, training planning, tourism and event management, management, law, marketing and communication)
- International agriculture (production methods, socio-economics)

Additional qualification in organic farming and conservation of resources: most of the content of this additional qualification is covered in the foundational modules and the modules of the degree majors; specific optional modules worth a total of 14 ECTS credits must also be taken. Academic achievement throughout the degree programme relating to this additional qualification is documented in a learning portfolio and included in the bachelor's degree.

### Optional modules (24 ECTS)

Approximately 150 modules from the majors, minors and other disciplines

### **Special features**

Most modules are delivered in German. It is not possible to gain 30 ECTS credits per semester with modules delivered in French. Most modules in the International agriculture specialisation are delivered in English. Some of the modules in this specialisation require specific prior knowledge and are thus not recommended for exchange students.

### **Further information**

hafl.bfh.ch/en > Degree Programmes > BSc in Agriculture

# Food Science & Management

### General

Languages: 95% German, 5% French Site: Zollikofen Number of students: approx. 160 Course type: full-time or part-time/extra-occupational

### **Course content**

### Core modules (100 ECTS)

 $1^{st}-2^{nd}$  semesters

- General basics (languages, communication and methodology skills, mathematics, chemistry, biology, economics)
  - Discipline-specific basics (food science, food technology)

### **Specialisations** (48 ECTS each)

From the 3<sup>rd</sup> semester

- Technology (the technology of animal products, nutrition, food and process technology)
- Food business (marketing and strategic planning, supply chain management)
- Consumer science & Marketing (marketing and strategic planning, consumer psychology and market research)

### Optional modules (~24 ECTS)

Approximately 150 modules from the majors, minors and other disciplines

### **Special features**

Most modules are delivered in German. It is not possible to gain 30 ECTS credits per semester with modules delivered in French.

# **Further information**

hafl.bfh.ch/en > Degree Programmes > BSc in Food Technology

# **Forest Science**

# Architecture

### General

Languages: 95% German, 5% French Site: Zollikofen Number of students: approx. 80 Course type: full-time or part-time / extra-occupational Only course of its type available at a Swiss university of applied sciences

# **Course content**

### Core modules (100 ECTS)

- $1^{st}-2^{nd}$  semesters
- General basics (natural sciences, languages, mathematics, economics, information technology)
- Discipline-specific basics (forest ecosystems, mountain forestry and natural hazards, forestry production, forestry planning, timber)

### Specialisations (36 ECTS each)

From the  $3^{rd}$  semester

- Forestry and timber industries (management of the timber value chain, planning, organisation)
- Mountain forests and natural hazards (mountain risk engineering, mountain forest management)
- Forest and society (forest management, forest and stakeholders)

### Optional modules (~24 ECTS)

Approximately 150 modules from the majors, minors and other disciplines

### **Special features**

Most modules are delivered in German. It is not possible to gain 30 ECTS credits per semester with modules delivered in French.

### **Further information**

hafl.bfh.ch/en > Degree Programmes > BSc in Forest Science

### General

Language: 100 % German Site: Burgdorf Number of students: approx. 220 Course type: full-time or part-time/extra-occupational

### **Course content**

This architecture course focuses on the design work in practice. The students spend half of their time in project related courses.

1<sup>st</sup> to 5<sup>th</sup> semesters (150 ECTS)

Every semester is based on four phases:

- Theoretical input with introduction to the project (8 weeks)
- AHB Special-Week (1 week)
- Project studio with integrated theoretical input (6 weeks)
- Final review (1 week)
- 6<sup>th</sup> semester (30 ECTS)

During the 6<sup>th</sup> semester students prepare their thesis (topics) and write it within 8 weeks.

### **Special features**

- It is possible to study part-time (duration: 4 years).
   The classes take place on Mondays and Tuesdays.
- In the 5<sup>th</sup> semester students choose between two specialisations, in which they deepen their knowledge.

Furthermore, these specialisations give students an insight into the master's course: building and area.

# **Further information**

ahb.bfh.ch/en > Bachelor > Architecture

"The national languages of Switzerland are heard all over the School of Agricultural, Forest and Food Sciences HAFL campus. The students and teaching staff come from all cantons and bring a rich variety of lifestyles, traditions and local specialities under one roof. This all helped to make my stay abroad a wonderful, exciting and mouth-watering experience."

Ben Schneider (Germany), Food Science & Management

# Civil Engineering

#### 8 General

Language: 100% German Site: Burgdorf Number of students: approx. 100 Course type: full-time or part-time / extra-occupational

### **Course content**

**Core modules** (60 ECTS) 1<sup>st</sup>-2<sup>nd</sup> semesters Basics in natural sciences, communication (German), and subject-specific basics

# Specialisations (120 ECTS) $3^{rd}-6^{th}$ semesters

Overarching content (law, economics), basic principles (structural physics, construction IT, information technology, materials), compulsory elective modules (e.g. underground engineering, environmental and geotechnical engineering, water resources engineering), project weeks, interdisciplinary projects

Specialisation in load-bearing structures:

- Compulsory modules: structural design modules, use of building materials (concrete/steel/timber)
- Compulsory elective modules: construction and calculation of load-bearing structures (concrete / steel / timber)

Specialisation in infrastructure:

- Compulsory modules: road systems, hydraulic engineering, foundation work
- Compulsory elective modules: road systems, hydraulic engineering, construction and corporate management, foundation work

### **Special features**

Extensive range of compulsory elective modules in the areas of load-bearing structures and infrastructure from the 4<sup>th</sup> semester.

Special modules: international transportation engineering workshop, international hydraulic engineering workshop, individual coaching module, practical week in a construction company, one year placement combined with thesis.

### **Further information**

ahb.bfh.ch/en > Civil Engineering > Bachelor of Science in Civil Engineering

# Higher Technical School of Wood Biel (Diploma level)

### General

Languages: 100 % German, 100 % French Site: Biel Number of students: approx. 220 Course type: full-time

### **Course content**

### Programmes of study

The School trains professionals from the wood industry wishing to become specialists in wood technology. This training – covering the areas of wood building, carpentry and wood industry – includes grounding in specialist and business skills as well as a thorough general training.

General, integrated teaching components and a placement in the wood industry ensure a high level of practical relevance. Technical specialists go on to middle and higher management positions in small or medium-sized industries and large industrial companies. Courses on offer at the Higher Technical School are designed to prepare students for Swiss specialist certificates and diplomas as well as the postgraduate course.

### **Special features**

### Diploma degree

Various professional examinations, higher specialist examinations and a postgraduate diploma in business management are also available.

### **Further information**

#### ahb.bfh.ch/en

> Wood > Higher Technical School of Wood Biel

"I like two things about studying here: first the relatively detailed and interesting programme of the main studies and seminars with new information and inputs and second the international character of the class, where you can observe different habits and ways of doing things."

Raquel Llorca Perez (Spain), Architecture

# Wood Engineering

# **Business Administration**

### General

Languages: 80 % German, 20 % French Site: Biel Number of students: approx. 210 Course type: full-time or part-time / extra-occupational Only course of its type available at a Swiss university of applied sciences

### **Course content**

### 1<sup>st</sup>-4<sup>th</sup> semesters (101 ECTS)

Communication and society, logic and forces, material, processes and components, technics and physics, computer sciences, management, ecology and environment, safety at work

### From 3rd semester: majors (38 ECTS)

- Process and product management: basic CAD-CAM, business organisation, business policy, CAD, commodity classification, controlling, design, dimensioning, finance, lean production, logistics, manufacturing concept, marketing, materials logistics, measurement and process control technology, procurement, product development, quality and process management, surfacing technology, timber machining tools
- Timber structures and technology: building structure dynamics, CAD, computer statics, concrete construction, construction processes, engineering and timber construction, finance, fire prevention in timber construction, measurement, multistorey timber construction, production technology, steel construction, structural analysis, timber machining tools, wood construction

### From 4<sup>th</sup> semester: semester papers and projects (13 ECTS)

### 5<sup>th</sup>-6<sup>th</sup> semesters: specialisations (16 ECTS)

Process and product management, interior furnishing, building shell, timber house construction, engineering and timber construction

### 6<sup>th</sup> semester: thesis (12 ECTS)

### **Special features**

Some bilingual modules. Available in the first year in the second Swiss national language (French or German) and English. A placement of 9 months minimum (30 ECTS) is usually completed after the 5<sup>th</sup> semester. The course focuses on all processing stages of timber.

### **Further information**

ahb.bfh.ch/en > Wood > Bachelor of Science in Wood Engineering

### General

Languages: 80 % German, 20 % English, International programme 100 % English Site: Bern Number of students: approx. 885 Course type: full-time or part-time/extra-occupational

### **Course content**

### Core modules

Leadership and organisation, accounting, finance, tax, law, economics, public management, sociology, methods, business information systems, marketing and communication

#### Specialisations in English

- Banking & Finance
- International Business Management

### Specialisations in German

- Corporate Communications & Marketing
- Public & Non-profit Management
- Management in practice: Strategy & Human Resources
- Controlling & Accounting

### **Special features**

The International programme is taught fully in English. Exchange students can follow a combination of modules from the study programme of all semesters. Full details of the module units (ECTS) are published on the Internet.

# **Further information**

business.bfh.ch > Bachelor > Business Administration

# Business Information Technology

#### 10 General

Languages: 80 % German, 20 % English Site: Bern Number of students: approx. 175 Course type: full-time or part-time / extra-occupational

### **Course content**

### Core modules

Business administration and ICT (information and communication technology), information management, business applications, project & service management, IT governance, e-business & e-government

### Specialisations

- E-Business & E-Government
- IT Governance & Compliance
- Business Applications

### **Special features**

Exchange students can follow a combination of modules from the study programmes Business Information Technology and Business Administration. Full details of the module units (ECTS) are available on the Internet.

### **Further information**

business.bfh.ch > Bachelor > Business Information Technology

### General

Languages: German, (French) Site: Bern Number of students: approx. 45 Course type: full-time

**Art Education** 

## Course content

#### Core modules

- Visual language (drawing, painting, visualisation, illustration, typography)
- Volumes, space, material (sculpture, site specific works, installation, performance)
- Theory (art history, media theory, aesthetics)
- Media (photography, video, film, web design)
- Seminar work (individual, student-initiated art and design projects)
- Studio (own artistic and design activity)

Students learn about new methods and forms of mediation and become familiar with different educational settings including museums and schools. A bachelor's project consists of the theoretical and artistic treatment of a topic.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Art Education

"To apply for an Erasmus exchange, you have to prepare a lot of papers, look for a place to live, choose modules, etc. Once you are there, you can start enjoying the great experience of the Erasmus Programme. You meet not only lots of Erasmus people, but also Swiss people in your modules, who will help you and work with you in all projects."

