



Faculty of Environmental Sciences

education for future generations



Czech University of Life Sciences Prague
Faculty of Environmental Sciences

A word from the Dean of the faculty

The Faculty of Environmental Sciences of the University of Life Sciences in Prague was established in 2007, in response to current trends in education and the demand for experts to work in the field of environmental protection. The first entrance exams to the new faculty showed that its establishment was a step in the right direction. The faculty attracted more than twice as many candidates as had applied to the university for similar fields of study in previous years. Although our faculty is young, it has a staff of experienced university teachers, who are also excellent experts and scientists. They are able to provide high quality education in a modern manner, pass on their ample experience, and train new experts and researchers.

Conservation and active care for the environment, nature and landscape, based on detailed scientific knowledge in a wide range of disciplines, is not just an ephemeral modern trend. It forms an integral part of the culture of any advanced society, and is a field of study and employment that will grow progressively more important. This is why our faculty aims to train high-quality specialists who will be able to employ scientific arguments in defending the interests of environmental conservation. What are the prerequisites for applicants? Applicants are not required to have profound encyclopedic knowledge, but above all we would like them to enter the gates of the university with their own views on the current key topics in environmental science and nature conservation, and with a desire to use a scientific approach in studying these important issues.

We would like to lead students toward independence, forming their own judgment and a creative approach to tasks and projects. We would also like our students to assert and implement their own ideas. We offer a wide range of specializations, covering the fields of nature conservation and landscape management. The faculty offers programmes which combine biological and technical aspects of environmental conservation in various proportions.



During their time at the university, students can benefit from agreements with our partner universities abroad, e.g. in Vienna, Cranfield, Munich, Uppsala, Wageningen, Copenhagen, and many others. We very much encourage studying abroad, and we regard it as almost a necessity nowadays. There are many reasons for this: it is good to experience the local conditions in another country, to take classes, work on research projects and present the results, to live in a new scientific environment, and, last but not least, to gain proficiency in a foreign language.

Studying at the Faculty of Environmental Sciences means three, five or more years of living in the cultural environment of a large and beautiful university campus with a wide range of sports facilities, clubs and other places to spend free time in. The Faculty of Environmental Sciences aims to have all the attributes of a modern university. We strive to create an environment that supports scholarly dialogue between student and teacher, an environment for our alumni to return to, where they can continue their studies, update their knowledge and, at the same time, pass their practical experience on to us at the faculty.

Our graduates head for positions in planning offices, in the civil service, in nature conservation organizations, in research, and in real estate development and management.

My wish for all our future and current students is that they find a welcoming and inspiring environment at our faculty, which will mean far more to them than just a place where they can obtain a degree leading to a good job.

Petr Sklenička

"not for school, but for life do we learn"

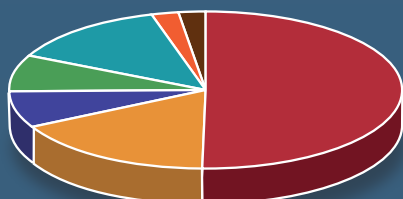
Seneca

Why study at the Faculty of Environmental Sciences?



- It is a part of Czech University of Life Sciences Prague (CULS) – an eminent university with long tradition. CULS has about 25 000 students and is today the third largest university in Prague.
- It is a modern faculty, offering a wide range of interesting programmes in conservation of the environment, nature and landscape at bachelor, master and PhD levels. The structure of each study programme allows for an ample choice of optional courses.
- All courses are taught by experienced professors or by excellent specialists, many of whom have an extensive research background. Professors try to motivate students to work independently. They welcome a creative approach to task solving, they are open to a balanced dialogue and are prepared to give advice and help where needed.
- Our graduates have very good job perspectives in manufacturing, administrative, planning and research institutions specializing in environmental conservation, landscape planning and design, and in other fields of employment. They also have an opportunity to continue their education and enhance their qualifications in PhD programmes.
- As a research establishment, the faculty works on major issues and specific problems in environmental conservation.
- The faculty co-operates with universities abroad, both within Europe and worldwide, encourages study abroad and organizes study-abroad programmes, usually 3 to 12 months in duration. Studying at a foreign university brings extensive new life and study experience, and of course also improved foreign language skills.
- As part of the study programme, the faculty organizes fieldwork courses and excursions both within the country and abroad. Well-attended extracurricular lectures by interesting specialists deal with selected aspects of environmental conservation and related subjects.
- The courses take place in a pleasant university campus environment, and students do not need to spend valuable time commuting to other parts of the city. Accommodation, clubs, restaurants and sports facilities are also available within the campus.

Numbers of students at the faculties of CULS



- Faculty of Economics and Management (13459)
- Faculty of Agrobiological Sciences, Food and Natural Resources (4549)
- Faculty of Environmental Sciences (3553)
- Faculty of Engineering (2029)
- Faculty of Forestry and Wood Sciences (2030)
- Institute of Tropics and Subtropics (578)
- Institute of Education and Communication (563)

Employment perspectives of our graduates

The Faculty of Environmental Sciences was established in 2007 as an independent faculty of the Czech University of Life Sciences in Prague. One of the reasons behind this was a growing demand for specialists with scientific knowledge and a practical orientation toward the environment.

