

## Welcome to BUT

### YOU HAVE MADE AN EXCELLENT CHOICE

We are the second largest and oldest technical university in the Czech Republic, located in its second largest city, Brno. We also rank second in the volume of contract research, which amounted to more than EUR 33 million in last five years.

We are not **the oldest** university, **BUT** we build on innovation and state-of-the-art technologies. We are based in the city known as Silicon Valley in the heart of Europe, which is a pretty inspirational environment

We are not even **the biggest** university, **BUT** we are strongly oriented towards research and development, which takes place on the premises of five local research centres. We offer top-notch education and a unique connection of technical and artistic disciplines.





We consistently appear in the **top 3 rankings of the world's** best universities.

## University Ranking

THE 1001. – 1200. ARWU 701. – 800. QS 611. – 620.

QS subject ranking **281**.

Engineering and Technology



### WE STAND ON SOLID PILLARS

#### Top-notch university

BUT is one of the leading teaching and research technical universities in central Europe, with more than 120 years of tradition and an excellent reputation.

We collaborate with many globally renowned companies, such as IBM, Thermo Fisher Scientific, Honeywell, Bosch and Siemens, on scientific projects as well as on the content of our study programmes.

#### Research-driven education

In the last 5 years, more than EUR 440 million has been assigned to the science and research field at BUT.

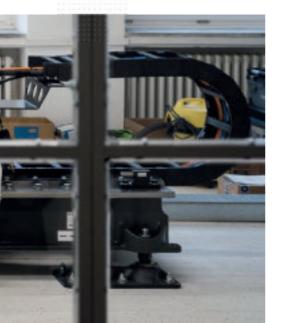
We are partners in two centres of excellent research (Central European Institute of Technology and IT4Innovations National Supercomputing Centre).

Our academic staff work on awardwinning scientific projects, and our students have access to state-of-theart equipment that even engineering companies often only dream of.



Thousands of great ideas are born here that can make the world a more favourable and sustainable place to live. We don't want to keep such treasures in the drawer when others can benefit from them. too.

Therefore, BUT collaborates with many start-ups, companies and local as well as international institutions. It actively promotes open science and the transfer of scientific knowledge and new technologies into practice.



#### HISTORY OF BUT

The history of our university dates back to **1899**, when the Austrian Emperor and King Franz Joseph I. of Hungary signed a decree establishing the Czech Technical University in Brno.

The university started with 4 professors and 47 students.

In 1923, the **first woman in Europe** – **Slávka Vuletič-Donátová** was awarded a Master's degree in electrical engineering here.

Today the university offers facilities for top-notch research and quality study for more than 2,000 scientists and academicians and more than 17,600 students.

#### 25 % INTERNATIONAL STUDENTS

from more than 80 countries

#### **220 PARTNER UNIVERSITIES**

from more than 50 countries

170+ STUDY PROGRAMMES





Pegember nach Christi Geburt im Ginn uche im beebjefenn Jahre-

Some le proof ton Juza Jungfund av Vergues interiorem Beteile.



#### CZECHIA – THE HEART OF EUROPE

#### Facts and figures

- Official name: The Czech Republic
- Situated in: Central Europe, often called the Heart of Europe
- Official language: Czech
- Area: 78,866 sq km
- 12<sup>th</sup> safest country in the world
- Neighbours: Austria, Germany, Poland, Slovakia
- Currency: Czech Crown, CZK
- Population: 10.9 million
- Capital: Praha / Prague (1.4 million)
- Political system: parliamentary republic, a bicameral parliamentary system with 281 representatives
- Head of state: president
- Significant membership: European Union, Schengen Area, NATO, OECD, WTO
- Every citizen or foreigner enjoys the freedom of religion
- Cradle of genetics, contact lenses, water turbine, blood types, nanofibers and many more (including sugar cubes and lager beer)





#### **WELCOME TO BRNO**

## Brno – your new second home

Brno is the second largest city in the Czech Republic, and it is one of the **30 best European cities\*** in terms of quality of life. The streets here pulsate with its rich **history**, ubiquitous **culture** and pleasant **cafe life**. Its unique gastronomic, coffee and cocktail scene has been noticed, for example, by the New York Times and the Guardian.