Almudena Fachal (Spain), Business Administration

# Conservation

# Fine Arts

### General

Languages: German, (English) Site: Bern Number of students: approx. 95 Course type: full-time or part-time/extra-occupational

#### **Course content**

#### Core modules

- Techniques, materials and practice of preventive conservation
- Fundamentals of art technology and conservation
- Documentation techniques, foundation in natural sciences and investigative methods
- History of art and cultural history
- Issues of professional ethics and terminology
- Basics of practical project work in conservation

#### **Specialisations**

- Architecture, furnishings and furniture
- Books, graphic and photographic objects
- Modern materials and media
- Paintings and sculptures

Lectures, practical exercises and seminars convey theoretical knowledge; specialised studios and laboratories are available for practical sessions with works of art. The range of activity is extensive: from oil paintings, sculptures, textiles, drawings, photographs and books, through audio visual-based media and synthetic objects, to buildings and their contents that are worthy of preservation.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Conservation

#### General

Languages: German, French, (English) Site: Bern Number of students: approx. 40 Course type: full-time

# Course content

### Core modules

- One-to-one art lessons and studio work
- Theory (contemporary art, history of art and cultural history)
- Specialised study of media
- Foundations of transdisciplinary work
- Projects

Students continue to develop their artistic projects throughout the degree programme. Independent work in the workshop takes up a great proportion of the time. This work is supported by wellknown artists and evaluated in end-of-semester appraisals. In the third year, the main focus is on the development of an artistic diploma piece, documenting it, and producing a written bachelor's project.

At the end of each year, students, teaching staff and external experts evaluate students' work together.

### **Special features**

Possibility of student exchange focused on transdisciplinary Arts studies.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Fine Arts

# **Literary Writing**

# **Multimedia Production**

### 12 General

Languages: German, French Site: Biel Number of students: 45 Course type: full-time Only course of its type available at a Swiss university of applied sciences

### **Course content**

### Core modules

- Individual literary production
- Working with different types of text
- Theory and contextualisation
- Transdisciplinarity and projects

The course enables German-speaking and French-speaking students to focus intensively on literary production. The course sets its emphasis on students' individual writing and includes modules featuring the study of contemporary literary issues.

The practice of critical reading, text analysis, literary and interdisciplinary projects are further elements of this course. After graduation, students are familiar with literary authorship and its demands; they have gained experience in the realisation of literary projects and are aware of issues related to contemporary literary publishing.

Fields of study: the Bachelor of Arts in Literary Writing is open to all literary genres – fiction, narrative, digital literature, poetry, drama, as well as more experimental genres.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Literary Writing

### General

Language: 100 % German Sites: Bern and Chur Number of students: 35 Course type: full-time

#### **Course content**

The main body of this course is defined by the model of core competences needed in multimedia production. Specialisation from the 4<sup>th</sup> semester focuses on the handling of different communication channels, market and network skills.

### 1st-2nd semesters

The 1<sup>st</sup> and 2<sup>nd</sup> semesters form a basis that allows the students to produce and publish work independently from the 2<sup>nd</sup> semester.

#### 3<sup>rd</sup> semester

The 3<sup>rd</sup> semester continues to develop and expand general skills, with the addition of character-building and leadership-oriented modules.

### 4<sup>th</sup>-5<sup>th</sup> semesters

Voice, image, sound and technology in all formats and combinations are used and considered in the 4<sup>th</sup> and 5<sup>th</sup> semesters. The students specialise in one major and three minor subjects.

### 6<sup>th</sup> semesters

The course is completed in the 6<sup>th</sup> semester with a student project and a thesis.

#### Specialisations

Media applications, radio production, TV/video production, integrated corporate communications, event communications, public communication and branded motion

### **Special features**

Registrations for the study course at the BFH must be made through the HTW Chur.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Multimedia Production

"In my time at Bern University of the Arts, I was constantly impressed by the superb premises and facilities. The trust placed in the students, who are allowed to visit and work at the university premises at all hours, is great. The relationship between students and teaching staff is also very good. I had a really great time here!"

Julian Groll (England), Visual Communication

# Music

### General

Languages: German, French, (English) Site: Bern Number of students: approx. 200 Course type: full-time

### **Course content**

### Core modules

- The core module comprises (depending on the major subject taken) work on instrument or voice or on the areas of composition and media expression forms. Interaction with music theory, musical improvisation, historical performance practice and contemporary music provides the framework. The core module is taught in one-to-one lessons. The programmes split into the fields of Classical music, Jazz, and Music and media arts.
- Theory: overview of musical theory and music history as well as practical music theory with a focus on analysis, supplemented by technology and composition where appropriate.
- Practice and projects: instrument-specific obligatory modules such as second instrument, chamber music and orchestra, accompaniment as well as general modules such as improvisation or body techniques and study techniques. Transdisciplinary projects (together with other fields such as Theatre, Arts and Conservation)
- Master's stream: preparation for the subsequent master's programme (Music Pedagogy, Music Performance, Composition and Theory, etc.)

# **Special features**

The modular structure of the course makes it possible to establish a dialogue with other art forms. The bachelor's degree is not a professional qualification, it prepares students for the specialisation of a master's degree.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Music

# Music and Movement (Rhythmics)

### General

Languages: German, French, (English) Site: Biel Number of students: approx. 35 Course type: full-time

### **Course content**

### Core modules

- Body and instrument (eurhythmics, movement-centred, percussion-centred, process-centred, body technology, voice training, piano, dance composition, dance interpretation)
- Knowledge of music, movement and design (harmony, solfège, anatomy, physiology, history of music and cultural history, dance analysis)
- Theory and practice of pedagogy (general pedagogy and music pedagogy, early musical education, transcultural interaction, period of practical training), Practical projects

The students study music, movement and pedagogy, and also work on teaching the material they have learned. A pedagogic traineeship and transdisciplinary teaching events are integrated into the programme. The bachelor's project consists of the theoretical and artistic treatment of a topic from the field of music and movement.

### **Special features**

- Bilingual course held in German/French
- Strongly focused on performing dance and music
- Two public festivals each year

# **Further information**

hkb.bfh.ch/en

> Studies > Bachelor > BA Music and Movement

# Theater

# **Visual Communication**

### 14 General

Languages: German Site: Bern Number of students: approx. 40 Course type: full-time

### **Course content**

### Core modules

- State performance acting courses (basic principles of improvisation, scenes, projects)
- Body work (movement, dramatic acrobatics, martial arts, dance theatre)
- Voice (basics of speech / breathing and voice, articulation, text work)
- Theory (performance analysis, repertoire, history of drama and media, cultural history)

Drama training at Bern University of the Arts teaches technical skill and the ability to develop and realise individual artistic ideas in the most varied forms and media, against the backdrop of everchanging contemporary theatre. Students formulate their own project, which they realise during the course of their studies. In the degree modules, aspects of effectiveness on stage are considered from various perspectives. The three year bachelor's degree programme provides comprehensive acting training.

# **Special features**

Transdisciplinary teaching events are integrated into the modules.

### **Further information**

hkb.bfh.ch/en > Studies > Bachelor > BA Theater

### General

Languages: German, French, (English) Site: Bern Number of students: approx. 65 Course type: full-time

# Course content

### Core modules

- Visual language / imagery (visualisation, typework, drawing, text, communication design, brand identity)
- Theory (history of design and cultural history, design theory, foundations of social science)
- Media (photography, interactive design, audio visual design)
- Studio projects and traineeship

At the heart of the degree lie independent creative projects in the workshop. These are accompanied by teaching events to develop specific professional knowledge and creative processes. Development is thus based on the student's own experience in practical creative activity, where their own style crystallises into images and words. The project and process-oriented learning situation is also strongly orientated towards future professional life.

### **Further information**

### hkb.bfh.ch/en

> Studies > Bachelor > BA Visual Communication

# Automotive Engineering Computer Science

### General

Languages: 50 % German, 50 % French (100 % translation) Site: Biel

Number of students: approx. 130

Course type: full-time or part-time / extra-occupational Only course of its type available at a Swiss university of applied sciences

### **Course content**

### Core modules

Natural sciences: chemistry, materials, physics (16 ECTS) Fundamentals of engineering: automotive engineering, CAx technologies (50 ECTS), mathematics (26 ECTS) General training with reference to vehicle engineering and mobility: languages, business administration (20 ECTS)

### Specialisations

From the 4<sup>th</sup> semester with theory modules, optional projects (60 ECTS) and thesis (12 ECTS)

Technology and services:

- Combustion engines
- Vehicle mechanics and safety
- Electrical engineering / electronics
- Business administration and information technology

Vehicle construction:

- Combustion engines
- Vehicle mechanics and safety
- Vehicle mechatronics
- Vehicle construction and design

### **Optional modules**

Cross-departmental modules from a pool in Engineering and Information Technology (14 ECTS)

### **Special features**

The course is taught in two languages (German and French). Highly developed, project-financed infrastructure is available to the students for practical projects.

### **Further information**

ti.bfh.ch/en > Bachelor > Automotive Engineering

### General

Languages: 100% German in Bern, 50% German/50% French in Biel Sites: Biel and Bern Number of students: approx. 330 Course type: full-time or part-time/extra-occupational

### **Course content**

### Core modules (2 to 8 ECTS per module)

Programming, software engineering, databases, operating systems, computer networks, web technologies, theoretical computer science, project management, mathematics, natural sciences, economics, law, communication, languages

### Specialisations (3 x 8 ECTS per specialisation)

- Mobile computing
- IT security
- Web and business applications
- Computer perception and virtual reality

Only one specialisation module per semester may be followed (8 ECTS)

### Projects and seminars

Two semester projects (4/8 ECTS), IT seminar (4 ECTS) and thesis (12 ECTS)

### Optional modules (2 or 4 ECTS per module)

Around 100 modules from the fields of information technology, communication technology, microtechnology, economics, natural sciences, mathematics and languages. The modules cover a wide variety of topics: from marketing, computer security through Chinese, robotics, artificial intelligence to astronomy.

### **Further information**

ti.bfh.ch/en > Bachelor > Computer Science

"As a PhD student, I appreciate the good working conditions and the good support in administrative and organisational procedures by the university staff. Also the informal relations with my supervisor as well as the excellent organisation of the university have left a positive impression on me."

Grzegorz Dziechciaruk (Poland), Electrical Engineering

# Electrical Engineering and Information Technology

### 16 General

Languages: 100% German in Burgdorf, 50% German / 50% French in Biel Sites: Burgdorf and Biel Number of students: approx. 210 Course type: full-time or part-time / extra-occupational

# **Course content**

### Core modules (120 ECTS)

1<sup>st</sup> to 4<sup>th</sup> semesters

Mathematics, physics, chemistry and materials, languages, communication, economics, electrical engineering, electronics, information technology, signals and systems

### Applications (24 ECTS)

### 5<sup>th</sup> semesters

Electric energy systems and renewable energies, industrial automation and control, communication technologies, embedded systems, project management, project work and system engineering

### Specialisations (28 ECTS each)

6<sup>th</sup> semester, incl. project study and thesis

- Electric energy systems and renewable energies: high-voltage technology, electricity supply, new energy technologies
- Industrial automation and control: modern power converters, drive systems, distributed control systems
- Communication technologies: telecom electronics, telecom networks, wireless communication systems
- Embedded systems: C++ in embedded systems, system-on-chip design, real-time operating systems

Additional specialisation in management 12 ECTS (5th and 6th semesters)

### Optional modules (min. 8 ECTS)

1<sup>st</sup>-6<sup>th</sup> semesters Numerous 2-ECTS optional modules are available in all semesters.

