Scan QR Code to download the online guide.

Ministry of Foreign Affairs of the Czech Republic

Czechia an attractive partner in higher education, excellent research and innovation

Czechia, a mid-sized country with outstanding industrial tradition and cultural heritage, is well known for its high quality science and innovative spirit. Its universities, research and innovative centres are open to bilateral and multilateral cooperation. The Czech Government recognizes that new knowledge and technologies are key to future prosperity and growth and for coping with global challenges. Strategic documents can be found at the website of **RDI Council**: **www.vyzkum.cz**.

This short guide should provide anyone interested with basic facts about Czechia's RDI system and opportunities for collaboration. It also contains contacts for further communication and networking. Czech diplomats stand ready to support those activities. They work together with experts and officials from other governmental and RDI institutions as well as with representatives of the academia. They help forge partnerships between Czech scholars, researchers and innovators and their possible international counterparts. They are keen to identify new opportunities for collaboration, assist in networking across borders and continents, and support joint projects matching mutual interest of those willing to work together bilaterally and multilaterally.

Czech foreign service organizes outgoing and incoming missions, webinars and workshops, and other projects that should bring together universities, research and innovation centers and, last but not least, technological firms and innovative entrepreneurs. Czech diplomats actively promote mobility in higher education and science. They work hand-in-hand with partner institutions in Czechia and abroad.

Scientific *counsellors*, *attachés* and other diplomats charged with RDI tasks are deployed at some **90 Czech embassies and general consulates** around the globe.

Specific requests regarding support of science diplomacy in the area of international collaboration in higher education and research could be also directed to responsible officials at the headquarters of the Czech Ministry of Foreign Affairs. Please contact us by e-mail at **science@mzv.cz**. You can also consult the website: **www.mzv.cz/en** for more information about science diplomacy at the Czech MFA.

Higher education in Czechia

The Czech higher education is of a very good quality and has a long and distinguished history, especially in sciences, engineering and medicine. Charles University is the largest and also the oldest university in the country and in the region. There are **26 public, 2 state** and **28 private universities** providing education in all relevant areas. At these universities, there are currently studying **304.000 students**, including **54.000 international students** (in English and other languages).

Tuition fees vary depending on the study programme and faculty. The highest ones go up to EUR 20.850 per year and the lowest are around EUR 1.500 per year. All information on tuition fees at different universities can be found at: **https://portal.studyin.cz/en**.

Czechia provides students with a very friendly and liberal environment in Central Europe with developed infrastructure, ranking between TOP 10 most peaceful countries in the world. The costs of living (food, accommodation, transportation, entertainment) are EUR 750 – 810 per month. The country offers over 1000 programmes in English, the possibility to work during studies, innovative careers in research (including at 8 European centres of excellence), and an established national alumni programme. **A high quality education, affordable living costs and attractive and friendly environment make Czechia a smart choice**.

Students' mobility is supported by **Czech National Agency for International Education and Research**. Detailed information for international students on study opportunities as well as practical stay-related recommendations can be found at: **www.studyin.cz**. The QR Code will direct you to information on all Czech universities with international programmes.

Research in Czechia

Czech research can build on advanced capacities and knowledge in a number of areas, including mathematics and physics, digital technologies and AI, cyber security, organic chemistry, biochemistry, and new materials. Hundreds of millions of people around the globe have benefited from Czech discoveries and technologies: antiretroviral drugs used in the treatment of diseases such as HIV/AIDS, hepatitis B (prof. Antonín Holý), soft lenses (prof. Otto Wichterle), polarography (prof. Jaroslav Heyrovský) or antivirus software (Avast).

Basic and applied research is in Czechia performed at universities (see above) and at the institutes of the **Czech Academy of Sciences** (CAS) (see: **www.avcr.cz/en**). There are altogether **54 institutes** of CAS with some **11,000 employees**, more than half of them researchers with university degrees.

