ČZU Faculty of Environmental Sciences

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Faculty of Environmental Sciences Dean‘s Message

Conserving nature and protecting our environment is more than a passing trend—it’s a core value in modern, developed societies. The Faculty of Environmental Sciences was founded to deliver hands-on, research-backed education that tackles today’s environmental challenges. Our dedicated team prepares skilled professionals ready to face diverse environmental fields.

We offer programmes focused on nature and landscape conservation, protection, and management, blending biological and technical methods with real-world applications in both public and private sectors. Our curriculum fosters independence, encouraging critical thinking and proactive problem-solving. Students also have opportunities to gain international experience at partner universities and organizations.

Studying with us means joining a vibrant community on a unique campus. You will find an inspiring space for meaningful dialogue with peers and professors—a place you will love returning to, where friendships and professional growth flourish.

EMPOWERING FUTURE ENVIRONMENTAL LEADERS

Every day, we witness the impacts of climate change, pollution, and biodiversity loss, making the need for environmental specialists greater than ever. In response, we offer specialized programmes focused on urgent environmental issues, along with a broad selection of elective courses.

Our dedicated faculty, alongside guest experts from around the world, inspire students to pursue independent, innovative work and foster collaborative, enriching dialogue. Students can participate in Czech and international research projects, collaborate with leading scientists, learn cutting-edge techniques, use advanced equipment, and contribute directly to real-world challenges.

Fieldwork, both locally and internationally, is a popular and essential part of our curriculum. We also encourage students to broaden their perspectives through study opportunities at partner universities across Europe and beyond. For those looking to deepen their expertise, we provide pathways for advanced studies through our doctoral programmes.

BUILDING PROFESSIONALS IN ENVIRONMENTAL SUSTAINABILITY

Environmental protection is not only a priority in today's interconnected world—it's essential for the well-being of future generations. The need for experts who can tackle current and future environmental challenges is growing rapidly. In response, we stay attuned to the needs of both public and private sectors, adapting our teaching and research to meet real-world demands.

As a member of the European League of Life Sciences (ELLS), a network of leading European universities, and through partnerships with universities worldwide, we offer students extensive networking opportunities. Student exchanges range from three months to a year, providing invaluable global perspectives. Our programmes are structured to prepare graduates—regardless of nationality—for leadership roles in consulting, research, design, administration, and forecasting.

Students can also gain qualifications for professional certifications in Environmental Impact Assessment (EIA/SEA), land planning, small-scale water construction, and ecological stability systems. This strong foundation empowers our graduates to bring their business ideas to life and make a meaningful impact in their fields.

PROGRAMMES

Bachelor's Programmes:

Environmental Data Science

How can data-driven solutions help to address environmental challenges? This programme combines environmental science and advanced data analytics to tackle complex contemporary issues.

Environmental Engineering

The programme provides students with a comprehensive understanding of environmental protection, emphasizing natural resource management.

Master's Programmes:

Environmental Modelling

How to learn more about flood risk, climate change impacts, and efficient adaptation strategies? The programme combines knowledge of applied mathematics, statistics, and informatics with an understanding of natural and human-driven processes.

Nature Conservation

The programme offers a crucial understanding of both applied and theoretical resource conservation and management, including principles of applied landscape ecology, legislation, economics, and GIS.

Environmental Geosciences

Do you see yourself at the forefront of scientific disciplines? Become an expert in environmental pollution and remediation, global climate development, soil chemistry, or hydrogeology.

Landscape Planning

Would you like to work on real-world projects and gain experience in sustainable land-use planning and resource management? This programme focuses on the dynamic European landscape, including engineering and design.

Doctoral Programmes:

- Applied and Landscape Ecology
- Ecology
- Environmental Earth Sciences

Prospective students can find up-to-date information on application deadlines and admission requirements on the Faculty‘s website.

COMBINING STUDY WITH TOP-NOTCH RESEARCH

Our research is put into action across government, non-government, and commercial sectors. We develop patents, utility models, technical methodologies, software, and mapping systems. We provide studies and expert reports to support state and local authorities, contribute to policy development, train industry professionals, and offer lifelong learning opportunities. We're also committed to fostering innovation by supporting promising projects and young leaders, especially PhD students.

- Our work is published in leading international journals such as *Nature, Science, Water Research, Land Use Policy, PNAS,* and *Remote Sensing of Environment, Environmental Science & Technology.*
- We are active members of prominent international consortia and lead prestigious grants, including the European Research Council (ERC) Grant, Marie Skłodowska-Curie Actions, the Fulbright U.S. Student Program, and Horizon Europe.
- Our findings are shared with the public, and we collaborate closely with domestic and international media outlets, including Czech Radio, Czech Television, Reuters, Guardian and AFP.