# **Special features**

Superbly equipped laboratories for student projects in all four areas of specialisation.

# **Further information**

ti.bfh.ch/en

> Bachelor > Electrical and Communication Technology

# Industrial Engineering and Management Science

### General

Language: German and English (approx. 50 % each) Site: Biel Number of students: approx. 60 Course type: Full-time or part-time Only course of its type available at a Swiss University of Applied Sciences

# **Course content**

The study program in Industrial Engineering and Management Science combines competencies in engineering, informatics, data analysis, and management to educate future decision-makers at the interface of these areas. Industrial Engineering and Management Sciences at the BFH educates the students about digital transformation and industry 4.0 which is the most recent industrial revolution that focuses on connectivity in industry. Each module has from 2 to 6 ECTS.

### Module Groups (142 ECTS)

- Management (34 ECTS): entrepreneurship, business administration, investing and finance, accounting and controlling, strategic and innovation management, marketing, logistics and supply chain, organization and change management, microand macroeconomics, business simulation, law and ethics.
- Information Technology and Data Science (30 ECTS): basics in programming, databases, computational modeling, data science and visualization, IoT design and embedded systems, business intelligence, IT security and safety
- Engineering (30 ECTS): digitalization, requirements engineering, mechanical and electrical engineering, actors, sensors and wireless applications, network technologies and control theory, integration seminar
- Natural Sciences (24 ECTS): analysis 1 and 2, linear algebra, physics, statistics
- Social Sciences and Meta Competences (24 ECTS): success competencies, communication, English, system thinking, research methods, English for project managers, negotiation and conflict management, project management

### Majors (38 ECTS):

- Business Engineering: digital business models, business lab, lifecycle management and ERP systems, management of complex systems, bachelor thesis (12 ECTS)
- Industrial Engineering: automation and robotics, industry lab, complex production systems, manufacturing technologies, bachelor thesis (12 ECTS)

# **Special features**

The course uses the two languages German and English to equal parts. In addition, highly developed infrastructure is available to the students for practical projects.

# **Further information**

ti.bfh.ch/en

> Bachelor > Industrial Engineering and Management Science

# Mechanical Engineering

# **Medical Informatics**

### General

Language: 100 % German Site: Burgdorf Number of students: approx. 185 Course type: full-time or part-time/extra-occupational

### **Course content**

### Core modules (120 ECTS)

Mathematics, physics, materials technology, technical mechanics, product development, information technology, electrical engineering, measurement and control technology, fluid mechanics, thermodynamics, project management, business administration and economics, communication, English

### Specialisations (60 ECTS)

From the 5<sup>th</sup> semester

- Development and design
- Materials technology
- Production technology
- Energy and process engineering
- Mechatronics

Two projects in collaboration with industry (10 ECTS), thesis (12 ECTS)

### Optional modules (2 ECTS each)

Around 60 modules from general areas (languages, economics, natural sciences), and:

- Clinical neurorehabilitation technology
- Environmental engineering
- Modern combustion engine technology
- Excel applications in mechanical engineering

# **Special features**

Practice-based, in-depth specialisation with modern infrastructure; involvement in projects with industry.

### **Further information**

ti.bfh.ch/en > Bachelor > Mechanical Engineering

### General

Language: 100 % German Site: Biel Number of students: approx. 70 (aim for the future: 140) Course type: full-time or part-time / extra-occupational Only course of its type available at a Swiss university of applied sciences

### **Course content**

The course integrates a sound understanding of information technology, as well as knowledge of medical processes and pathways, with an understandig of the healthcare system. It is based on three main module groups, with each module worth from 2 to 6 ECTS.

### Module groups

- Medical based modules (56 ECTS): healthcare systems, anatomy and physiology, pathophysiology, medical documentation and classification, patient pathways and processes, clinical studies, interoperability, e-health, telemedicine, information systems, value-added chains in the healthcare system, logistics, hospital organisation, ethics
- Information technology and mathematics (58 ECTS): mathematics and statistics for medical practitioners, programming, software engineering, information security, databases, data warehouses, operating systems, computer networks, web technologies, user-centred design
- Management and projects (40 ECTS): project and quality management, system engineering, living cases, seminars, law, communication and languages

### Thesis (12 ECTS)

### Optional modules (14 ECTS)

Optional modules from application areas of medical informatics, general informatics, communication technology, economics, languages and society (2 or 4 ECTS per module)

# **Further information**

### ti.bfh.ch/en

> Bachelor > Medical informatics

"I am a BICSS student from Vienna and spent a semester studying at Bern University of Applied Sciences. I learned how the study courses are organised and structured at a Swiss university. The wonderful integration achieved by Bern University of Applied Sciences and the warm response I received from fellow students made it easier for me to work on my thesis. I gained a lot of experience and made many new friends during this time."

Verena Meinung (Austria), Computer Science

Midwifery

# Micro- and Medicaltechnology

#### 18 General

Languages: 50 % German, 50 % French Site: Biel Number of students: approx. 125 Course type: full-time or part-time / extra-occupational

### **Course content**

### Core modules (120 ECTS)

 $1^{st}-4^{th}$  semesters

The core modules of the course cover a broad spectrum of the following topics: mechanics, design (CAD), electronics, information technology and medical technology.

### Specialisations (60 ECTS)

5<sup>th</sup> and 6<sup>th</sup> semesters

Students may choose three of the following five specialisations:

- Mechatronics: interface electronics mechanics, process chain sensors – signal conditioning – signal interfaces – signal processing – signal output – actuators
- Medical engineering: basics of important techniques in medical technology (cardiology, imaging techniques and orthopaedic implants)
- Optics and photonics: wave and geometric optics, measuring by means of optical sensors, applications
- Robotics: study of industrial robots and how to model them, development and design of small robots
- Sensor technology: basics of physical effects to understand and design sensors and actuators

### **Further information**

ti.bfh.ch/en

> Bachelor > Micro- and Medicaltechnology

### General

Language: 100 % German Site: Bern Number of students: approx. 225 (including students attending the compulsory ten-month additional practical module) Course type: full-time

### **Course content**

#### 1<sup>st</sup> year

Obstetrics: normality (35 ECTS), bodywork (2 ECTS) Scientific methods: research methods (2 ECTS) Communication: communication, developing relationships (2 ECTS), technical English (2 ECTS) Interdisciplinary: lecture series (2 ECTS), practical placement (15 ECTS)

### 2<sup>nd</sup> year

Obstetrics: pathology (34 ECTS), bodywork (2 ECTS) Scientific methods: statistics (3 ECTS), evidence-based practice (2 ECTS), implementing evidence in practice (2 ECTS) Communication: facing challenging situations (2 ECTS) Practical placement (15 ECTS)

### 3<sup>rd</sup> year

Obstetrics: holistic approach (12 ECTS), bodywork (2 ECTS) Communication: communicating publicly (2 ECTS) Interdisciplinary: interprofessional project in health (1 ECTS), communication between healthcare professionals (1 ECTS), practical placement (30 ECTS), thesis (12 ECTS)

### **Special features**

Problem-based curriculum with skills training, clinical assessment and professional communication training. The course is completed by a compulsory additional ten-month practical placement.

Nursing professionals who have already completed a tertiary level education may enrol for a shortened part-time course of study (120 ECTS) since they will be accredited with 60 ECTS from their prior education.

### **Further information**

health.bfh.ch > Bachelor > Midwifery

# Nursing

# **Nutrition and Dietetics**

### General

Language: 100 % German Site: Bern Number of students: approx

Number of students: approx. 300 (including students attending the compulsory ten-month additional practical module) Course type: full-time or part-time / extra-occupational

### **Course content**

### 1<sup>st</sup> year

Fundamentals of nursing and emergency situations (48 ECTS), practical placement (12 ECTS)

### 2<sup>nd</sup> year

Overcoming difficult situations (8 ECTS), handling challenging conversations (1 ECTS), clinical assessment (7 ECTS), multidisciplinary project in health (1 ECTS), caring for the chronically ill (7 ECTS), training and counselling (7 ECTS), systematic nursing and ethics (7 ECTS), applying research results (3 ECTS), practical placement (18 ECTS)

### 3<sup>rd</sup> year

Project implementation (5 ECTS), implementing best practice (4 ECTS), targeted communication (1 ECTS), thesis (12 ECTS), ensuring quality (4 ECTS), nursing care and health policies (3 ECTS), compulsory elective practical (6 ECTS), practical placement (24 ECTS)

### **Special features**

The course is completed by a compulsory additional ten-month practice module.

Nursing professionals who are already qualified to tertiary level education may follow a shortened, extra-occupational course of study with focus on additional areas of the study programme.

### **Further information**

health.bfh.ch > Bachelor > Nursing

### General

Language: 100 % German Site: Bern Number of students: approx. 200 (including students attending the compulsory ten-month additional practical module) Course type: full-time This is the only course of its type available in the German-speaking

part of Switzerland and offered at a university of applied sciences.

### **Course content**

### 1<sup>st</sup> year

Focus on basic knowledge required for counselling healthy persons (51 ECTS), practical placements (9 ECTS)

### 2<sup>nd</sup> year

Focus on people with conditions or diseases requiring dietetic management: clinical practice and healthcare system (7 ECTS), the ill adult patient 1+2 (12 ECTS), ill children and adolescents (3 ECTS), evidence-based practice 1+2 (2 ECTS), nutrition counselling in practice (3 ECTS), applied research project (2 ECTS), management in healthcare (2 ECTS), interdisciplinary project (1 ECTS), practical placements (28 ECTS)

### 3<sup>rd</sup> year

Focus on counselling in complex situations and management aspects: counselling in complex situations (6 ECTS), complex medical diagnoses (5 ECTS), quality management (3 ECTS), counselling and mental disorders (3 ECTS), synthesis (3 ECTS), thesis (12 ECTS), practical placement (22 ECTS)

Compulsory elective modules in the 6<sup>th</sup> semester

- a) Management aspects in the hospital/industry/private practice (3 ECTS)
- b) Counselling, clinical nutrition, public health nutrition (3 ECTS)

### **Special features**

Balance between theory and practical acquisition of skills for handling various situations encountered in practice. The course is completed by a compulsory additional ten-month practice module.