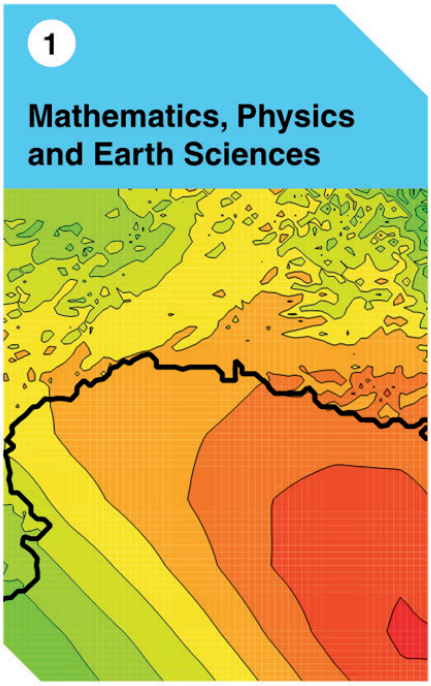
Czech Academy of Sciences

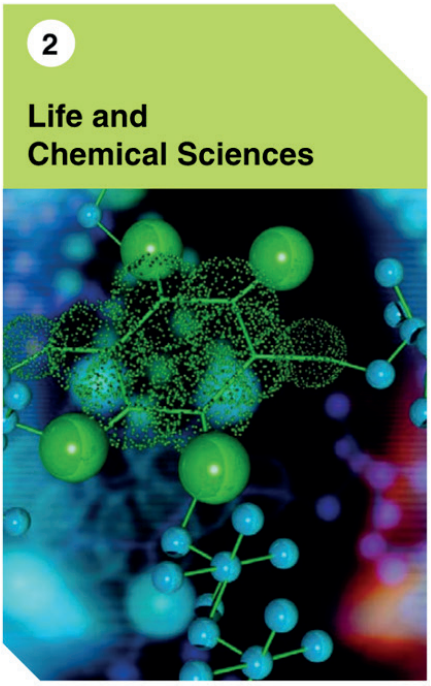
STRATEGY AV21
Top research in the public interest

The mission of CAS is to conduct basic research in a broad spectrum of natural, technical and social sciences and to develop knowledge addressing needs of the Czech society. The basic framework is the **Strategy AV21** (see: **https://strategie.avcr.cz/en**) prioritizing topics such as energy sustainability and security, health, AI, quality of public policies. It fosters interdisciplinary research, both basic and applied.

The institutes of CAS support education of young researchers in doctoral study programmes. They also work together with industry in applied research and development of new technologies. They have numerous international collaborations in terms of joint projects and research mobility schemes. CAS objective is to fully integrate Czech science into the international context.

The list of research institutes in alphabetical order and clustered according the research area could be found at: **www.avcr.cz/en**. The basic structure and the number of institutes of CAS is shown below.





Mathematics, Physics, Computer Sciences	6	**Chemical Sciences**	6	**Social and Economic Sciences**	6
Applied Physics	7	**Biological, Medical Sciences**	8	**Historical Sciences**	6
Earth Sciences	5	**Bio-Ecological Sciences**	4	**Humanities and Philology**	5

Information on research positions available at Czech universities and CAS can be found at international and national websites: **euraxess.ec.europa.eu**, **www.researchjobs.cz**.

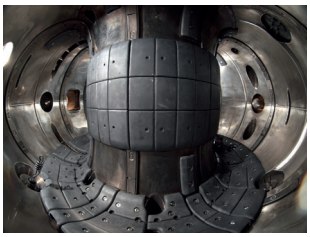
Large research infrastructures on Czechia's territory

Large research infrastructures (RIs) funded by the Czech Government (Ministry of Education, Youth and Sports) provide unique, *state-of-the-art* facilities and equipment, and enable advanced research (both basic and applied), technology development and innovation. Their operating costs are covered from the state budget (EUR 85 mil. in 2023), up-grade and investments are supported from the EU Cohesion Policy Funds (EUR 163 mil in 2023-2026). RIs have been built in recent years with the aim to interlink Czech universities, institutes of CAS and other research centres.

RIs therefore provide unique research facilities and bring together advanced knowledge and expertise. **They are open to collaboration with international partners from RDI organisations and innovative firms**. Many of them are already international with English as a working language, therefore RIs could serve as hubs for international cooperation in RDI with involvement of the best Czech teams.

RIs are clustered into following basic categories:

- energy
- environment
- health and food
- biological and medical sciences
- physical sciences, engineering
- social sciences, humanities



A complete overview of RIs on the Czech territory, Czech participation in ESFRI and international RDI organizations can be found at: **www.vyzkumne-infrastruktury.cz/en**.

