

Faculty of Environmental Sciences ČZU Prague





Study Generation



FACULTY OF ENVIRONMENTAL SCIENCES, WORDS FROM THE DEAN

Nature protection and landscape care are becoming increasingly important in advanced societies. The Faculty of Environmental Sciences (FES) was established in response to the demands for operational practice in modern research and education in the environment.

At the FES, we have developed an experienced team who will produce specialists to solve environmental problems. These experts will thus take the disciplines further and become the best leaders

We offer study programmes that are relevant to our prospective applicants in terms of nature protection and landscape care. These study programmes adopt ecological and technical approaches, which directly guide the students to their future employment in

the public and commercial sectors. We guide our students towards independent study and work. During the course of their studies, we encourage them to gain experience at partner universities and workplaces abroad. Conversely, we welcome foreign students with open arms because we know that neither education nor global environmental challenges recognize borders. Our unique campus enriches all aspects of student life at our university. Enjoy it. We strive to create an inspirational dialogue between students and teachers. An environment that you will want to come back to, meet colleagues and friends and share your practical experience.

Vladimír Bejček Professor, Dean





WE TEACH YOU TO PROTECT THE ENVIRONMENT

We are a modern university with modern educational approaches

We offer specialized bachelor, master and doctoral educational programmes, complemented with a range of elective subjects.

Our experienced educators and various visiting experts motivate students to work independently. We welcome co-equal dialogue.

We offer unique opportunities for students: to participate in ongoing faculty research team projects, be introduced to top scientists, techniques and equipment, and have a real opportunity to get their own grants.

We cooperate with universities worldwide, support learning abroad and welcome international students.

Apart from classroom teaching, we organize popular field exercises and excursions.



These are **good opportunities** for FES Graduates in environmental protection-oriented practical work and landscape planning. Doctoral studies offer the possibility to further increase expertise.

www.fzp.czu.czleni



WE EDUCATE IN-DEMAND PROFESSIONALS



We respond to current global demands from the workplace

Protection of the environment has become a norm for virtually all activities in private and public life because it affects economic activities, and is one of the priorities of European and world politics. The demand for professionals capable of addressing current and future global environmental issues is rapidly growing. We respond to the demand of industry and government agencies as they are potential employers of our graduates and users of our output.

The design of the study programmes at the FES ensures that graduates find adequate **employment** in production, administrative, prognostic, projection, research, consulting and management institutions.

Our fields of study qualify for a number of the authorized concessions. For example, graduates who obtain relevant practical training qualify to conduct environmental impact assessment (EIA / SEA), design land consolidation, small water structures, territorial systems for ecological stability and many others.



www.fzp.czu.cz/programmes

WE OFFER TAILOR-MADE STUDY PROGRAMMES

The FES currently offers 8 Bachelor's, 10 Master's degree and, 3 Doctoral study programmes.

Courses of study are offered in full-time and combined formats in Prague, as well as our remote locations in Litvínov, Karlovy Vary, and Březnice in Příbram.



Bachelor's degree programmes Bachelor's (B.Sc.) degree

Environmental Data Science EN

Environmental Engineering **EN/CZ**

Geographic Information Systems and Remote Sensing in Environmental Sciences ^{EN/CZ}

Applied Ecology cz

Landscaping cz

Spatial Planning cz

Landscape Technical and Administration Services ^{cz}

Water Management cz

CZ - taught in English / EN - taught in Czech

WE OFFER TAILOR-MADE STUDY PROGRAMMES

Master's study programmes Engineer (Ing.) degree

Environmental Modelling EN/CZ

Environmental Geosciences EN

Landscape Planning ^{EN}

Nature Conservation EN/CZ

Applied Ecology cz

Landscape and Land Management cz

Landscape Engineering cz

Regional Environmental Administration cz

Spatial Planning cz

Water in Landscape cz

Doctoral study programmes Doctoral (Ph.D.) degree

Applied and Landscape Ecology EN/CZ

Ecology EN/CZ

Environmental Earth Sciences (Environmental modelling, Spatial Sciences, Geoenvironmental Sciences) EN/CZ

Admission procedures usually take place in the second half of June, with the application submission deadline at the end of March.



Prospective applicants can find up-to-date information at:

CZ - taught in English / EN - taught in Czech

www.fzp.czu.cz/applicants



WE COMBINE STUDIES WITH CUTTING-EDGE RESEARCH

Priority research areas of the FES include complex topics, ranging from community ecology, climate change, hydrology, biodiversity conservation, protected area management, biotechnical land consolidation in the landscape, water resources management, environmental geochemistry and remediation, landscape planning, and methodological issues of FIA / SFA.

We publish in the most prestigious international periodic journals (e.g. Nature, Water Research, Land Use Policy, Environmental Science & Technology, Scientific Reports, Plos Biology, Hydrology and Earth System Sciences). Practical application of the results of our research are implemented by both state and private organizations.

We share our results with the public. We work closely with national and international media (e.g. Reuters, AFP, Czech News Agency, Czech Radio, Czech Television).

We welcome new ideas and do not hesitate to support promising projects and their young creators, especially those enrolled in Ph.D. studies.

We have been successful in receiving prestigious grants (e.g. Horizon 2020, Marie Skłodowska-Curie Actions, Fulbright U.S. Student Program, Norway Grants, Interreg programs, Czech Science Foundation, Technology Agency of the Czech Republic and many others).