#### World-class vihes

Brno has gained world fame for many other reasons. These include international music festivals (Janáček Brno and JazzFestBrno) and a unique concentration of functionalist architecture, headed by the Villa Tugendhat, which is a UNESCO World Heritage Site.

Many tourists then like to visit the mediaeval labyrinths under Brno's square, the Church of St. James, with the second-largest ossuary in Europe, and museums overflowing with technical curiosities and historical artefacts.

Here you can admire, among other things, the original painting "Head of Medusa" by **Peter Paul Rubens**.

#### Relaxation

Brno offers plenty of pleasant zones for relaxation thanks to the fact that the locals are not indifferent to climate change.

As you walk through the city, you will come across plenty of greenery and relaxing water features. You can relax, for example, in the largest local park, Lužánky, which was founded in 1786 and is the oldest city park in the Czech Republic, or at Brno Lake, which is easily accessible by public transport.





#### Student's Mecca

Every fifth inhabitant of Brno is a student, thanks to which the city has a specific open-minded student atmosphere.

 $\mathbf{2}^{\mathsf{nd}}$ 

largest city in the Czech Republic

400,000

residents living there

65,000

students from 10 universities in Brno

#### Foreigner-friendly

Brno offers good quality education and interesting working opportunities for both locals and foreign guests. This creates an open environment where multicultural contacts become more and more numerous. As a result, more and

more people speak various languages on a daily basis, with English the most popular.

#### Safe & sound

According to the Global Peace Index 2023, the Czech Republic ranks among the **TOP 12 safest countries worldwide**.

#### **European Silicon Valley**

Brno is a city of IT development, startups and technological innovation. It presents a unique combination of investment in science and research, a concentration of smart brains from around the world and innovative industry.

Nearly one-third of the world's electron microscope production comes from here. A total of 30 % of computers worldwide are protected by software from Brno. And there are three unique technology parks, home to major multinational companies and the National Cyber and Information Security Agency.

#### TRANSPORTATION

#### All aboard, please!

Brno has a very well-organised, reliable and unique **public transportation** which serves not only the city itself but also the municipalities around it **24/7**. Its core is formed by trams (called the Brno-specific term šalina), completed by trolleybuses and buses.

You can change freely among different lines using the same tickets. There are several ways to buy tickets, including by credit card or by SMS. You can also buy an online non-transferable ticket for public transport in Brno. We highly recommend you buy the online ticket, since it is very easy and it saves you time.

Timetable for public transport in Brno: dpmb.cz/en

#### Going abroad...

#### ... by plane

Everywhere is a short distance from Brno. You can head to destinations like London or Milan from the local airport. There are many seasonal flights to and from the Greek Islands, Egypt, Turkey and Bulgaria.

For more information go to: brno-airport.cz/en

If you need a wider range of destinations, just hop on a train or a bus and travel a bit further – from the international airports in Vienna, Bratislava or Prague, you can reach the whole world.

#### ... by train

Thanks to its advantageous location, Brno is pretty close to Vienna and Bratislava, the capitals of the two neighbouring countries — Austria and Slovakia. And although it's only a little further from here to Prague, the capital of the Czech Republic, the influence of Vienna has always been major. It's no surprise that you can reach all those capital cities within 1.5 to 2.5 hours by train.

And what makes Brno's location even more attractive, and central, is a direct train connection with two more capitals – Berlin in Germany and Budapest in Hungary.



#### **CAMPUS FACILITIES**

### Eat, research, live

The university campus offers great facilities for both work and private life. There's comfortable accommodation in the modern dormitories and state-of-the-art laboratories for your high-tech research. For a yoga or tennis lesson, head to one of the many facilities of the Centre of Sports Activities.

