



Bern University
of Applied Sciences



Master of Science in Engineering

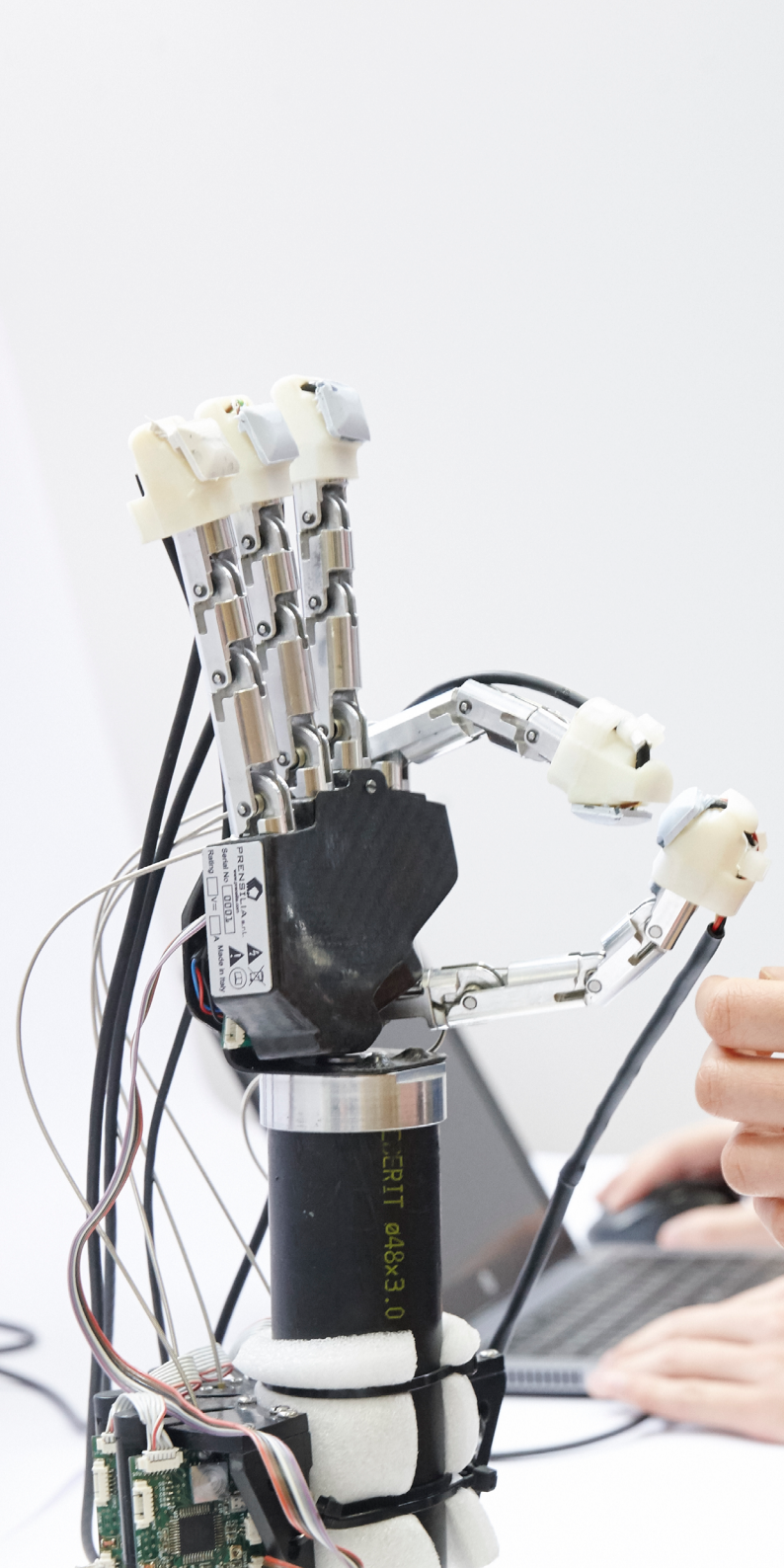
Explore 11 pathways across technology,
IT and construction in our Cooperative
Master in Engineering



MSE

MASTER OF SCIENCE
IN ENGINEERING

► bfh.ch/mse



The MSE at a glance

As a Master of Science in Engineering student, you work in a dynamic environment shaped by close collaboration with leading research institutions and industry partners. You develop advanced competencies that empower you to take responsibility for complex, high-impact projects and to contribute confidently, both at a technical and strategic level.