### **Further information**

health.bfh.ch > Bachelor > Nutrition and Dietetics

"In Switzerland, the collaboration between the universities of applied sciences and the clinical institutions is very intense and physiotherapy education at Bern University of Applied Sciences is of a very high level. Mutual confidence and a cooperative atmosphere provide plenty of opportunities to work independently and take initiative. Nevertheless, due to the close supervision and constructive feedback which had been given to us during our internship, we have learned not only for our professional life but also for our personal development."

Ulla Schwarzenlander and Florian Zeugswetter (Austria), Physiotherapy

# Physiotherapy

Bachelor's programme Social Work

# Social Work

### 20 General

Language: 100 % German Sites: Bern and Basel Number of students: approx. 400 in Bern and Basel (including students attending the compulsory ten-month additional practical module) Course type: full-time

# **Course content**

### 1<sup>st</sup> year

Fundamentals of physiotherapy: musculoskeletal system and spinal column (60 ECTS)

### 2<sup>nd</sup> year

A more in-depth study of core modules and pathology, assessment and treatment techniques, clinical modules: musculoskeletal system, internal medicine, clinical geriatrics and neurological rehabilitation (38 ECTS), practical placement (22 ECTS)

### 3<sup>rd</sup> year

A more in-depth study of core modules and pathology, assessment and treatment techniques, complex clinical modules in all subject areas: paediatrics, gynaecology, sports, psychiatry and pain (23 ECTS), thesis (12 ECTS), practical placement (25 ECTS)

# **Special features**

The course of study is structured spirally. Specialist content is learnt in a more complex form in each subsequent module. The course is completed by a compulsory additional ten-month practice module. A short "interprofessional module" is also carried out during each year of study.

# **Further information**

health.bfh.ch > Bachelor > Physiotherapy

### General

Languages: 85% German, 15% (English, Spanish, French) Site: Bern Number of students: approx. 565 Course type: full-time or part-time/extra-occupational

### **Course content**

The curriculum is divided into three module areas:

### Social work modules

Theories and methods of social work are at the forefront of this module area. The basic principles of social work are taught, however, practical training is key here. This allows students to recognise and work with social work issues in a real context. In their dealings with different service users, the students reflect on their own values and behaviour and to develop a professional identity as well as their professional competence.

### Modules from related disciplines

Social work professionals work in tandem with representatives from other disciplines on a daily basis. Knowledge of these professions promotes interdisciplinary collaboration. To facilitate this, the related disciplines of sociology, law, psychology, philosophy, ethics, economics and other disciplines are taught in separate modules within the Social Work Division.

### Integration and interdisciplinary modules

The modules in this area consider social problems such as poverty, addiction, migration and other issues. These issues are considered both from the theoretical and methodical perspective of social work and as well as from the viewpoint of related disciplines. This integrates the knowledge and skills gained in the modules.

# **Special features**

Students have considerable flexibility when it comes to organising and structuring their study. They can follow their own interests in various topics to a large degree and develop an individual profile.

### **Further information**

social-work.bfh.ch > Bachelor

# Sport

### General

Languages: 90% German, 10% French Site: Magglingen Number of students: approx. 110 Course type: full-time or part-time / extra-occupational Only course of its type available at a Swiss university of applied sciences

### **Course content**

### Basic studies (60 ECTS)

The course is a multi-disciplinary program to develop a comprehensive understanding of scientific and applied aspects of sports, physical education and fitness. The practical component in sport and movement fosters a

range of personal sports skills and contributes to basic physical fitness.

# Intermediate and specialised level (120 ECTS)

Building on a foundation of core knowledge the programme includes sports science studies in theory of training, motor learning, sports medicine, business management, psychology, health, nutrition and different sports activities as well as educational, sociological and historical dimensions of sport and physical activity. The course is completed by a scientific project and a thesis.

### **Further information**

ehsm.admin.ch/en
> BSc EHSM in Sports

# A world of Culture

E.

22

# Master's programmes

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Bern University of Applied Sciences BFH offers 22 master's programmes (postgraduate programmes) in a wide variety of disciplines. These follow on from the bachelor's programmes and last from one and a half to two years. Master's programmes are usually run in cooperation with other universities of applied sciences or universities in Switzerland or abroad, with the aim of drawing together all available theoretical and practical competence. Various degree programmes are delivered in English.

The master's degree programmes combine teaching and researching, introducing students to current research issues and qualifying participants for future work in research. Specific modules are used to impart practical and scientific knowledge. Students additionally collaborate on ongoing research projects and write their master's theses. There is often a focus on specific research issues with practical applications. In terms of content, all BFH courses are research focussed or Master Research Units (MRU).

The master's programme comprises a total of 90 or 120 ECTS credits and lasts one and a half to two years full-time. Some courses of study can be completed on a part-time basis.

On the following pages you will find an overview of the key data and the main content of the individual study programmes. Please note that admission to a course of study at master's level is subject to attainment of a bachelor's degree or equivalent higher education qualification as well as sufficient competence in the language in which the course is taught. Specific checks are carried out to ensure that the admission requirements are met for each master's programme.

If you require further information about the admission requirements or content of a particular course of study, please get in touch with the international office contact of the relevant department. You will find these contact details on page 41. Applications for degree programmes should also be submitted via these offices. If you are interested in an exchange programme, please contact the International Relations Office at your home university.

# Architecture

# Engineering

### 24 General

Languages: German, courses at HES-SO conducted in English and French Site: Burgdorf Number of students: approx. 30 Course type: full-time or part-time/extra-occupational ECTS credits: 120

### **Course content**

### Theory modules (27 ECTS)

Transformation and methods, context and nature, urban planning and public space, office and context, use and gender, the city and creative cluster, materiality and spirit, the urban condition.

### Project studios, profile search, thesis (81 ECTS)

In the project studios, research topics are investigated and developed on the basis of practical assignments. Students work on this with experts in the field and students from other disciplines.

### Optional modules (10 ECTS)

Scientific methods, wood research, international workshop, English, French, German

Study visits (2 ECTS) 1 week

### **Special features**

Cooperation with Ecole d'ingénieurs et d'architectes de Fribourg and Haute école du paysage, d'ingénierie et d'architecture de Genève.

The course is conducted in English at the Burgdorf site. Three theory seminars are held per semester, alternating between Burgdorf, Geneva and Fribourg.

### **Further information**

ahb.bfh.ch/en > Master > Master of Arts in Architecture

### General

Languages: 100 % German or 30 % German / 70 % English or any combination of German, English and French modules Sites: Biel or Burgdorf Number of students: approx. 25 Course type: full-time or part-time / extra-occupational ECTS credits: 90

### **Course content**

### **10 theory modules** (30 ECTS)

- 2 context modules
- 3 modules on extended technical principles
- 3 modules on a technical/scientific specialisation
- 2 optional modules

# Specialisations (30 ECTS)

Civil Engineering and Building Technology: Within this specialisation, students deepen their knowledge in one or any combination of these fields:

- Building restoration and building physics
- Composite and timber construction
- Infrastructure
- Load-bearing structures
- Natural phenomena and geotechnics

**Thesis and block module** (compulsory modules 27/3 ECTS) The thesis is closely linked to a specific research assignment. The block module is carried out jointly by master's students from all over Switzerland in order to establish the reference to all context modules and increase its practical relevance.

### Special features

Joint course of study delivered in cooperation with five Swiss universities of applied sciences.

### **Further information**

ahb.bfh.ch/en > Master > Master Engineering MSE

"From my experience, staying in an exchange programme at BFH and especially in the Master of Architecture, has been a very special opportunity to meet people from many countries around the world, as well as Swiss students and teachers, who, day after day, help us to discover a bit more of Switzerland."

Miroslav Maly (Czech Republic), Architecture

# Wood Technology

# **Business Administration**

### General

Language: 90 % German / 10 % English or 100 % English or any combination of German and English modules Sites: Biel and Rosenheim (Germany) Number of students: approx. 30 Course type: full-time or part-time / extra-occupational ECTS credits: 90 Only course of its type available at a Swiss university of applied sciences

### **Course content**

### Basic studies (30 ECTS)

Basic grounding in the modules of mathematical and scientific fundamentals, research and development, and management.

### Specialisations (30 ECTS)

In-depth, subject-specific learning in one of two specialisations:

- Products and process
- Timber engineering

### Thesis (30 ECTS)

Final project (14 ECTS), thesis (16 ECTS). The topics are derived from the research and development projects in the selected specialisation.

### **Special features**

Cooperation with the University of Applied Sciences in Rosenheim (Germany).

Particular attention is given to the integration of students into industrial projects.

### **Further information**

ahb.bfh.ch/en > Master > Master Wood Technology

#### General

Languages: 95% German, 5% English Site: Bern Number of students: approx. 85 Course type: full-time or part-time/extra-occupational ECTS credits: 90

### **Course content**

#### Module groups

- General management (18 ECTS): situation analysis, solution design, decision-making, project management, organisational development: organisational psychology, business process engineering
- Major corporate, business development (30 ECTS): set-up and growth, maturity and saturation, crisis and turnaround, compulsory elective module (strategic management), international integration module
- Scientific projects and research methodology (27 ECTS): research tools, research methodology, scientific theory and research, practical scientific projects I & II
- Thesis (15 ECTS)

### **Special features**

The course has been developed in cooperation with St. Gallen University of Applied Sciences and supplemented by a strategic partnership with Lucerne University of Applied Sciences and Arts.

It is advised that students continue to work up to a maximum of 50% during their studies.

### **Further information**

business.bfh.ch
> Master > Business Administration
fh-master-wirtschaft.ch

### 26 General

Languages: 95% German, 5% English Sites: Mainly Zurich, but also partly in Bern, Lucerne, St. Gallen, and Winterthur Number of students: approx. 15 Course type: part-time / extra-occupational ECTS credits: 90

### **Course content**

### 1<sup>st</sup> semester

IT management (9 ECTS), trends in IT I (3 ECTS), scientific work (9 ECTS)

### 2<sup>nd</sup> semester

Strategic process management (3 ECTS), project and change management (6 ECTS), applied research and development: case studies and exercises (9 ECTS)

### 3<sup>rd</sup> semester

Operational process management (6 ECTS), business intelligence (6 ECTS), applied research and development: projects (9 ECTS), thesis preparation (3 ECTS)

### 4<sup>th</sup> semester

Trends in IT II (3 ECTS), information security (3 ECTS), IT governance, risk and compliance (6 ECTS), thesis (12 ECTS)

# **Special features**

The course has been developed and is delivered in cooperation with St. Gallen University of Applied Sciences, Lucerne University of Applied Sciences and Arts, and Zurich University of Applied Sciences – School of Management and Law.

It is advised that students continue to work up to a maximum of 50 % during their studies.