#### Accommodation

BUT has the largest accommodation capacity in Brno, which is used by around **6,100 students** and researchers. They can choose the one closest to their faculty from several campuses.

Of course there is a 100% high-speed internet connection; washing machines, dryers, bike storage, study rooms and TV rooms are all available. Most dormitories also have a gym or outdoor playground.

## What would you choose?

#### Rezidence Erasmus

Especially for academic staff

- · newly built residential house
- 5 fully equipped single and double flats with kitchenette and balcony or terrace
- parking place in garage
- fee for energy and internet connection included in rent
- up to 5 minutes on foot to FCE and 10 minutes by public transport to FFA

#### Pod Palackého vrchem Dormitories

Right in the Technology Park

- the largest campus
- double and triple rooms
- canteen, bar, pizzeria
- up to 10 minutes on foot to FEEC,
   FBM, FME, FCH, IFE and CEITEC

#### Pension Starý pivovar

Privacy for ITs

- accommodation on the FIT campus primarily for doctoral students and staff
- single and double rooms
- up to 1 minute on foot to FIT

#### The dorms are not for you?

You can also choose private accommodation – we have the **Welcome Service** just for you, where we can help you to find accommodation for you and your family.

#### More

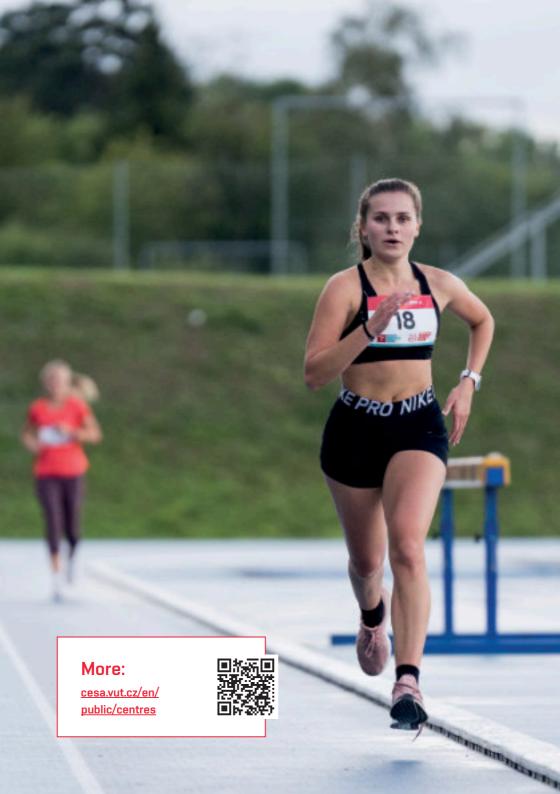
vut.cz/en/ life/dormitories



Student accommodation office: <a href="mailto:ubytovatelky@skm.vutbr.cz">ubytovatelky@skm.vutbr.cz</a>









## CENTRE OF SPORTS ACTIVITIES

If you want to get some exercise after a day in the lab, the Centre of Sports Activities is the place to be.

The CESA has around **30,000 m²** of sports facilities. In addition to modern fitness centres, two gyms and a climbing wall, there is a multi-purpose sports complex with an athletic stadium, football field, tennis courts, workout and a modern sports hall.

#### TIP

You enter the sports complex Pod Palackého vrchem for free where you can use the running oval with MONDO surface, the workout playground, asphalt track for inline skating or the bouldering gym for your recreational or performance activities. The area is equipped with outdoor lighting, wheelchair access and 220 parking spots.

Another option is to rent sports facilities for sports such as badminton, volleyball, football, etc.; the sports facilities can be booked online and paid for on the spot using cash or a credit card.

#### **LIBRARIES**

The BUT libraries are a bit like
Trafalgar Square – they occupy
an area of **6,979** m² and you can
meet more than **200,000** titles. It is
worth a visit to the FIT library, located
In the oldest and historically most
precious parts of the monastery.