WE APPRECIATE INTERNATIONAL EXPERIENCE



International cooperation in research and student exchange programmes are a matter of course for us. We fully support our students in gaining experience abroad. Bilateral agreements of the FES can be used with a wide range of universities throughout Europe, the USA, and other locations. The FES has been a member of the consortium of leading European life sciences universities, known as the Euroleague for Life Sciences (ELLS) since 2005. The Erasmus+ student mobility programme is the basic programme in addition to scholarships such as AKTION, CEEPUS or Marie Skłodowska-Curie Actions Student placements usually take place from three to twelve months

International students are often integrated into our research teams and have the choice for a variety of study programmes for degrees, taught in English. We are well known for our offer of affordable high education in the heart of Europe.

www.fzp.czu.cz/international-relations

FES HAND-IN-HAND WITH PRACTICAL NEEDS

We are recognized for our multidisciplinary approach to solving issues of environmental protection and sustainable development. Our professional team knows how to use its research results in both theory and practice. We create patents, utility models, methodologies, software, web applications and maps. We participate in the formulation of new policies, train professionals and organize lifelong training courses. We produce a number of studies and expert reports for state institutions and selfgoverning bodies. We support cooperation of our students and scientists with the private sector.





OUR UNIQUE CAMPUS HAS TO BE EXPERIENCED



Studying in the country with the charming city of Prague within reach

In addition to its educational facilities, our campus in Suchdol - a suburb just outside of Prague - offers dormitories, restaurants, canteens, clubs, sports grounds, a student information centre with library, and more, all in one place. We are a vibrant university with creative people, and the campus is the scene of numerous professional, cultural and social events. Visitors and faculty students have seen exhibits of renowned artists, award-winning photographers and works of foreign documentarists.

A fully equipped sports grounds offers a wide range of activities: a swimming pool, gyms, fitness room, several tennis and volleyball courts, a beach volleyball court, and a horse riding facility.

Thanks to the city's public and fully integrated transport network, you can easily and quickly access what the city has to offer.



www.fzp.czu.cz/information-for-students

MAIN FOCUS OF SCIENCE AND RESEARCH

Environmental and Isotope Geochemistry

Our research is focused on various aspects of environmental geochemistry and hydropedology. Our primary interests include absorption processes and modeling, chemical stabilization/phytostabilization of metal(loid)s in soils, reactive-transport modeling, tracing contamination sources, and biogeochemical processes using various isotope systems (Pb, Cd, Ni, Cr, Zn).

Human Adaptability Studies

Our research aims at finding patterns of human subsistence across time and space, including investigations of serious disturbances in living conditions introduced either by natural forces or prior human activity.

Spatial Science in Ecology and Environment

Our research is interdisciplinary, a combination of GIS, remote sensing, unmanned aerial systems, GNSS, citizen science, data uncertainty, scaling, spatial ecology, landscape spatial patterns and processes, ecological indicators, species distribution modelling, restoration ecology, landscape ecology, vegetation health and geohazards.

Hydrological and Climate Variability

Our research is focused on the statistical analysis of hydrological and climate variability, and mathematical modelling of related physical processes.

Land Research

The Land Research Group has extensive experience in dealing with land management and land-use policy, and engages in dynamics of vernacular historic landscapes and visual resources management.

www.fzp.czu.cz/science-research

MAIN FOCUS OF SCIENCE AND RESEARCH

Community Ecology and Conservation

Our research combines different branches of ecology, including animal behavior, GIS and remote sensing with citizen science. Our particularly interests include macro-ecology, spatial patterns of biodiversity in plant and animals and the use of ecological indicators focused on conservation

Plant Biodiversity and Evolution

Our research topics primarily focus on fundamental questions concerning the origin, evolution and diversification of plants. Our research combines systematics, morphology, karyology, population and molecular genetics and vegetation science.

Wetlands

We are focused on nutrient, heavy metal and xenobiotic retention, and cycling in natural and constructed wetlands. We also focus on the history of wetlands at the landscape level, the urban drainage impact on receiving waters and wetlands, or invasive plants in wetlands.

Behavioral Ecology

Focuses on various aspects of animal behaviour. In doing so, we make use of other disciplines such as genetics, general zoology, population and breeding biology, and community ecology with implications for nature and landscape conservation.



www.fzp.czu.cz/science-research



OUR GRADUATES ARE THE BEST REFERENCE

"Most of the time I work in the field and process assessments and projects in which I'm looking for solutions on how to reconcile human activities and nature conservation."

Kateřina Z. graduated in Applied Ecology, now works as a freelance landscape environmentalist and is active in the non-profit sector.

"My studies at the FES and internships abroad, organized by the faculty, opened the door to Europe for me and helped me to find interesting and promising work in the discipline."

Pavlína N. graduated in Applied Ecology at the FES in 2008, hired the same year as Sales Associate at Carbon Capital Markets in London, specializing in sales of CO₂ emission allowances.

"At the end of my studies, I found work at the department of the environment of our municipal office."

Tereza K. graduated in Applied Ecology in 2005, currently acts as Head of the Department of the Environment.

"Composition of subjects of study and quality of education enabled me to become an independent landscape consolidation planner after a few months of practice."

Petr J. graduated in Landscape Engineering in 2007, currently works as a planner in a private projection firm.

"I always wanted to work in the field and use knowledge gained during my studies in the protection of flora and fauna."

Tomas K., graduated in Applied Ecology in 2004, since then works as an expert in the administration of a protected landscape area.

"I always wanted to leave some real and specific work behind."

Karel H. graduated in Landscape Engineering in 2003, currently works as Managing Director of a company specializing in garden and landscape architecture.

www.fzp.czu.cz/alumni



www.fzp.czu.cz/en/ | e-mail: admission_fes@fzp.czu.cz