A Joint Master's Programme

The Master of Science in Engineering is a flagship programme run by all eight public Swiss universities of applied sciences. It offers a highly personalised academic journey across engineering, IT, construction and planning. With 11 specialised profiles to choose from, the programme offers exceptional breadth and flexibility. A strong emphasis on practical application, accounting for approximately two-thirds of the curriculum, ensures that your education is closely aligned with the evolving needs of industry and future employers.

Career perspectives

Graduates are ideally positioned for leadership roles in research and development. Whether pursuing specialist or interdisciplinary career paths, you will be equipped to take on complex challenges and drive innovation. Your expertise in advanced methodologies and management will enable you to actively shape the development of new products, services and organisational strategies.

Practical relevance

Practical application is a central pillar of the MSE programme. In close collaboration with industry partners, real-world challenges are systematically integrated into coursework and project work. The programme's flexible structure enables students to engage with cross-cutting topics across different specialisation profiles, reflecting the growing importance of interdisciplinary and trans-disciplinary approaches in both research and industry. From an early stage, students are embedded within research units and contribute to ongoing, cutting-edge projects. The master's thesis will be conducted in partnership with a business, ensuring strong practical orientation and direct societal and industrial relevance.

International experience and competence

The programme offers opportunities to gain valuable international orientation through study visits abroad and participation in global research projects within selected profiles. These experiences enhance your intercultural competence and prepare you to operate confidently in an international professional environment.

Study programme

At Bern University of Applied Sciences (BFH), the Master of Science in Engineering is designed with you in mind. The programme's flexible modular structure allows you to tailor your studies to your individual interests and career ambitions, while seamlessly combining them with professional engagements in industry or research.

Structure and modules

The programme comprises 90 ECTS credits, corresponding to approximately 2,700 hours of study. It is carefully structured into two complementary components:

- a solid foundation (one-third of the programme),
- an in-depth specialisation (two-thirds), enabling you to develop advanced expertise in your chosen field.

Module languages

Courses are offered in German, English and French. Depending on the location and profile, instruction takes place in the regional language or in English, reflecting the programme's international outlook.

Master's thesis

Throughout your studies, you engage in intellectually demanding, practice-oriented projects that deepen your expertise. The master's thesis represents the culmination of this journey, typically developed in close collaboration with industry or research partners and focused on delivering meaningful, real-world impact.



Key Benefits



Study visits
abroad possible



Full-time or part-time
studies possible



Flexible study options
with two start dates



Excellent networking
opportunities



Hands-on experience
in labs and industry



Modules available
on site or online

Course of Studies

Master of Science in Engineering (MSE)

Specialisation

(51-54 ECTS credits)

- Projects
- Master's thesis (30 ECTS credits)

Basic training

(30 ECTS credits)

- Technical scientific modules TSM (at least 12 ECTS credits)
- Fundamental theoretical principles FTP (at least 9 ECTS credits)
- Context modules CM (at least 6 ECTS credits)

Supplementary courses (6-9 ECTS credits)

Career perspectives

Graduates are prepared to assume leading roles in research and development environments, where innovation and strategic thinking are essential.

Graduation

Upon graduation, you will have a distinctive, future-oriented skill set:

- Advanced analytical and mathematical expertise
- Deep specialist knowledge across engineering disciplines
- The ability to apply sophisticated methods in modelling, simulation, analysis and validation
- Expertise in developing innovative products and services using state-of-the-art technologies
- The capability to analyse complex systems and interdependencies using both established and proprietary approaches
- Strong communication skills for effective collaboration with international stakeholders
- Proven leadership abilities to guide projects and teams from concept to implementation

Doctoral degree pathways

The MSE facilitates access to doctoral programmes at leading universities. Depending on your profile and academic performance, you may pursue a PhD, often in collaboration with BFH and an international partner institution. Throughout this process, you will benefit from personalised guidance in selecting the right university and shaping a compelling research focus. While the programme provides a solid foundation for academic advancement, its primary orientation is towards industry, equipping you with the expertise and practical experience to excel in demanding professional environments from day one.

Information events

Discover the programme firsthand at our exclusive information events offered both on site and online. Engage directly with students and faculty, explore our laboratories and gain a deeper insight into the MSE experience in a welcoming and inspiring setting. Further details, including dates and registration, are available at bfh.ch/mse-info.

Application

Apply conveniently online at bfh.ch/registration-mse.



► bfh.ch/registration-mse

Application deadlines

Autumn semester:

- 31 May for international applicants
- 31 July for national applicants

Spring semester:

- 31 October for international applicants
- 31 December for national applicants

We recommend submitting your application early to secure your place.

Contact

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