Environmental conservation nowadays plays an important part in practically all public and private activities. It exercises a significant influence on economic activities and is a key issue in European and world politics.

The demand for specialists able to provide theoretical and practical solutions to current and future environmental problems has been growing rapidly. The faculty therefore pays close attention to the requirements of private companies, the civil service, regional and local government, as the future employers of our graduates and as the final users of the results of our research projects.

The structure of the programmes at the faculty ensures that our graduates will relatively easily find positions in manufacturing, operational, management, prognostic, planning, research, counseling and governing institutions within the Czech Republic and abroad.

Our study programmes are the accepted education leading to a number of official authorizations. After gaining the required practical experience, our graduates can become authorized for positions, e.g., in biological assessment, environmental impact assessment (EIA/SEA), land consolidation planning, design of small hydraulic structures, planning of territorial systems of ecological stability, and a number of other fields.



The range of programmes and specializations

● Bachelor programmes – leading to a Bachelor (Bc.) degree

Applied Ecology (CZ) – complex care of the environment, focusing on ecological studies

Landscape Planning and Design (CZ) - landscape planning and conservation, focusing on technical studies.

Territorial Technical and Administrative Services (CZ) - environmental issues in public administration and in regional and local government

Water Resource Management (CZ) - management of water resources, design of water bodies and watercourses in the landscape.

Spatial Planning (CZ) - environmentally responsible landscape, town and village planning.

● Master programmes - leading to an Engineer degree (Ing.), equivalent to MSc.

Applied Ecology (CZ) – complex care of the environment, focusing on ecological disciplines

Nature Conservation (EN, CZ) – theoretical and practical aspects of biological diversity conservation.

Landscape Planning and Design (CZ) – planning and design for landscape conservation and restoration

Landscape and Land Improvement (CZ) – landscape restoration, complex land consolidation planning

Environmental Modelling (EN, CZ) – preparation for planning and research in the fields of water resource management and ecology

Regional and Environmental Administration (CZ) – environmental issues in public administration, regional and local government

Land and Water Management (EN) – management of land and water resources

Water in the Landscape (CZ) – sustainable use of water resources, facilitated by correct management of landscape, soil and biodiversity

● Doctoral programmes – leading to a Doctor degree (PhD)

Ecology (EN, CZ)

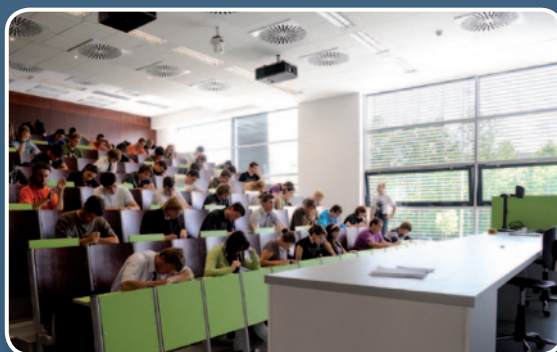
Applied and Landscape Ecology (EN, CZ)

Environmental Modelling (EN, CZ)

Water Regime Improvement in the Landscape (EN, CZ)

The graduate's diploma supplement affirms in English that the title is equivalent to a bachelor degree, or equivalent to a master degree.

The Faculty of Environmental Sciences of the Czech University of Life Sciences currently offers 5 bachelor programmes, 7 master programmes and 4 doctoral programmes. Some programmes can only be studied in Czech (CZ), others also in English (EN).



Entrance exams for bachelor and master programmes are usually held in the second half of June. Applications are usually accepted until the end of March. More detailed current information can be found on the faculty's web site www.fzp.czu.cz, or in the attached leaflets.

Science and Research

The main characteristic of the faculty's research is its interdisciplinarity. The research teams work on protecting primary aspects of the environment, assessing the impacts of human activities, and methods for mitigating damage to the environment. Each department co-operates in its research with a number of Czech and foreign institutions and universities. The results of research projects are published in prestigious international journals and monographs. Practical implementation of the outcomes of the research is usually ensured by direct involvement of commercial organizations in the research.



Priority research areas

Conservation of biological diversity in the landscape

Several projects are aimed at studying and conserving endangered species (European beaver, river otter, black grouse, Tengmalm's owl, grey partridge, northern lapwing, three-toed woodpecker, common kingfisher, amphibians, crayfish, dragonflies and others) and endangered habitats (alder carrs, peat bogs etc.)

Increasing the retention and accumulation of water in the landscape

Research in this area is directed at using the potential of the landscape for water retention. Work is done on solving problems with extreme hydrological events, such as floods and droughts.

Landscape-ecological principles of restoring landscapes damaged by open-cast coal-mining

Several research projects dealing with ecological and landscape aspects of land reclamation projects, the role of spontaneous succession, and dealing with the overall rehabilitation of post-mining areas and integrating them into the surrounding landscape.