ELI ERIC

Czechia also participates in altogether 17 European Research Infrastructure Consortia (ERIC). One such consortium finds itself on the Czech territory, **ELI ERIC**, that provides most powerful laser facility globally that can be utilized for basic and applied research.

Institutions and Funding agencies supporting international collaboration

International collaboration is supported from different resources, namely from **Ministry of Education, Youth and Sports**, **Czech Science Foundation**, **Technology Agency of the Czech Republic** and **CAS** (mobility programs only).

Tools of International Collaboration

Information on all bilateral programs supporting joint projects and research mobility, broken down by countries, can be found at the website of the Czech Ministry of Foreign Affairs (see: **www.mzv.cz/en**).

Smart Specialization in applied research and innovation in Czechia

Czechia builds on a long-term tradition of high-quality manufacturing, innovation and research. To advance those qualities, modernize the Czech industry and boost growth of Czech innovative entrepreneurship, the Government adopted **National Research and Innovation Strategy for Smart Specialization** (see: www.ris3.cz/en). It should serve as an instrument to support research and innovation in a "smart" manner and fully explore a high potential of Czech knowledge and resources in identified areas at both national and regional levels.

Concrete areas and projects with a high potential for applications have been identified. There are altogether nine "domains of specialization" ready for promotion. The coordinating body of RIS3 is Ministry of Industry and Trade (Mr. D. Všetečka, ris3@mpo.cz; tel.: +420 224 852 242).

Smart specialization is also implemented at **regional level**. Each Czech region is building its own innovation ecosystem. To support that, **regional innovation centres** have been set up (see the list below). **They are open to international collaboration**. Projects in areas identified by RIS3 will be prioritized in allocation of resources by the Czech Government.

South Bohemian Region
Priority areas: engineering and mechatronics, electronics, electrical engineering, IT, biotechnology, sustainable development, automotive, textile and clothing

South Moravian Region
Priority areas: IT and SW services, measuring and sensing devices, advanced machinery, engineering equipment, power engineering, electrical components, medical and pharmaceutical products, diagnostics, aerospace

Karlovy Vary Region
Priority areas: electrical engineering and mechatronics, energy transformation, automotive and autonomous transport, traditional industries (ceramics, porcelain and glass), spa balneology and tourism

Hradec Králové Region
Priority areas: manufacture of transport equipment and components, engineering and investment units, new textile materials for new applications, optoelectronics, optics, electronics, electrical engineering, IT, medicines, medical devices, healthcare, advanced agriculture and forestry

Liberec Region
Priority areas: advanced engineering and transport equipment, vehicles and their components, optics, decorative and utility glass, sustainable management of energy, water and other natural resources, advanced materials based on textile structures, nanomaterials, advanced metal, composite and plastic materials, ICT, processing technologies, electronics, electrical engineering

Moravian-Silesian Region
Priority areas: automotive, engineering, IT, technologies for energy production, transmission and storage, new materials, cultural and creative industries

Olomouc Region
Priority areas: biomedicine, life sciences, 21st century agriculture, optics, optoelectronics, fine mechanics, pumping and water management technology, advanced materials and technologies, creative industries

Pardubice Region
Priority areas: intelligent chemistry for industrial and bio-medical applications, advanced applications of electrical engineering and computer science, sustainable transport, advanced materials based on textile structures, engineering and modern production technologies

Pilsen Region
Priority areas: new materials, intelligent production systems, smart mobility, biomedicine and health care

Capital City of Prague
Priority areas: life sciences and creative industries, emerging technologies, knowledge-based business services

Central Bohemian Region
Priority areas: equipment for transportation, electrical engineering and electronics, biotechnology and life sciences, chemical industry, engineering and metal processing, food industry, research and development

Ústí nad Labem Region
Priority areas: energy resources, supply and downstream industries, reclamation, organic and inorganic chemistry, glass and porcelain manufacturing, engineering, mechatronics and automotive

Vysočina Region
Priority areas: engineering and metal industry, energy, automotive, electrical engineering, industrial automation

Zlín Region
Priority areas: progressive product development, process design, polymers in circular economy, innovation in design, IT, control and security systems