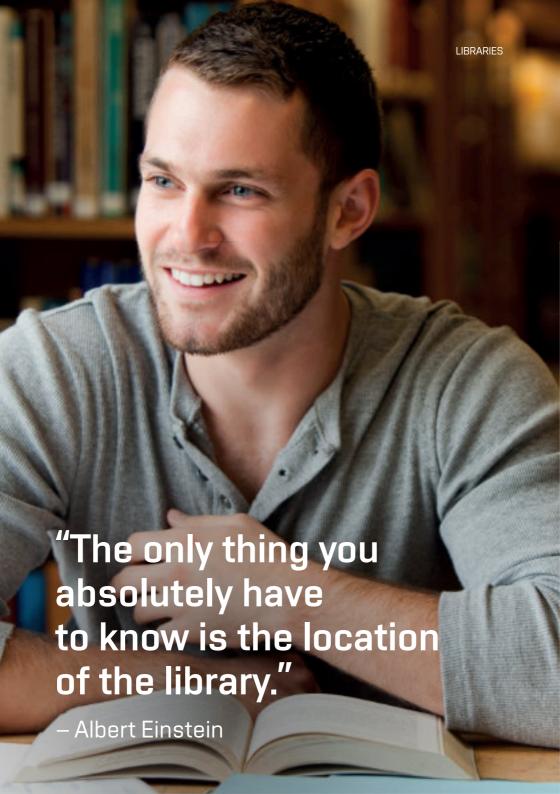
You can also gain knowledge from electronic resources available online. They contain professional journals, articles, anthologies or books. You can access databases such as EBSCO, Emerald, Scopus and Web of Science.

As if that weren't enough, the libraries also offer a wide range of other services – you can use computers equipped with Autodesk software or the Lexicon of Metals with material sheets. And if you don't feel like researching, you can borrow a board game from some of the libraries.

More: vut.cz/en/uk











#### **LABORATORIES**

Its excellent scientific background is one of the reasons why BUT attracts so many talented foreign scientists. Interesting projects, first-class research projects and daring experiments are carried out in more than 800 laboratories.

Take a look inside some of them:

#### Aircraft Testing Laboratory

The laboratory is used to test various prototypes of aerospace technology, including **space technology** with expertise of over 25 years. Experts perform fatigue, static, material as well as ground vibration tests or strain and stress analyses using the **Pontos and Aramis** non-contact optical system and much more.

#### Water Research Laboratory

Two halls of the laboratory are used for hydrotechnical research on scale models of real waterworks. The third hall is equipped with aerodynamic modelling equipment. Experts here use a wind tunnel and also a wind tunnel track.

#### **Climate Chamber**

Almost anything can be exposed to extreme conditions in the prototype of the unique artificial sun laboratory: from cars to technical equipment to humans, who are represented by a mannequin in the truly extreme tests.

The temperature range with solar simulation is from -10° to +50 °C, and when solar simulation is excluded, it is even higher.

#### Quantum Security Laboratory

Scientists here are working on nextgeneration computer networks that will be protected from attacks by quantum computers. The new laboratory has the ambition to become one of the first building blocks of the National Quantum Network. The results of the measurements will then be used to connect with European partners in building the EuroQCI quantum communication infrastructure.

#### **Robotic Laboratory**

Students and researchers have the opportunity to work in the robotic classroom, which is equipped with a robotic arm (Friendly Robot for Design and Architecture) and computer-controlled laser cutters, CNC milling machines and a 3D printer that allows printing from, for example, concrete.

In the future, the laboratory will be equipped with other smaller robots.

#### Biotechnology and Biomaterials Laboratory

A place where researchers focus on the development of methods and technologies of microbial production of industrial substances such as biomaterials, enzymes, vitamins, pigments and other natural molecules. At the same time, researchers investigate potential effects of various materials and bioproducts on living cells of all types (e.g. human, microbial, etc.).

