STUDIES AND EXCELLENCE THROUGH INNOVATION
Brno University of Technology (BUT) can boast about being the largest technical university in the Czech Republic. Its tradition dates back to 1899 when it was founded with four professors and 47 students. More than 115 years later, the university, with 23,000 students, has managed to become an internationally respected educational, scientific and research institution with a significant position in Central Europe. Today it has eight faculties and three university institutes, five regional research centres and is part of two centres of excellence. The programmes offered include technology, natural sciences, architecture, economics and fine arts.

Most university buildings are situated at the Pod Palackého Vrchem Campus in the northern part of the city of Brno. There you can find the new premises of several faculties, the Central European Institute of Technology, as well as BUT’s unique sports facilities. Besides constructing new buildings, BUT also focuses on restoring the old structures. The Carthusian monastery, for example, received a modern look, being architecturally joined to the new premises of the Faculty of Information Technology.

For many years, BUT regularly has favourable standings in the QS World University Rankings. In appreciation of its good quality, BUT received, as one of the first in the Czech Republic, the ECTS and QS Label certificates of the European Commission.

BUT owes its credibility to its state-of-the-art facilities, top academic staff and an environment open to students.
UNIVERSITY STRUCTURE

Faculties

- Faculty of Architecture (FA)
  www.fa.vutbr.cz
- Faculty of Business and Management (FBM)
  www.fbm.vutbr.cz
- Faculty of Chemistry (FCH)
  www.fch.vutbr.cz
- Faculty of Civil Engineering (FCE)
  www.fce.vutbr.cz
- Faculty of Electrical Engineering and Communication (FEEC)
  www.feec.vutbr.cz
- Faculty of Fine Arts (FFA)
  www.ffa.vutbr.cz
- Faculty of Information Technology (FIT)
  www.fit.vutbr.cz
- Faculty of Mechanical Engineering (FME)
  www.fme.vutbr.cz

University Institutes

- Central European Institute of Technology (CEITEC)
  www.ceitec.eu
- Institute of Forensic Engineering (USI)
  www.usi.vutbr.cz
- Centre of Sports Activities (CESA)
  www.cesa.vutbr.cz

Regional Research and Development Centres

- Advanced Materials, Structures and Technologies (AdMaS)
  www.admas.eu
- Centre for Research and Utilization of Renewable Energy (CVOZET)
  www.cvvoze.cz
- Institute of Forensic Engineering (USI)
  www.usi.vutbr.cz
- Centre of Sports Activities (CESA)
  www.cesa.vutbr.cz

IT4Innovations

Brno University of Technology partners with the Centre of Excellence, the National Supercomputer Centre IT4Innovations.

www.it4i.cz
Faculties

Faculty of Architecture

Architecturally speaking, Brno is a cradle of a newer style of architecture that emerged in the 1920s, functionalism. This style reflects the happenings of that era and has expanded throughout vast parts of the city. The elaborated principles of functionalist housing and the minimalist and airy features of the buildings have made Brno excel among other European cities. Architectural experts and art lovers appreciate Brno’s timeless character and keep it as their must-see site.

The Faculty of Architecture (FA) was founded in 1919 and has housed numerous prominent architects and theorists. Thanks to them, Brno interwar architecture has become renowned worldwide, keeping its strategic position in the artistic fields until the present day.

The multidisciplinary orientation of the faculty combines rigorous architectural training and practice-oriented activity in urban planning. Experienced teachers and researchers with their own architectural practices pass the highest standards of academic scholarship and creation. Students are encouraged to understand the building environment in all its aspects, from the technological – through culture and aesthetics – to the environmental, to explore specialised questions and to articulate diverse ideas.

International workshops and seminars are part of the architecture programme, enriching the curriculum with the experience of international experts from our partner universities. The Faculty of Architecture collaborates with a lot of architectural departments from Europe and the USA. The faculty is a member of EAAE – European Association for Architectural Education and AESOP – Association of European Schools of Planning.

Departments
- Department of Theory
- Department of Engineering
- Department of Drawing
- Department of Design
- Department of Experimental Design
- Department of Monument Care
- Department of Spatial Design
- Department of Urban Design

www.fak.vutbr.cz

Faculty of Business and Management

The Faculty of Business and Management (FBM) offers a broad spectrum of fields of study in every level of university education, ranging from finance to system engineering to corporate management. Within the management programme, students are trained to occupy middle and higher managerial positions in different organisations and companies. An emphasis is put on the development of strategic and conceptual thinking, as well as the ability to manage organisations, changes and relationships.