# **Further information**

business.bfh.ch > Master > Business Information Technology

### General

Languages: German, French, (English) Site: Bern Number of students: approx. 30 Course type: full-time or part-time/extra-occupational ECTS credits: 120

### **Course content**

### Core modules

- Practice projects, depending on the minors chosen (minors: art history, art education, research and Y/transdisciplinary)
- Theory: introduction to artistic research, directly projectrelated theory sub-modules, and theory events from the HKB's transdisciplinary range
- Synthesis: end-of-semester talks and thesis, based on the preceding projects, containing elements of art, design and technology as well as academic-theoretical and educational parts

The programme is a threefold artistic, academic and pedagogical degree for aspiring educators in art and design. It is aimed at students working in education and in a broad cultural field, who wish to combine design, artistic, technological, academic and educational activities. Students can also specialise in the areas of art mediation, community art, cultural communication or research.

### **Special features**

Cooperation with the Pedagogical University of Bern and the University of Bern. The order in which the major and the minors are taken can be chosen freely to a large extent. At the heart of the degree lies practice-oriented project work, which is accompanied by theoretical courses.

### **Further information**

hkb.bfh.ch/en > Studies > Master > MA Art Education

# **Art Education**

# Composition and Theory

### General

Languages: German, French, (English) Site: Bern Number of students: 25 Course type: full-time or part-time/extra-occupational ECTS credits: 120

# **Course content**

### **Specialisations**

- Composition
- Musical Theatre
- Jazz Composition and Arrangement

### Core modules

- Major-related core module: essentially one-to-one tuition and accompanied projects
- Supplementary modules: career-oriented, practical exercises.
- Graduate training seminar: building up artistic experience (one-week block each semester)
- Minor: choice of a minor from all the modules offered in Music degrees

The programme offers access to composition through various media and techniques. Composition includes from traditional notation on paper, the setting in sound of visual material, to the digital synthesis of sounds and the staging of musical productions.

# **Special features**

- Composition students have regular opportunities to compose for visiting Swiss and international contemporary ensembles (Ensemble Interface, Ensemble Matka, Ensemble Vortex, etc.)
- Regular collaboration with the Bern music scene (Ensemble Proton, Berner Kammerorchester [Bern Chamber Orchestra], Dampfzentrale, etc.) and international festivals (Donaueschingen, Biennale Munich, Darmstadt, etc.)
- Regular interdisciplinary projects (for example John Cage's Europera II or Helmut Oehring's Angelus Novus II)
- Cooperation with Zurich University of the Arts

### **Further information**

hkb.bfh.ch/en > Studies > Master > MA Composition and Theory

# Conservation-Restoration

### General

Languages: German, (English) Site: Bern Number of students: approx. 50 Course type: full-time or part-time/extra-occupational ECTS credits: 120

### **Course content**

#### Specialisations

- Architecture, furnishings and furniture
- Paintings and sculptures
- Graphics, books and photographic objects
- Modern materials and media
- Textiles (Abegg Foundation, Riggisberg)

### Core modules

- Workshop practice
- Art technology and conservation
- Documentation and examination techniques
- Scientific analyses
- History of art and cultural history
- Further foundations and help tools

The emphasis of the programme is on workshop practice, theory and applied research within the chosen specialisation. The project work is sometimes extended through the department's Distant Teaching Programme.

### **Special features**

Students develop a pluridisciplinary specialisation, related to their own practice.

Cooperation with Swiss Conservation-Restoration Campus CRC (Haute école d'arts appliqués Arc La Chaux-de Fonds, University of Applied Sciences and Arts Southern Switzerland, Abegg Foundation Riggisberg).

### **Further information**

#### hkb.bfh.ch/en

> Studies > Master > MA Conservation-Restoration

# Contemporary Arts Practice

### 28 General

Languages: German, French, English Sites: Bern and Biel Number of students: approx. 45 Course type: full-time ECTS credits: 120 Only course of its type available at a Swiss university of applied sciences

### **Course content**

### Core modules

- Artistic production / thesis (70 ECTS)
- Transdisciplinarity: individuality in context (30 ECTS)
- Subject-related theory and practice (20 ECTS)

The programme is a multidisciplinary degree programme for artists from the visual arts, the performing arts, music and literature. Its starting point is the student's individual approach and choice of emphases; together with interdisciplinary projects it enables multidisciplinary exchanges with students and teaching staff from other subjec areas.

### **Special features**

One-to-one tuition

Cooperation with University of Applied Sciences and Arts North-western Switzerland.

### **Further information**

hkb.bfh.ch/en > Studies > Master > MA Contemporary Arts Practice

# Design

### General

Languages: English, German Site: Bern Number of students: approx. 30 (max 18 per semester) Course type: full-time or part-time / extra-occupational ECTS credits: 90

### **Course content**

The MA Communication Design of the Bern University of the Arts (HKB) offers an individual course for design and design-research projects with a high degree of social relevance in the fields of "Design Entrepreneurship" and "Design Research", as a full-time student (over 3 semesters) or as a part-time student (over 5 semesters). On the "Design Entrepreneurship" track you will conclude your studies with a concept for a design-based product or service that you can make into the basis of a subsequent entrepreneurial career. On the "Design Research" track you will conclude your studies with a plan for a research project that you will carry out in your subsequent academic career.

Individual curriculum: in order to acquire project-specific theories, methodologies and competences, you will attend courses from the MA Communication Design, the Division of Design and Fine Arts, the MAS Environmental Information Design, the CAS Data Visualization and other courses of the HKB, the Bern University of Applied Sciences or partner institutions.

Project development: You will develop your project in close collaboration with your supervisor. For this purpose you will agree on a given number of coaching sessions for each semester.

Colloquia: In each semester you will present the current status of your project to your fellow students, your supervisor, invited experts and the Head of Studies of the MA and his / her assistants. The Commission will support you in developing your project, in compiling your individual curriculum and will, at the close of the second semester, define the formal parameters for your thesis.

# Special features

- Future-oriented study program
- Focused exclusively on your project
- Two study tracks: Design Entrepreneurship and Design Research
- Individual curricula
- One-to-one tuition
- Close collaboration with the Research area Communication Design
- Start in autumn

### **Further information**

### hkb.bfh.ch/en

> Studies > Master > MA Communication Design

# **Music Pedagogy**

# **Music Performance**

### General

Languages: German, French Site: Bern Number of students: approx. 100 Course type: full-time ECTS credits: 120

### **Course content**

The programme trains professional artists and teachers with a wide stylistic focus and equips them for music teaching and training. The major is supplemented with an optional minor. Practical music-making includes performing opportunities. Teaching practice secures the acquisition of pedagogic skills. It combines artistic abilities of expression and reflection and technical skill with the tools to teach them.

### Specialisations

- Music pedagogy in Classical music, Jazz or Rhythmics
- Music education: music teaching in secondary schools

### Core modules

- Core subject: interpretation, development of technical instrumental skills, expanding the repertoire in various styles
- Theory: analysis, knowledge of sources / interpretation practice, various approaches to interpretation and perspectives, basics of artistic research, project management, self-management, the music business
- Subject-specific didactic courses, practical placements
- Practice: audition training, ensemble, orchestra, music education, advanced band concepts, electronics and music (jazz)
- Specialisation in the minor
- Cooperation with the Institute of Musicology, University of Bern

### **Further information**

hkb.bfh.ch/en > Studies > Master > MA Music Pedagogy

#### General

Languages: German, French, (English) Site: Bern Number of students: approx. 115 Course type: full-time ECTS credits: 120

### **Course content**

### Specialisations

- Classical music (instrumental/vocal)
- Jazz

#### Core modules

- Core subjects: development of technical instrumental skills, expanding the personal repertoire in various styles, gaining performance experiences in innovative environments
- Classical music: historical performance practice and contemporary music, interdisciplinary projects
- Jazz: free improvisation, solo performance, band coaching, recording
- Theory: contextualization of the student's own artistic profile, study of sources and analysis, project management and self-management in music business providing knowledge of the current industry climate
- Research: basics of artistic research, various approaches to interpretation and historical as well as contemporary perspectives
- Practice: audition training, ensemble, orchestra, music education, music-mediation/communication, advanced band concepts (jazz), electronics and music, cooperative projects with festivals and institutions all over Europe
- Specialisation in a minor: by choosing one of 22 minor options, students link their instrumental / vocal practice to a wider range of classical as well as interdisciplinary fields, such as media, performance practice, musical theatre, etc.

### **Further information**

### hkb.bfh.ch/en

> Studies > Master > MA Music Performance

# Specialized Music Performance

### 30 General

Languages: German, French Sites: Bern and Biel Number of students: approx. 35 Course type: full-time ECTS credits: 120

### **Course content**

Specialisations

Instrument/Voice:

- Core subject instrument / voice
- Music practice
- Minors (2 x 20 ECTS)

### Opera:

- Opera-specific voice lessons (40 ECTS)
- Practical work in the opera studio (60 ECTS)
- External courses in a musical theatre, opera house or similar institution (20 ECTS)

The programme corresponds to the highest educational qualification level in classical music and opera. The course provides intensely individualised training to help students with above average talent reach the top international level. To this end, the course engages with the entire stylistic range of music and musical theatre and offers regular performances as well as a stimulating and innovative learning environment.

### **Special features**

Relating the individual interest to the changing field of musical activity this programme offers the opportunity to strengthen the student's profile either in contemporary performance practice (théatre musical, media, improvisation, interdisciplinarity) or in the field of research (as preparation for a PhD) or in the growing field of music-mediation / communication (in collaboration with festivals and institutions all around Europe).

Emphasis is placed on one-to-one teaching. Career-related supplements that were already taken in a preceding master's degree can be accredited.

# **Further information**

hkb.bfh.ch/en > Studies > Master > MA Specialized Music Performance

# Theater

### General

Languages: German, English Site: Bern Number of students: approx. 35 Course type: full-time ECTS credits: 90

### **Course content**

### Core modules

- Campus events, workshops and toolboxes: within this module group, practical workshops are offered that aim to expand the range of the performance skills available to the participants. The toolboxes give overarching competencies in organisation, infrastructure, finance, technology, society, theory and research.
- Guest projects: curated block courses or transdisciplinary projects by high-profile theatre professionals as guest teachers.
- Production: this module group includes the thesis and the individual development module. This format gives students the time and space to reflect on competencies and knowledge acquired during studies independently and to transfer these to the student's own work. The modules of this group are developed and realised by the students independently and supervised by a mentor, whose artistic work corresponds to the content of the respective student project.

The master's degree programme prepares graduates for a highly competitive international market. Building on the more general bachelor's degrees, it focuses on student independence and promotes skills in self-management and independent creative production (authorship). The degree programme shapes specific individual strengths and extends the disciplinary horizon beyond conventional theatrical traditions. Students take their specialisation to a high level. Throughout their studies they initiate, plan and realise their own productions and relate them to various audience interests. They learn how to involve different art forms and target groups in their projects. The course of study is also geared to artists from other disciplines, such as dancers and performers.