#### Laboratory of Human-Robot Communication

The laboratory is focused on research and experimentation in the field of human-robot interaction. A place, where ground robots are used to various experiments, is equipped with an extensive set of sensors for sensing the situation in the robot environment, positioning and movement of people and robots, operator gestures etc., as well as specific imaging devices for realizing virtual and augmented reality.



#### **BUT**

# Where science is born

#### 8 Faculties

- Faculty of Civil Engineering (FCE)
- Faculty of Mechanical Engineering (FME)
- Faculty of Electrical Engineering and Communication (FEEC)
- Faculty of Architecture (FA)
- Faculty of Chemistry (FCH)
- Faculty of Business and Management (FBM)
- Faculty of Fine Arts (FFA)
- Faculty of Information Technology (FIT)

#### 3 University Institutes

- Institute of Forensic Engineering (IFE)
- · Centre of Sports Activities (CESA)
- Central European Institute of Technology (CEITEC)

#### 7 Research Centres

#### RESEARCH CENTRES

#### **CEITEC**

A multidisciplinary centre of the scientific excellence. At CEITEC BUT, scientists are currently engaged in a total of three areas of research: Advanced Nanotechnology and Microtechnology, Advanced Materials and Industrial Cybernetics and Instrumentation and Systems Integration.

The main priorities of CEITEC BUT include not only international research cooperation but also its interdisciplinary character. The CEITEC Nano cleanroom laboratories operate in open access mode, providing ideal conditions for addressing multidisciplinary issues, as their facilities can also be accessed by external users, institutions or industry partners.

CEITEC BUT offers an **international PhD programme** in Advanced Materials and Nanosciences, which in general is based on its research areas.

- 2,000 m<sup>2</sup> cleanroom laboratories area
- 145+ PhD students (55% international)
- 18 research groups

#### ceitec.eu

#### IT4Innovations National Supercomputing Centre

It is the only national IT research centre that is equipped with a powerful supercomputer. The focus here is on the image, video, and speech analysis, as well as secure and safe architectures, networks, and protocols. Besides particular projects, researches and scientists from FIT are massively involved there in education, consultancy or as members of the Scientific Council.

fit.vut.cz/units/vcit/.en

#### ADMAS – Advanced Materials, Structures and Technologies

This cutting-edge research centre is the only one of its kind in Europe. 5 372 m², four buildings, 250 appliances, That is the AdMaS Centre. Thanks to its facilities, our scientists can focus on research, development and the realworld application of advanced building materials, structures and technologies not only in civil engineering, but also in transport systems and the infrastructure of cities.

#### admas.eu/en

#### NETME – New Technologies for Mechanical Engineering

Is a modern R & D centre based on longterm research. Its activities are focused on four technical fields – automotive engineering, aerospace engineering, energy and resources and engineering technologies.

- 540+ research staff
- 39 % foreign research
- EUR 12 mil. value devices

#### netme.cz/en

#### CVVOZE – Centre for Research and Utilisation of Renewable Energy

Nearly one hundred specialists concentrate here on R & D in the areas of electrochemical sources of electric energy, hydrogen cells, electromechanic energy conversion, power and control electronics and sensorics, and the production of electrical energy from renewable resources.

#### cvvoze.cz/en

#### SIX – Centre for Sensor, Information and Communication Systems

The centre focuses on research

on communication and information systems and their components operating in emerging frequency bands. As an example, we can mention speech analysis for timely diagnosis of nervous diseases, intelligent control of traffic, reducing the danger of terrorist attacks and supporting the quality of life of the ageing population. There are six research groups at SIX – sensor systems, signal processing, radiofrequency applications, mobile communications, advanced cybersecurity and antennas and HF systems.

#### six.feec.vutbr.cz

#### MRC – Materials Research Centre

9 research groups focus on applied research in inorganic materials, advanced organic materials and biomaterials. It also deals with analytical and environmental chemistry, biotechnology, bioplastics, organic electronics and photonics.