Research activities at the Faculty of Business and Management include the development of methods for decision making and risk management with the use of ICT, Soft Computing and Business Intelligence. Also, financial management in corporations, accountancy, marketing and taxes and law in practice represent the key areas of research projects.

Students of FBM, along with students from Finnish and Dutch universities, participate in the project International Branding, which is aimed at using market analysis and the comparison of survey results as the basis for brand development design. Besides that, the faculty runs the Joint Master’s Degree Programme in European Business and Finance in cooperation with universities in Great Britain and Poland, enabling students to spend part of their studies at a partner university.

Departments
- Department of Economics
- Department of Finance
- Department of Informatics
- Department of Management

www.fbm.vutbr.cz

Architecturally speaking, Brno is a cradle of a newer style of architecture that emerged in the 1920s, functionalism. This style reflects the happenings of that era and has expanded throughout vast parts of the city. The elaborated principles of functionalist housing and the minimalist and airy features of the buildings have made Brno excel among other European cities. Architectural experts and art lovers appreciate Brno’s timeless character and keep it as their must-see site.

The Faculty of Architecture (FA) was founded in 1919 and has housed numerous prominent architects and theorists. Thanks to them, Brno interwar architecture has become renowned worldwide, keeping its strategic position in the artistic fields until the present day.

The multidisciplinary orientation of the faculty combines rigorous architectural training and practice-oriented activity in urban planning. Experienced teachers and researchers with their own architectural practices pass the highest standards of academic scholarship and creation. Students are encouraged to understand the building environment in all its aspects, from the technological – through culture and aesthetics – to the environmental, to explore specialised questions and to articulate diverse ideas.

International workshops and seminars are part of the architecture programme, enriching the curriculum with the experience of international experts from our partner universities. The Faculty of Architecture collaborates with a lot of architectural departments from Europe and the USA. The faculty is a member of EAAE – European Association for Architectural Education and AESOP – Association of European Schools of Planning.

Departments
- Department of Theory
- Department of Engineering
- Department of Drawing
- Department of Design
- Department of Experimental Design
- Department of Monument Care
- Department of Spatial Design
- Department of Urban Design

www.fak.vutbr.cz

The Faculty of Business and Management (FBM) offers a broad spectrum of fields of study in every level of university education, ranging from finance to system engineering to corporate management. Within the management programme, students are trained to occupy middle and higher managerial positions in different organisations and companies. An emphasis is put on the development of strategic and conceptual thinking, as well as the ability to manage organisations, changes and relationships.

Research activities at the Faculty of Business and Management include the development of methods for decision making and risk management with the use of ICT, Soft Computing and Business Intelligence. Also, financial management in corporations, accountancy, marketing and taxes and law in practice represent the key areas of research projects.

Students of FBM, along with students from Finnish and Dutch universities, participate in the project International Branding, which is aimed at using market analysis and the comparison of survey results as the basis for brand development design. Besides that, the faculty runs the Joint Master’s Degree Programme in European Business and Finance in cooperation with universities in Great Britain and Poland, enabling students to spend part of their studies at a partner university.

Departments
- Department of Economics
- Department of Finance
- Department of Informatics
- Department of Management

www.fbm.vutbr.cz
Faculty of Chemistry
This faculty (FCCh) provides a state-of-the-art base for education and research in chemistry and chemistry related fields, including physical chemistry, bioengineering and microbiology. The Faculty of Chemistry enables its students to explore the fascinating world of this modern discipline from the bachelor’s programme all the way to the Ph.D. programme. This faculty also provides an opportunity to join national and international projects led by top-class researchers that are conducted in high-tech laboratories.

Research activities focus on the development of materials used in the pharmaceutical and food industry. An emphasis is also put on environmental chemistry and biotechnology, creating significant achievements in the area of biopolymers.

In fact, the Materials Research Centre, which is part of the faculty, earned its success in the field of bioplastics made from used cooking oil (PHA). In cooperation with high-tech companies, the environment-friendly Hydal Technology, developed by Czech researchers, broke through to international markets and is an important source for biodegradable plastics.

Faculty of Civil Engineering
Ranked 151 of 200 in the Civil and Structural Engineering category by QS World University Rankings in 2015, the largest faculty of Brno University of Technology, with 5,600 students, provides top quality training in Civil Engineering and affiliated fields such as Civil Engineering Management, Construction Technology, Geodesy and Cartography, Municipal Engineering, Water Management and Water Structures, Architecture of Building Construction and more.