### **Special features**

Students have access to courses offered within the whole Master-Campus-Theatre-CH (Swiss drama schools in Bern, Lausanne, Verscio and Zurich), universities within and beyond Europe.

# **Further information**

hkb.bfh.ch/en > Studies > Master > MA Theater

# Biomedical Engineering

### General

Languages: 90 % English, 10 % German Sites: Bern, some parts in Biel Number of students: approx. 145 Course type: full-time or part-time / extra-occupational ECTS credits: 120

### **Course content**

#### **Basic modules**

Biomedical engineering, Human medicine, Applied mathematics

#### Specialisations

- 2<sup>nd</sup> and 3<sup>rd</sup> semesters
- Biomechanical systems
- Electronic implants
- Image-guided therapy

**Thesis** (30 ECTS) 4<sup>th</sup> semester

In this programme, students gain a sound foundation in medical and technical modules and in biomedical engineering applications. The programme is offered by the Faculty of Medicine of the University of Bern in close cooperation with BFH.

Since it is offered almost completely in English, students can enjoy interdisciplinary studies with fellow students of different cultural and academic backgrounds.

Successful completion enables commencement of a doctoral thesis. To support regular part-time work, mandatory courses only take place (with rare exceptions) on three days per week.

### **Further information**

ti.bfh.ch/en > Master > MSc Biomedical Engineering

# Engineering

### General

Languages: 100 % German or 100 % French or any combination of German and French completed by 70 % English Sites: Biel or Burgdorf and Zurich or Lausanne Number of students: approx. 65 Course type: full-time or part-time/extra-occupational ECTS credits: 90

### **Course content**

### Theory modules (30 ECTS)

- 2 context modules
- 3 modules on extended technical principles
- 3 modules on a technical/scientific specialisation
- 2 optional modules

### **Specialisations** (30 ECTS)

- Human interface technology
- Energy, transport, mobility
- Mobile information society
- Production technology
- Civil Engineering

Two additional modules, selected within different Master Research Units (3 ECTS).

Two project reports equivalent to 9 and 15 ECTS; the project reports form part of a larger project or research assignment.

**Thesis and block module** (compulsory modules 27/3 ECTS) The master's thesis is closely linked to a specific research assignment of an economic partner. The block module is carried out by master's students from all over Switzerland together in order to establish the reference to all context modules and increase its practical relevance.

### **Special features**

Joint degree programme in cooperation with the specialised technical departments of all Swiss universities of applied sciences. 25% of all students come from abroad.

### Further information

ti.bfh.ch/en > Master > MSc Engineering msengineering.ch

"This is such a wonderful experience as it develops a person in every aspect of life through the rich cultural diversity and cross-pollination of ideas with students and teachers from a very different background from mine." 31

# Midwifery

# Nursing

### 32 General

Language: German and English Sites: Bern and Winterthur Number of students: approx. 45 Course type: full-time or part-time ECTS credits: 90

### **Course content**

The Master's degree course Midwifery builds on the skills gained at the Bachelor of Science level. The contents of the module are research-based and consider current social and medical developments. The central idea behind the MSc Midwifery course is to enable the students to further advance the quality of perinatal healthcare and to join in the design of innovative family-focused models of care. The studies prepare students for more advanced general or specialized positions as midwifes.

### Module groups

- Midwifery development (15 ECTS): ethics, advanced midwifery practice
- Midwifery specialisation (20 ECTS) psychosocial health, communication
- Research (20 ECTS): theory and concepts,
- research methods, statistics
- Transfer (15 ECTS): practical placements in research
- Thesis (20 ECTS)

### **Special features**

Cooperation with Zurich University of Applied Sciences. As a specialist, the midwife MSc can lead and assist in expert perinatal care within an interdisciplinary and multi-professional team in complex childbirth situations by providing comprehensive advice and continuity of care.

### **Further information**

health.bfh.ch > Master > Midwifery

### General

Languages: 60 % German, 40 % English (a good understanding of the German language is important; communication and examinations in English are possible) Sites: Bern, St. Gallen and Winterthur Number of students: approx. 45 Course type: full-time or part-time / extra-occupational ECTS credits: 90 Only course of its type available at a Swiss university of applied sciences

### **Course content**

With particular emphasis on evidence-based practice, students learn to develop various solution approaches and models for highly complex nursing problems, carry out research assignments and initiate and manage projects.

### Module groups

- Care development (20 ECTS): ethics, advanced nursing practice (ANP), communication, practice concepts
- Research (25 ECTS): theory and concepts, research methods, statistics, research planning and evaluation
- Nursing specialisation (15 ECTS): health promotion and prevention, psychosocial health, integrating approaches to nursing efficiency and effectiveness
- Transfer (10 ECTS): practical placements in research, public sector, management or as ANP
- Thesis (20 ECTS)

# **Special features**

Cooperation with St. Gallen University of Applied Sciences and Zurich University of Applied Sciences. The cooperating universities offer different specialisations (nursing specialisation module group). The course enables students to take on new roles and responsibilities, including as part of interdisciplinary teams.

### **Further information**

health.bfh.ch > Master > Nursing

# Physiotherapy

### General

Language: German and English Sites: Bern and Winterthur Number of students: approx. 45 Course type: part-time/extra-occupational ECTS credits: 90 Only course of its type available at a Swiss university of applied sciences

# **Course content**

### Module groups

- Clinical specialization (28 ECTS): Applicants may choose between the fields of pelvic floor, muscoloskeletal, geriatrics, cardiopulmonary or general physiotherapy (uneven years) and between lymphology-oncology, neurology, paediatrics, sports or general physiotherapy (even years)
- Research methods (28 ECTS): Greater insight into the use of specialized clinical research techniques in the physiotherapeutic, clinical, interdisciplinary and interprofessional contexts.
- Transfer (14 ECTS): Practical placements in research, professional development and clinics
- Thesis (20 ECTS)

# **Special features**

Cooperation with Zurich University of Applied Sciences.

### **Further information**

health.bfh.ch > Master > Physiotherapy

# Life Sciences – Agricultural and Forest Sciences

### General

Language: 100% English (except for the two majors which are organised with Weihenstephan-Triesdorf University of Applied Sciences: the semesters taking place in Germany are taught in German) Sites: Zollikofen and Bern Number of students: approx. 50 Course type: full-time or part-time/extra-occupational ECTS credits: 90

### **Course content**

# Specialisation modules (30 ECTS)

### Module groups:

- Value chains and rural development an economic approach
- Sustainable production systems a technical-ecological approach
- International management of forest industries a bordercrossing approach (with one semester in Germany, at Weihenstephan-Triesdorf University of Applied Sciences)
- Regional management in mountain areas an alpine approach (with one semester in Germany, at Weihenstephan-Triesdorf University of Applied Sciences)

### Entrepreneurial basics (12 ECTS)

These modules enable the students to understand and address the interfaces between their technical-scientific core study and the economic and social environment.

# Life Sciences advanced (18 ECTS)

These modules cover subject matters common for several specialisations (human nutrition, natural resources and sustainability, biology, ecology, chemistry, statistics, quality management and project management in life sciences research). They start where the respective bachelor's modules ended.

### Thesis (30 ECTS)

Research project on a question of practical relevance. The thesis is the backbone of the individual degree programme.

### **Special features**

Exchange students are recommended to take mainly the specialisation modules offered by BFH. The programme is offered in cooperation with the Zurich University of Applied Sciences, the University of Applied Sciences and Arts North-western Switzerland and the University of Applied Sciences and Arts Western Switzerland; the entrepreneurial and life sciences modules are common to all cooperating universities.

### **Further information**

hafl.bfh.ch/en > Degree Programmes > Master

Social Work

# Life Sciences – Food, Nutrition and Health

### 34 General

Language: 100 % English Sites: Zollikofen, Bern and Sion Number of students: approx. 30 Course type: full-time or part-time/extra-occupational ECTS credits: 90

### **Course content**

#### Specialisation modules (30 ECTS)

- Food quality from farm to fork
- Food ingredients
- Food regulations and customer expectations
- Nutritional value through process design
- Food for specific target groups

### Entrepreneurial basics (12 ECTS)

These modules enable the students to understand and address the interfaces between their technical-scientific core study and the economic and social environment.

### Life Sciences advanced (18 ECTS)

These modules cover subject matters common for several specialisations (human nutrition, natural resources and sustainability, biology, ecology, chemistry, statistics, quality management and project management in life sciences research). They start where the respective bachelor's modules ended.

### Thesis (30 ECTS)

Research project on a question of practical relevance. The thesis is the backbone of the individual degree programme.

### **Special features**

Exchange students are recommended to take mainly the specialisation modules offered by BFH. The programme is offered in cooperation with the Zurich University of Applied Sciences, the University of Applied Sciences and Arts Northwestern Switzerland and the University of Applied Sciences and Arts Western Switzerland (HES-SO); the entrepreneurial and life sciences modules are common to all cooperating universities. Specialisation modules are offered jointly by BFH Food Sciences, BFH Health and HES-SO Life Technologies.

### **Further information**

hafl.bfh.ch/en > Degree Programmes > Master

### General

Language: 100 % German Sites: Bern, Lucerne, St. Gallen and Zurich Number of students: approx. 65 Course type: full-time or part-time / extra-occupational ECTS credits: 90

### **Course content**

#### Core modules (30 ECTS)

- International comparative social policy
- Change and innovation in organisations
- Development of theory and methods
- Scientific theory and research methods

### Specialisations (total 18 ECTS)

- Social change and the organisation of social work
- Social policy and social economics
- Professional and methodological development
- Social problems, social conflict and lifestyle

### Research (12 ECTS)

Optional modules are available as follows: qualitative research, quantitative research, evaluation.

#### Transfer

The transfer module "Development and problem solving" underlines the practical orientation of the course of study. The content and methods learnt are transferred to practice projects. The focus is on the skills of development and problem solving.

#### Thesis (30 ECTS)

- Project module for outlining the thesis
- Supervised work and preparation for the thesis

### **Special features**

Cooperation with universities of applied science in Lucerne, St. Gallen and Zurich. Lectures take place at all sites. The programme can commence in the spring and autumn semesters.

### **Further information**

social-work.bfh.ch > Master masterinsozialerarbeit.ch

## **Sport Sciences**

## **Sports**

#### General

Language: 50 % German, 50 % French Sites: Magglingen and Fribourg Number of students: approx. 45 Course type: full-time or part-time / extra-occupational ECTS credits: 90

#### **Course content**

#### Specialisations

#### Education:

Students obtain the Master of Science in Sports, prerequisite to the professional qualification as a physical education teacher.

Health and research: Graduates will be able to conduct independent research in the promotion of physical activity and health.

Both courses culminate in a scientific project and thesis.

#### **Special features**

The degree programme is a Joint Master of Science in Sports in cooperation with the University of Fribourg.