MAIN SCIENTIFIC AND RESEARCH THEMES

- Conservation of communities
- Plant, invertebrate, and vertebrate biodiversity, as well as their changes over time and space
- Animal ecology and behavior
- Adaptation to the return of large predator
- Remote sensing of the Earth
- Spatial data for environmental applications
- Monitoring, modeling, and forecasting of hydroclimatic processes
- Environmental application of big data and artificial intelligence
- The impacts of climate change on water regime of landscape and settlements
- Landscape, ownership, and adaptation to climate change
- Methods for improving water retention in the landscape
- Soil revitalization and erosion protection
- Pollution research and environmental remediation solutions
- The use of wetlands for water purification from settlements and agriculture
- Microplastic pollution
- Sustainability, circular economy, and carbon footprint assessment

YOU MUST EXPERIENCE PRAGUE AND OUR UNIQUE CAMPUS

Magical Prague, the city of a hundred spires, is one of the world's most beautiful and safest capitals. Here, medieval history isn't just a scenic backdrop—it's part of a vibrant, comfortable lifestyle with an outstanding public transportation system. Located in the heart of Europe, Prague is also a perfect starting point for exploring the continent. Václav Havel Airport Prague is just a 20-minute drive from our campus.

Did you know that CZU is situated on one of the world's most eco-friendly campuses? Our modern pavilions, featuring rooftop gardens and green walls, capture rainwater, support biodiversity, enhance the microclimate, and act as a living laboratory for sustainable development.

In the quiet suburban district of Suchdol, our campus offers much more than educational facilities. Students enjoy dormitories, fully equipped sports fields, dining options, clubs, a library, and various recreational amenities. CZU is a lively university filled with creative energy, hosting a range of events—from film festivals and guest lectures to exhibitions by renowned artists. And with seamless public transport, the city center is always within easy reach.

GREEN-BLUE INFRASTRUCTURE COMPONENTS:

Green facades

Wetland

Biodiversity support

Rooftop gardens

Measurement
and control system

Building Information
Modeling (BIM)

Rainwater retention

OUR GRADUATES ARE OUR BEST REFERENCE

„The FZP equipped me with a deep understanding of environmental processes and modelling, essential for my current career of researcher, and supported my international exchange, which broadened my network and global perspective. Currently, I'm working at the University of a Coruña (Spain) where I'm developing high-detail local compound flood models in characteristic areas of the Spanish coast. In 2025, however, I pretend to start a PhD thesis in the area of Climate chance and the coastal wetlands adaptability to Sea level rise."
Julio T., Environmental Modelling Alumni, currently working at University of a Coruña.

„I explored the places in the Czech Republic just through field trips full of practical experiences. I would never have expanded my way of thinking if I had not come here to study this course. I have just started my PhD journey as an aspiring researcher at the faculty and I want to continue learning and growing in my career through the opportunities provided by the Faculty of Environmental Sciences."
Shruthi V. K., Landscape Planning Alumni, currently a PhD student in the Department of Applied Ecology

„The Faculty's international connections and research opportunities have opened doors to meaningful partnerships in my field."
Hossein A., Environmental Modelling Alumni, currently a PhD student in the Department of Water Resources and Environmental Modeling

„Studying at the FZP was a transformative experience. If you're willing to work hard, you'll find endless ways to grow. I had the rare opportunity to work directly on a major project alongside my professor, who involved me in various activities and rewarded my dedication with a higher scholarship. I work as a data scientist and analyst in a leading Czech company, and I've started my own business, helping companies in the environmental field with marketing, IT, and AI solutions. My time at the Faculty of Environmental Sciences was a key stepping stone that made all of this possible."
Eleni M., Environmental Modelling Alumni, currently Data Scientist and Analyst (Yups)

„Everyone gets a chance to really delve into their personal interests, because the degree is so well-rounded."
Eliška P., Environmental Engineering graduate, currently MSc. Landscape Planning student

„Studying at the FZP allowed me to be immersed in an international environment, where I not only gained valuable academic knowledge but also had the opportunity to spend a semester and an internship abroad. This experience helped me make meaningful connections with like-minded individuals who share my passion and opened doors for future opportunities, allowing me to focus on different aspects of the environment and contribute to impactful solutions."
Nikki K., Environmental Engineering Student


Fakulta životního prostředí

www.fzp.czu.cz/en