A division of this faculty, Advanced Materials, Structures and Technologies (AdMaS) is a modern science centre and comprehensive Civil Engineering research institution that focuses on research and development in the area of advanced construction materials, structures and technologies, along with their real-world applications in the construction industry, transportation systems and the infrastructures of cities and municipalities.

Among its numerous research projects, the moveable, energy-autonomous testing structure EnvHyd and the innovative methods of wastewater treatment using anaerobic membrane technologies for wastewater treatment and biogas production are worth mentioning.

www.fce.vutbr.cz

Departments
Department of Physical and Applied Chemistry
Department of Materials Chemistry
Department of Chemistry and Technology of Environmental Protection
Department of Food Science and Biotechnology

www.fcch.vutbr.cz

Departments
Department of Mathematics and Descriptive Geometry
Department of Physics
Department of Chemistry
Department of Structural Mechanics
Department of Geodesy
Department of Geotechnics
Department of Building Structures
Department of Architecture
Department of Technology of Building Materials and Components
Department of Concrete and Masonry Structures
Department of Road Structures
Department of Railway Structures and Constructions
Department of Metal and Timber Structures
Department of Municipal Water Management
Department of Water Structures
Department of Landscape Water Management
Department of Building Services
Department of Computer Aided Engineering and Computer Science
Department of Structural Economics and Management
Department of Technology, Mechanization and Construction Management
Department of Building Testing
Department of Social Sciences

www.fce.vutbr.cz
Faculty of Fine Arts

Technology and fine arts have been interconnected at BUT since the very beginning as art-oriented disciplines like graphic design, applied arts and others were first taught at the Faculty of Architecture.

The independent Faculty of Fine Arts (FFA) now provides creative education in painting, graphic design, sculpture, body design, performance, product design, environment, multimedia and more. It is a young and dynamic faculty whose academic staff are professionally active artists. They have been laureates of prestigious Czech or Slovak art awards.

The graphic design students and teachers alike were awarded in the notable contest The Most Beautiful Book of the Year. The publication 2x100 mil. m², on which the faculty staff participated, was awarded a silver medal at the best book design from all over the World in 2016 in Leipzig. Another graphic design teacher was given Honorary Appreciation in 2015 at the above-mentioned contest for Aliens and Herons.

The FFA, nearly a quarter of a century old, combines classical disciplines with advanced technology, primarily in 3D printing sculpture. Since 2013, the studio has been collaborating with the School of Visual Art in New York on exhibition projects both in New York and galleries in the Czech Republic. The faculty owes its prime position to housing the only Body Design Studio of all Czech academies.
Faculty of Information Technology

Located in the unique, former Cartesian monastery interconnected with the new modern building near the city centre, the Faculty of Information Technology (FIT) is one of the leading European educational and research institutions providing top quality degrees in information and computer technologies. Students are encouraged to work on their own projects in the faculty’s computer centre and to join the teams pursuing national and international research in the state-of-the-art laboratories, including, but not limited to, multimedia, biometric, optic and robotics. As a part of the IT4Innovations Centre of Excellence, the Faculty’s Research Centre of Information Technology is connected to the national Supercomputer Salomon, which, as of June 2016, is ranked 55th in the TOP500 List of the world’s top supercomputers.

Security is the leading research domain of the academic and research staff, focussing on the analysis, monitoring and security of high-speed networks. To test the software created for projects and theses, students can use the faculty’s airplane simulator.

Its vaunted position in world-wide research enabled FIT to create Speech@FIT, one of the most famous speech data mining research and development groups. In addition, biometric elements analysis, such as fingerprints and cornea recognition, belong to this important topic.

FIT’s most recent highlight is becoming one of the 15 world-class research teams across nine European countries to join Facebook’s GPU Partnership Programme, which allows FIT to make faster progress in the field of artificial intelligence.

“We are performing top research and education in human-computer and human-human interaction. The donated GPU servers will enhance DCIM’s computing power, helping the research groups at DCIM to perform data-intensive computations in the areas of speech data mining, image and video processing, computer graphics, knowledge extraction from big data, and computational photography.”

As. Prof. Jan Černocký, Department of Computer Graphics and Multimedia, FIT BUT, for Facebook

Departments

→ Department of Information Systems
→ Department of Computer Systems
→ Department of Intelligent Systems
→ Department of Computer Graphics and Multimedia

www.fit.vutbr.cz

Faculty of Mechanical Engineering

The second largest faculty of Brno University of Technology (FME) offers high quality and practice-oriented education in mechanical engineering and applied sciences. Therefore, it is easy for students to find jobs and start their successful careers. Thanks to the close cooperation of the faculty with prominent companies, such as IBM, ŠkODA AUTO, Bosch, Honeywell, Siemens, etc., students have an opportunity to be a part of leading research projects during their studies with an excellent perspective of the labour market. Another plus that enables easy contact with the industry is the faculty’s location in the vicinity of the Czech Technology Park.