#### Further information

ehsm.admin.ch/en
> MSc Sports Sciences

#### General

Languages: 90 % German, 10 % English Site: Magglingen Number of students: approx. 45 Course type: full-time or part-time/extra-occupational ECTS credits: 120 Only course of its type available at a Swiss university of applied sciences

#### **Course content**

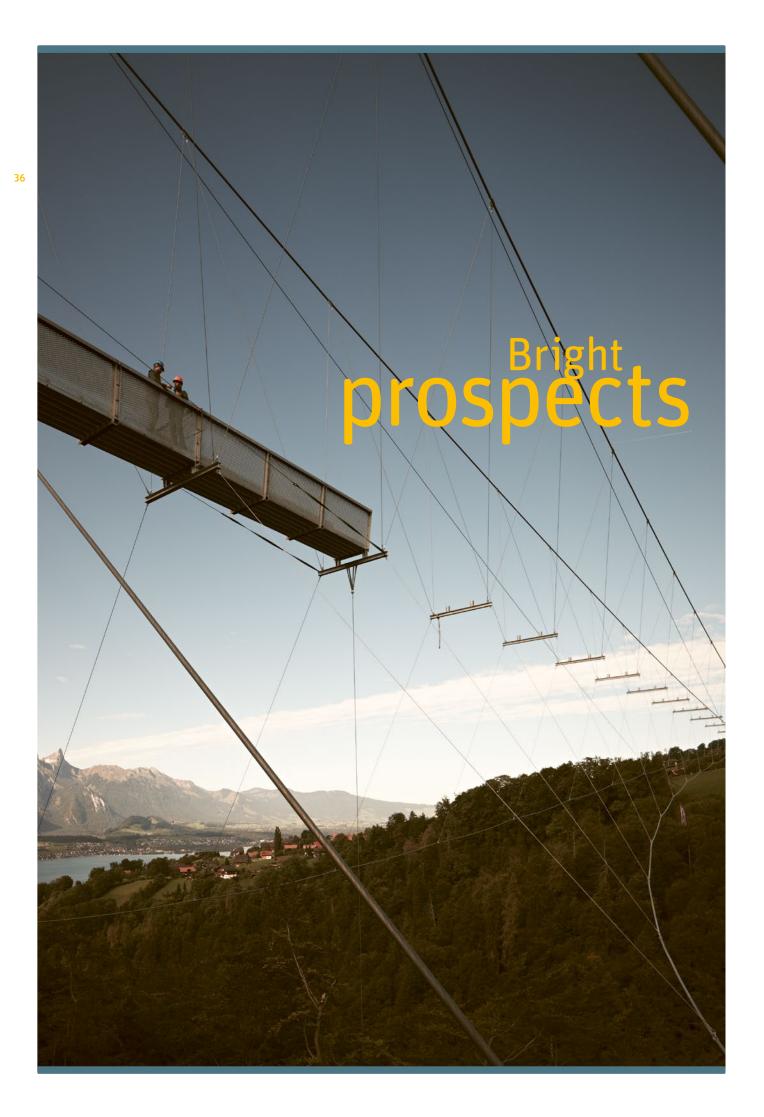
The degree programme is intended to produce high-quality graduates who have an excellent understanding of high-performance athletes, their coaches, the organisation, management and administration of elite sport.

The Master of Science in High-Performance Sports will provide well-grounded educational processes in the behavioural and cognitive sciences, high-performance sciences and technology as well as management processes and responsibilities.

The degree programme is completed by a scientific project and thesis.

#### **Further information**

ehsm.admin.ch/en
> MSc EHSM Elite Sports



## **Bern University of Applied Sciences**

#### **Swiss Education System**

Bern University of Applied Sciences BFH is part of the versatile, highquality Swiss education system. This system is enriched by the diversity of the 26 cantons being responsible for all aspects of education in its own territory. After nine mandatory years, students can choose to continue their studies either in academic upper secondary schools, specialised middle schools or in vocational education and training. Higher education is provided by both the traditional universities, including the cantonal universities and the two Federal Institutes of Technology in Zurich and Lausanne, and the Swiss universities of applied sciences. The latter are distinguished in particular by their practical approach and their focus on applied research.

#### **BFH in brief**

BFH welcomes foreign students. Located in the heart of Switzerland, it is a particularly attractive location. Some of the bachelor's and master's programmes it offers are unique in Switzerland. The Bern region is bilingual and therefore you will often find courses offered in different languages. BFH also provides excellent opportunities for practical experience in business, public institutions, culture and administration.

#### Portrait

BFH is one of the seven Swiss universities of applied sciences. It was founded in 1997 by regrouping 13 specialised schools and therefore offers a wide range of further education and training courses: bachelor's and master's programmes, Executive Master's programmes, Diploma and Certificate of Advanced Studies programmes and seminars are available. Most programmes are taught in German, while others are conducted both in French and German. An increasing number of courses or modules within these programmes are held in English, and courses are internationally accredited.

BFH fosters an active internationalisation policy and cooperates with a number of partner institutions within and beyond Europe, in terms of student, teaching and staff exchanges, research and service delivery.

#### Facts & Figures

Foundation: 1 October 1997 Study programmes: 30 Bachelor / 22 Master Teaching languages: German, French, in some cases English Students: 6891 (proportion of women 48%) Staff: 2418 (936 teaching staff)

#### Departments

- Architecture, Wood and Civil Engineering: 614 students
- Bern University of the Arts: 1152 students
- Business: 1130 students
- Engineering and Information Technology: 1297 students
- Health Professions: 1144
- School of Agricultural, Forest and Food Sciences HAFL: 722 students
- Social Work: 668
- Swiss Federal Institute of Sports Magglingen SFISM: 164 students

#### **BFH Centres**

Many tasks call for interdisciplinary solutions today. In order to better address these requirements in the future, BFH has grouped its areas of expertise into BFH Centres based on its established research groups and institutes. These centres develop responses to current and future social and technological issues. They are unique in Switzerland either in their composition or in their holistic approach. The BFH distinguishes itself by concentrating on the following BFH Centres:

- Wood Resource and Material
- Food Systems
- Social Security
- Technologies in Sports and Medicine
- Arts in Context
- Digital Society
- Energy Storage

#### Studies

The academic year begins in mid-September and is divided into two semesters. The autumn semester runs from September to January / February and the spring semester from February to June / July.

Bachelor's programmes are usually taken over three years if studied full-time. The normal duration of a master's degree programme is one and a half to two years. Most bachelor's degree and some master's degree courses can be taken part-time over a longer time period.

Studying is done in "modules". These are study units that are selfcontained in terms of content and topic. A course is made up of a number of different, partly interchangeable modules, which together form a study programme that is coherent in terms of content.

There are three kinds of modules: compulsory, compulsory elective and optional: compulsory modules must be taken; compulsory elective modules can be chosen from a range on offer; and optional modules cover students' further interests. The work for modules is done during contact hours (lectures, exercises) and as self-study (individual and accompanied). A module is completed once a certain number of ECTS credits have been awarded.

#### **ECTS credits**

The workload in the selected programme of study is measured by the European Credit Transfer System (ECTS) in terms of ECTS "credits", as shown below. ECTS is the European system for calculating, transferring and accumulating student achievement. One ECTS credit corresponds to 30 hours of student work.

Student year full-time: 60 ECTS credits Student semester full-time: 30 ECTS credits Bachelor's degree course: 180 ECTS credits Master's degree course: 90 or 120 ECTS credits

ec.europa.eu/education/tools/ects\_en.htm

#### 38 Certificate of Global Competence

With BFH's supplementary "Certificate of Global Competence", students have the opportunity to acquire specific intercultural and transcultural skills during the course of their studies – and to earn a qualification for them.

#### What is the Certificate of Global Competence?

The Certificate of Global Competence offers students the opportunity to acquire additional intercultural and transcultural skills as part of their regular studies – and to provide evidence of this to future employers. The certificate provides excellent preparation for a professional future in an international context.

#### Who can obtain the Certificate of Global Competence?

The certificate is available to all bachelor's or master's students, as long as they include it early enough in their study plan.

#### How does the Certificate of Global Competence work?

The students achieve portfolio points rather than credits for the Certificate of Global Competence. This allows them to match activities with their own personal and professional needs and to have extra-curricular activities taken into account.

#### International students at BFH

BFH is interested in student exchanges. Students on these programmes are therefore welcomed at BFH and are well looked after.

#### **Study options**

There are basically two options available. You can complete one or two exchange semesters or the entire degree programme at BFH. Practical work placements or research visits can also be arranged for doctoral students in some cases.

bfh.ch/international

#### Support

The International Relations Office is responsible for administering and supporting international matters at BFH. Among other things it looks after your wellbeing and helps deal with general questions related to your study visit. Each department has its own international contact point, which will answer questions about your course and help you to settle into your studies.

Would you like to get in touch with other international students? Once every semester BFH organises an International Welcome Event, which will give you the opportunity to meet other students from abroad. The Erasmus Student Network, in which BFH is involved, also offers a whole range of cultural and social events.

bfh.ch/international bern.esn.ch

#### Language courses

A good knowledge of German is a requirement for admission to most programmes. Some programmes also require knowledge of French. BFH offers its exchange students German courses in cooperation with the University of Bern for further improvement of their language skills. The Office for German as a Foreign Language of the University of Bern runs integration courses for exchange students, together with its regular "German as a foreign language" programme. BFH covers the cost of courses for students of the Swiss-European Mobility Programme (formerly Erasmus). In addition to these courses the local section of the Erasmus Student Network organises a language tandem for exchange students.

University of Bern, The Office for German as a Foreign Language: daf.unibe.ch

#### Sport

Do you enjoy sport? BFH offers its students and staff a range of attractive sports facilities and events. These include training sessions and courses as well as various sports tournaments, and "The Games", its traditional sports day held in early summer. With the exception of special courses, these facilities are free for students. Furthermore, for a small annual fee you can use the extensive sports facilities at the University of Bern.

bfh.ch/hochschulsport

#### Admission requirements and costs

#### Language skills

Prospective students need to have sufficient knowledge of the teaching language to gain admission and to benefit from their period of study here. German is the usual teaching language at BFH. On many courses, French and/or English are also used. European language level B2–C2 is required depending on the programme.

#### Admission to exchange programmes

If you are interested in doing an exchange programme of one to two semesters at BFH, there must be an exchange agreement with your home university. Within Europe, student exchanges take place in the context of the Swiss-European Mobility Programme (formerly Erasmus). Get in touch with your home university's international relations office to learn about the existing exchange agreements. It is also the place to start organising your exchange programme. The recommended closing date for applications is 15 April (autumn semester) and 15 October (spring semester). An exchange is only possible from the 3<sup>rd</sup> semester.

National Agency of the Swiss-European Mobility Programme: movetia.ch/en

#### Admission to degree programmes

It is also possible to complete a full degree programme at BFH. The important thing is that you fulfil the entrance requirements. To study on a degree programme, you need to comply with the particular requirements. Students with foreign ID must provide additional documents to those usually required for enrolment. If you require further information about the admission requirements, please get in touch with the international point of contact of the relevant department (see page 41).