- 44 projects in 2022, of which
   24 in cooperation with enterprises
- EUR 48 million the total volume of contract research in 2022
- 150 students and faculty members working in the center

#### fch.vut.cz/en/rad/mrc



WELCOME SERVICE

## We are here for you



We are glad that you have chosen our university and we want to make your transition to a new environment as pleasant as possible. The Welcome Service is tailored to foreign reserchers, foreign PhD students and their families.

It is the **first point of contact for future BUT employees**, providing them with information about their employment and all that has to be done before and after their arrival

To make your arrival at BUT as smooth as possible, we ask you to complete the online registration for the Welcome service. The online registration can be found here: <a href="wut.cz/en/cooperation/welcome-service">wut.cz/en/cooperation/welcome-service</a>

#### What can we help you with?

- applying for a visa
- finding suitable accommodation
- planning your trip to Brno

The Welcome Service also cooperates with other university departments, faculties and external institutions – for example, with the Department for Asylum and Migration Policy of

the Ministry of Foreign Affairs of the Czech Republic ("OAMP") or the Brno City Municipality. Thanks to this, we can also provide:

- arranging an appointment and accompanying you to register at NAMP
- assistance with setting up a bank account, mobile phone plan and transport card
- arranging health insurance and medical care
- recommendations for proven language courses
- providing tips for suitable school or kindergarten for your children

We want your stay with us to be enjoyable from start to finish. You can use the Welcome Service even when your cooperation with BUT is coming to an end. We can help you to arrange to close your bank account, terminate your lease and deregister from OAMP.

#### Contact

welcome.service@vut.cz

#### **WELCOME SERVICE**

## Practical information for your arrival

The Welcome Service team members can assist you with airport transfers and many practical matters that may arise during your stay. Whether it's to arrange permanent residency, extend your visa or open a bank account, feel free to contact them.

However, immediately upon arrival, you should register at **OAMP** (Department of Asylum and Migration Policy Brno). We recommend that you make an appointment with OAMP in advance for a specific time, which our Welcome Service team colleagues will be happy to help you with.

#### **CHECK LIST**

The to-do list is not short. That's why there's a handy check-list to ensure you don't miss anything important so your arrival and subsequent settling in goes smoothly.

#### **BEFORE ARRIVAL**

#### All foreign nationals

Find accommodation

Find out about other facilities

#### Nationals of non-EU countries staying long-term

To get a visa/residence permit at a Czech Embassy abroad, you will need:

✓ Valid passport

Supporting documents (hosting agreement, written commitment)

Criminal record(s)

Proof of accommodation (if required)

Passport photo

Payment of the fee

Proof of travel insurance

#### **AFTER ARRIVAL**

#### All foreign nationals

Open a bank account

Register your vehicle (if needed)

Have your driving licence replaced (if required)

✓ Family, medical care...

#### **EU** nationals

Registration with the Foreign Police – must be done within **30 days after arrival**. You must:

Fill in the short questionnaire

✓ Have a valid passport

✓ Have proof of accommodation

#### Nationals of non-EU countries

Registration at the OAMP (Department of Asylum and Migration Policy Brno) must be done within **3 days after arrival**. The registration involves:

Filling in the registration form

Presenting a valid passport

Proving that you have accommodation

Collection of biometric data

Are your stay and cooperation over? Are you leaving Brno?

#### **BEFORE DEPARTURE**

#### All foreign nationals

Close your bank account

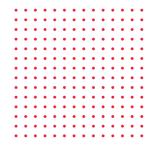
Return your employee card and health insurance card to the HR department

Return your residence card – send it to the Department of Asylum and Migration

#### More:

vut.cz/en/cooperation/ welcome-service





## And that's it! Let's discover your next adventure.

#### **Contacts**

Brno University of Technology Antonínská 548/1 602 00 Brno, Czech Republic

- ψut.cz/en
- (f) @ BrnoUniversityOfTechnology

Stay in touch