Students are actively involved in national and international competitions with significant achievements in Formula Student, ebec and others.

The NETME Centre is an integral part of the Faculty R&D strategy, serving as a prime contact point for large-scale industrial and public projects. The core competencies are in aerospace and automotive transportation, energy systems and resources and engineering technology.

Researchers of the faculty’s Department of Mathematics specialise in the analysis of images of solar eclipses through mathematical methods to aid with corona structure exploration. Their discoveries have been featured in Nature and Science journals.

“N’est pas possible to separate beauty from science. From my point of view, my job – mathematics – is beautiful. Because these geometrical bodies, those different types of fractal sites and so on, are extremely rich mathematical constructions. It’s hard to say what my original motivation for the eclipse photographs was – science or beauty. It’s all connected. I can’t say whether science is more important than beauty or vice versa. It’s everything bound together.”

Prof. Miroslav Druckmüller for SOME/THInGS MAGAZInE

Departments

→ Department of Mathematics
→ Department of Physical Engineering
→ Department of Solid Mechanics, Mechatronics and Biomechanics
→ Department of Materials Science and Engineering
→ Department of Machine and Industrial Design
→ Energy Department
→ Department of Manufacturing Technology
→ Department of Production Machines, Systems and Robotics
→ Department of Process Engineering
→ Department of Automotive Engineering
→ Department of Aerospace Engineering
→ Department of Automation and Computer Science
→ Department of Foreign Languages
→ Heat Transfer and Fluid Flow Laboratory

www.fme.vutbr.cz
Central European Institute of Technology

The Central European Institute of Technology (CEITEC) is a joint project of the following six Brno universities and research institutions: Brno University of Technology, Masaryk University, Mendel University in Brno, The University of Veterinary and Pharmaceutical Sciences, The Institute of Physics of Materials of Academy of Sciences and The Veterinary Research Institute. Together they create Europe’s leading scientific research centre specializing in the field of life sciences, advanced materials and nanotechnologies. The main goals are to build a major European centre of science and education and to offer top facilities and conditions to the best researchers. Implemented results will improve the quality of human life and health. Advanced Materials as well as Advanced Nanotechnologies and Microtechnologies are the two Ph.D. programmes offered by CEITEC.

The CEITEC BUT continues the trends of internationalization and commercial cooperation. It has started successful partnerships with prestigious foreign academic and research institutions and domestic and foreign industrial partners. This leads to an increasing number of European research projects and broader scientific collaboration. Some of the major achievements of international cooperation consist of the establishment of long-term partnerships, common research projects and high-quality, scientific publications.

www.ceitec.eu

Institute of Forensic Engineering

With more than 50 years of existence, the Institute of Forensic Engineering is the only institution in the Czech Republic providing education in forensic disciplines. Students receive training in road traffic accident investigation, damage assessment for structures, risk engineering and forensic environmental risk assessment. Another field of study offered at the Institute is real property appraisal. Applicants to the Institute must already hold a bachelor’s or master’s degree, respectively, as master’s and doctoral degree programmes are offered by the institute.

www.usi.vutbr.cz

Centre of Sports Activities

When the city of Brno organises numerous sports events, Brno University of Technology offers its unique modern sports facilities. Situated at the Pod Palackého Vrchem Campus, the university’s largest sports ground boasts an athletic stadium with a surface that meets Olympic standards, an indoor sports hall for futsal, football, basketball, and volleyball. Students can choose from a wide range of services offered by the Centre of Sports Activities (CESA). Currently, they include more than 70 sports specialisations at different performance levels, a few of which are badminton, tennis, H.E.A.T. programme, fitness, in-line skating, indoor cycling and foot tennis. Students are entitled to two hours of activities per week free of charge; on top of that, they can use additional paid services, such as massages, physiotherapy and more sport lessons.

The CESA regularly hosts national and international sports events in athletics, bouldering etc.

www.cesa.vutbr.cz
The university’s long-term plan is to strengthen its position among the leading, internationally-respected research universities. International cooperation is, therefore, one of the strategic priorities of Brno University of Technology.

To be able to achieve this aim, BUT undertakes activities aimed not only at recruiting more international students, but also at hiring researchers and teachers from abroad. With respect to international cooperation, good quality and a broad partner base is essential. Being one of the first two universities in the Czech Republic to receive the ECTS and DIS Label is worth mentioning.