#### Costs

Enrolment, tuition and examination fees at BFH are moderate even for foreign students. These fees are not charged in an exchange of the Swiss-European Mobility Programme (formerly Erasmus) since the students remain enrolled at their home university. Further contributions, such as for learning materials and study trips, vary according to the course of study. For further details please consult the international point of contact of the individual departments (see page 41).

#### The eight Departments of BFH

#### Architecture, Wood and Civil Engineering

The Department of Architecture, Wood and Civil Engineering BFH-AHB in Biel and Burgdorf is one of Switzerland's leading educational institutions in the area of building and construction. As part of a nationally and internationally recognised university of applied sciences with many years of experience and tradition, BFH-AHB equips the architects, civil engineers and wood engineers of the future with the qualifications for a successful career. All the department's bachelor's and master's degree programmes are closely linked to current practices and trends, and facilitate the rapid progression of new graduates into their professional life. The Bachelor of Science in Wood Technology held in Biel is unique in Switzerland.

The research activities are oriented towards practical experience. As part of its service assignments, BFH-AHB carries out product testing, planning, expert advice and consulting services for the public and private sector. Applied research and development is closely associated with the master's degree programme.

Burgdorf and Biel are attractive sites near the capital city of Bern. The clear organisation of the two sites enables and promotes a lively and valuable exchange between our students and teaching staff.

#### Bern University of the Arts

Highly individualised tuition and research strengths: as Switzerland's first transdisciplinary university of the arts, Bern University of the Arts HKB offers a diverse study programme in the divisions of Music (Classical/Jazz), Design and Fine Arts, Conservation and Restoration, Opera/Theatre and Literature. It enables its students to enjoy a top-class education extending over all three academic levels up to a doctoral programme (in collaboration with the University of Bern) and attaches importance to tuition that takes account of the changing nature of the professional world. The Y Institute – a centre for transdisciplinary tuition – organises and moderates exchange between the disciplines. HKB research combines scientific and artistic approaches. It is organized in four key areas: Intermediality, Interpretation, Communication Design and Materiality in Art and Culture. The further education programme at HKB benefits from extensive networking in all divisions of HKB; it is aimed at artists as well as educators who are seeking to expand their artistic repertoire and acquire new knowledge, skills and qualifications. An outstanding infrastructure, focus on the latest artistic and scientific developments, innovative teaching methods, a manageable size with a familial atmosphere together with its location in the cultural cities of Bern and Biel contribute to the unique nature of Bern University of the Arts.

#### Business

The Business Department offers the entire package – degree programmes, further education, applied research and development as well as services.

Courses in the Business Department are orientated towards the needs of the employment market. These include Business Information Technology BSc and Business Administration BSc – which also includes its International Programme – and a MSc in Business Administration. In addition to its degree programmes the Department has devised a practically oriented, scientifically-based further education programme. Extensive further education opportunities are available in various EMBA, MAS, DAS and CAS courses.

Research by the Business Department is based on specific, practical problems, for which sample solutions and methods for finding solutions are identified and documented. The main focus is on the areas of business management and development, and e-government.

The site, with nearly 1300 students and 150 staff, is located in the city of Bern. The infrastructural facilities include comprehensive WLAN, a cafeteria and a library.

#### **Engineering and Information Technology**

The Department of Engineering and Information Technology BFH-TI undertakes coordinated services in the areas of education, continuing education, applied research and development and technological knowledge transfer. Its work has a three-fold focus: high quality, in order to be able to provide the economy with qualified, innovative engineers and competitive services, an international outlook, to open up to students and staff the best opportunities in the globalised world of education and business, and interdisciplinary thinking and action, to be able to match the high expectations of increasingly heterogeneous teams in industry and science.

BFH-TI offers seven bachelor's and two master's degree courses as well as an extensive, mainly extra-occupational further education courses. The BSc degree courses in Automotive Engineering and Medical Informatics are unique in Switzerland, as is the Master of Science in Biomedical Engineering which is run by the University of Bern in close collaboration with BFH-TI. Course languages are German, French and in some cases English.

The department has sites in Biel, Burgdorf and Bern, all of which have the latest state-of-the-art technological facilities.

#### 40 Health Professions

The Department of Health Professions is characterised by strong interdisciplinary. The Department offers bachelor's degree courses in Nursing, Physiotherapy, and Midwifery – as well as Nutrition and Dietetics, a course which is unique in German-speaking Switzerland. An MSc degree course (Master of Science) in Nursing, Midwifery and Physiotherapy was launched in autumn 2010. Various MAS, DAS and CAS study programmes provide extensive opportunities for knowledge consolidation, specialisation and further development, both for specific occupations and on an interdisciplinary basis, for example in the fields of "Mental Health and Illness" and "Management in the Healthcare System".

The Department of Health Professions also provides numerous services with customised products, for example in the form of in-house training courses, communication training, specialist consulting or contract research/evaluation. Research is applicationoriented and practice-based, in the form of disciplinary and interdisciplinary projects. The focal areas are "Health promotion and prevention across all life stages", and "Quality improvement, effectiveness and economic efficiency in the health system".

The Department of Health Professions, with around 1150 students and around 180 staff, is located at the University Hospital (Inselspital) near the main station in Bern. The facilities offer two cafeterias, a well-stocked library, an international lounge where students and staff receive advice and information about international affairs, extensive WLAN as well as a fully equipped skills centre for a practice-oriented learning experience.

Furthermore, the Department of Health Professions offers communication training with professional actors in all four disciplines. The internationally renowned movement laboratory has been established for exclusive high-quality research purposes in the field of physiotherapy.

#### School of Agricultural, Forest and Food Sciences

The School of Agricultural, Forest and Food Sciences BFH-HAFL in Zollikofen is a centre of excellence in the agricultural, forestry and food industries. It offers three bachelor's programmes, taught in German / French that are unique in Switzerland: Agriculture, Forest Science, and Food Science & Management. It also offers two master's programmes in Life Sciences delivered in English: Agricultural and Forest Sciences and Food, Nutrition & Health.

Thanks to BFH-HAFL's close links to various partners from the agriculture, forestry and food industries, students receive an education that is both extremely practical and scientifically based. Sustainability forms an important element of the content in all degree programmes.

In addition to its role in education, BFH-HAFL is active in research and consulting projects in Switzerland and around the world. The portfolio includes more than 70 projects with partners in over 120 countries.

The BFH-HAFL campus is located in the countryside outside the city of Bern. With approximately 750 students and 250 staff, the campus is of a manageable size. The infrastructure includes a student residence and kitchen, cafeteria, library, WLAN, laboratories, greenhouse, swimming pool, and a beach volleyball area.

#### Social Work

The Department of Social Work has a long tradition as a training establishment for prospective social workers. An MSc in Social Work has been available since 2008, in addition to its tried and tested bachelor's programme.

The Department of Social Work specialises in the following main subject areas: social security, organisation, children and young people, the elderly, management concepts and methods of social work. Each area offers extensive opportunities for further development and specialisation of professional skills in various MAS, DAS and CAS courses. The range also includes numerous sciencebased services for organisations and institutions. Since applied research by the Department of Social Work is also centred on these main areas, new research findings are incorporated directly into its further education courses and services.

The Department of Social Work, with at least 700 students and around 100 staff, is located a five-minute walk from the Bern's main train station in the Länggasse district. The facilities include a cafeteria, a library and extensive WLAN.

#### Swiss Federal Institute of Sports Magglingen SFISM

The Swiss Federal Institute of Sports Magglingen SFISM is one of Swiss sport's most important educational centres.

The Bachelor of Science in Sports programme with the focus on "sports teaching" prepares students for employment as sports teachers in schools and for non-school activities. The comprehensive practical and theoretical training in sport opens doors to further study (a master's degree).

The Master of Science in Sports with specialism in high- performance sports normally follows on from the bachelor's degree. With their Master of Science in Sport Sciences with teaching specialisation, SFISM and the University of Fribourg jointly offer a newly designed master's programme. The students learn how to apply scientific working methods and implement their findings into sports practice.

In addition to students, numerous trainers from all clubs and associations come to Magglingen for further education and training. Athletes have professional training facilities in Magglingen.

The SFISM 50-hectare campus is located at an altitude of 800 to 1000 metres above Biel. It has five sports halls, indoor and outdoor swimming pools, training rooms, laboratories and various lecture theatres with state-of-the-art technical installations. The campus also has a hotel and student residence, the largest sports library in Switzerland and two restaurants with bars.

#### Contacts

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#### ESN Bern – Erasmus Student Network

bern.esn.ch

## **Practical Information**

#### 42 Entry

To enter the country, foreign nationals need a valid travel document that is recognised by Switzerland. If you are a national of an EU or EFTA country you do not need a visa to study in Switzerland. Persons from most other countries must apply for an entry and residence visa from the Swiss representation in their home country at least four months before their course starts. A tourist visa does not give you the right to study in Switzerland. It is the responsibility of all exchange students to apply for a residence permit before their course starts.

Swiss representations abroad: eda.admin.ch > Representations

Entry to Switzerland: sem.admin.ch > Entry

#### Insurance

In Switzerland, health insurance for stays of longer than three months is obligatory. A basic insurance plan covers medical care in the case of sickness or accident. Students are responsible for taking out health insurance themselves. Students from the EU/ EFTA area who have a European health insurance card, who don't work in Switzerland and who stay in Switzerland for the purpose of basic / continuing education and training are exempted from the duty to take out health insurance. Privately insured students from non-EU countries whose health insurance schemes are recognised by the Swiss authorities can, on application, exempt themselves from the duty to take out health insurance. The International Relations Office will help you apply to health insurance companies.

Information on health insurance for students from EU or EFTA countries:

kvg.org > Private persons > Compulsory Insurance bag.admin.ch > Topics > Insurance

Personal liability insurance insures you for any damage you might cause to other persons or their property. This type of insurance is not required by law, but we recommend that exchange students take out a private personal liability policy. In Switzerland this costs between CHF 100 and CHF 150 per annum.

#### Accommodation

BFH is not a campus university in the true sense of the word, having only a limited supply of student accommodation. Students are responsible for their own housing needs.

#### bfh.ch

#### Jobs

In order to take paid work in Switzerland, you require a work permit. Nationals of EU and EFTA countries have the same opportunities on the employment market as Swiss nationals. Nationals of other countries are subject to more stringent conditions.

The Erasmus Student Network can provide some useful tips on finding a job.

ESN Bern – Erasmus Student Network: bern.esn.ch

#### Living costs

Living costs in Switzerland are relatively high. In addition to the costs of your course, you should allow CHF 1600 to 2400 per month overall for food and accommodation. Costs will vary according to region and lifestyle.

#### **Further information**

ESN Guide for Exchange Students in Switzerland: esn.ch



# Practical training

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