As a member of the European University Association (EUA), CESATER and other organisations, BUT is active in joint projects and activities. Erasmus+ CEEPUS, Aktion, EEA and Norway Grants are but a few of the international educational programmes where the university cooperates. Additionally, students can take part in joint and double degree programmes which allow them to spend part of their studies abroad. BUT is also involved in the SoMoPro project, whose aim is, among others, to support distinguished researchers and enhance the international scientific environment in the South Moravian Region.

“i had an amazing opportunity coming to Brno University of Technology as a student intern in the Faculty of Information. If I had to describe it in a few words, I would call it the most memorable journey of my life. Living in a country where the language is unknown to you and where people belong to a different culture altogether could be a difficult task, one could think. However, with such hospitable and friendly people around, and an amazing International Students’ Club, life couldn’t get any better. The amazing trips, events and parties organized by ISC, the friendly faculty and staff in all the departments, and friendly accommodation – when all combined make up a fantastic experience. When you get to meet and interact with people from all over the world just staying in one place, your perspective about a lot of things changes. To anyone coming here for a semester or year, I assure you that you’re going to have the best time of your life.”

Sajal Sehgal, India
but has the highest student accommodation capacity of all Brno universities. The majority of the rooms in the five halls of residence, most of them at the Pod Palackého Vrchem Campus, have been refurbished. Each room has high speed internet. Almost all services are located in close proximity to the campus – canteens, sports grounds and a university club. Two but dormitories were among the TOP three in a competition for the best halls of residence, which testifies to their good quality. The university also has many catering facilities available both to students and employees. Apart from the usual canteens with modern equipment, there are snack bars, cafés and a pizzeria. In the canteens, up to 12 meals are on the menu every day.

The Lifelong Learning Institute (LLI) provides a central base for communication, information, education and coordination for the systematic development of a lifelong education at BUT. For both students and university staff, LLI organises soft skills workshops, language courses and managerial courses. Various courses, including aeronautical training, are offered to the public, too.

Popular Third Age University programmes are aimed at active seniors who are interested in fields ranging from technology to humanities to fine arts. In cooperation with experts from other faculties, LLI designs courses one to three years in length to broaden these seniors’ minds.

Students with special needs are provided consultations and assistance through the Alfons Centre, which is part of LLI. This way, students are able to compensate their disabilities with the use of specific tools, visualisation, sign language and other aids. Psychological counselling is provided by the Alfons Centre, too.

International students who intend to study degree programmes in the Czech language can enrol in a year-long Czech language course organised by LLI.

BLUT has the highest student accommodation capacity of all Brno universities. The majority of the rooms in the five halls of residence, most of them at the Pod Palackého Vrchem Campus, have been refurbished. Each room has high speed internet. Almost all services are located in close proximity to the campus – canteens, sports grounds and a university club. Two BLUT dormitories were among the TOP three in a competition for the best halls of residence, which testifies to their good quality. The university also has many catering facilities available both to students and employees. Apart from the usual canteens with modern equipment, there are snack bars, cafés and a pizzeria. In the canteens, up to 12 meals are on the menu every day.

The university also runs a hotel near the campus that offers short-term and long-term accommodation for university guests and international researchers.
With 380,000 inhabitants, Brno is the second largest city of the Czech Republic and the capital of the South Moravian Region. Home to nearly 80,000 students studying at six public universities, it is a vibrant city with a young and inspiring spirit, a great place to live, study and do research.

Huge investments in infrastructure, along with high-tech institutions, make it an attractive hub for international technological corporations and innovative companies that choose Brno for their branches. The South Moravian Innovation Centre, top local and international researchers with strong backgrounds combined with highly motivated people in the public sphere, drives the development of technology as well as of the city. Therefore, it is deservedly named the Czech Silicon Valley.

In addition to that, Brno enjoys its selection as one of the best places to live according to the New York Times and Numbeo. What makes it so special? A combination of its technology industry with immense employment potential, world-respected architecture ranging from stunning historical palaces to functionalist jewels like the famous UNESCO-listed Villa Tugendhat, and citizen-friendly services are only a few elements for all who seek a modern lifestyle with perspective. Residents and guests find that Brno is a very safe place to live and raise children.

Considering Brno’s strategic location between two capital cities – Vienna and Bratislava – it is easy to travel abroad and get inspired by the neighbouring countries. Beautiful landscapes, the nearby Moravian Karst and unique cultural and folk traditions in the South Moravian Region astonish visitors searching for rest and outdoor-oriented activities.

www.getobrno.cz has more information about the city and surroundings.