Restoration of non-production functions of the landscape

This research deals with new considerations in ecology, landscape ecology, landscape architecture, erosion and flood control, and with implementing them into the tools used in landscape planning.

Biogeochemistry of metals and metalloids in the environment

The research focuses on the forms and the mobility of metals and metalloids in the environment, the use of isotope systems in the environmental sciences and in investigations of global changes in geological history. An important part of research is on developing gentle methods for use in remediating soils contaminated with inorganic pollutants.

Conservation and management of selected habitats, management of protected areas

Research projects dealing with the use and management of selected habitats (meadows, pastures, forest ecosystems, wetlands), ecological relationships within habitats, the impacts of protective measures on selected species or groups of species. The outcomes serve as recommendations for the management of protected areas, subsidized programs, etc.

The use of alternative energy sources

Several research projects on the use of alternative energy sources, including impacts of their use on the environment and on endangered species - geothermal energy, solar energy, wind energy, the use of biomass or wastes in energy production.

Links

with workplaces

The Faculty of Environmental Sciences is an institution known for its multidisciplinary approach in dealing with issues of environmental conservation and sustainable development. Our team of experienced professionals from many fields, especially ecology, hydrology, landscape planning, master planning, land consolidation, waste management, environmental modeling, soil protection and many others, is motivated not only to use its research findings in teaching our students, but also to implement them in practical applications.

Co-operation with the civil service

The specialists of the Faculty of Environmental Sciences carry out a considerable number of expert studies for the civil service, regional and local government. They have also authored methodologies used by the civil authorities, take part in preparing laws on environmental conservation and, last, but not least, provide education for civil servants in lifelong study programmes.

Co-operation with private enterprises

One of the priorities for current research at the faculty is to include private enterprises in the projects. This should lead to better co-operation between the university and the private sector. Our students take part in internships and short term attachments at our partner companies and institutions and, at the same time, leading experts from outside the university participate in the teaching process as external lecturers. The Faculty is also developing new research projects and other forms of cooperation with the private sector. Current information on projects and on opportunities for cooperation can be found on our website.



International co-operation and study-abroad programs

The Faculty of Environmental Sciences places strong emphasis on co-operating with universities abroad. Since 2005, the whole university has been a part of the Euroleague consortium of elite European universities of life sciences, together with universities in Uppsala, Wageningen, Copenhagen, Stuttgart-Hohenheim, Vienna and Warsaw. In addition, we maintain close relationships with other universities in Europe and in other continents.

International co-operation takes place in research and development and also in student exchange programmes. We offer a range of study programmes and courses for incoming international students - a two-year master's programme, a three to five-year PhD programme, two-month international courses, summer courses and workshops.

Master's programmes taught in English include the current programmes in Nature Protection, Environmental Modeling and Land and Water Management. On the doctoral level, the four programmes offered in Czech language (see page 3) are also available in English. Information on studies in English can be found on www.fzp.czu.cz/studiesatfes, and in the English version of our website www.fzp.czu.cz/en.

We very much encourage studying abroad. Within the regular study programmes at FES, students have an opportunity to travel abroad and study at partner universities, with quite good financial support. The primary programme that our students use to travel abroad is Erasmus, but there are also other scholarships. The study abroad programmes are usually 3-12 months in duration.

The Faculty of Environmental Sciences has bilateral agreements with a number of European universities, and also with universities in the USA and elsewhere. The steadily growing list of these universities and more detailed information about our study-abroad programmes are available on our website. <http://www.fzp.czu.cz/studiesatfes/>



Life on the university campus



The Faculty of Environmental Sciences is located on the campus of the Czech University of Life Sciences, on the outskirts of Prague 6, in the quiet city district of Suchbát. The campus consists of the faculty buildings and the buildings of university management, housing and dining facilities, the student information centre and extensive sports grounds. In addition, there are a number of restaurants and clubs within the campus. Using the City transportation system (bus and subway), it takes approximately 20 minutes to reach the city centre of Prague. The campus thus provides a good range of facilities for studying, living and cultural life, together with all the advantages of the capital city.

Free time



Sports grounds

The excellently equipped sports grounds offer the use of an indoor swimming pool, a weights room and gyms. Each year, the Sports Department organizes winter and summer trips for students at very favourable prices. Further information can be found on the Sports Department website www.ktv.czu.cz

Student clubs

Within the campus, there are several student clubs that regularly stage concerts and other social and cultural events.

The tradition of "knighting"

Knighting is an annual event, during which the first-year students are welcomed by older students and teachers, and are accepted as part of the "guild". Knighting is a popular activity supported by the faculty.



What do our alumni think of us?

"Studying at the Faculty of Environmental Sciences and taking part in a study abroad programme arranged by the faculty opened the door to Europe for me and helped me to get an interesting, forward-looking job in the field of environmental conservation. A double-degree programme made it possible for me to obtain an MSc degree from Cranfield University (Great Britain) and also an Ing. (master's) degree from the Czech University of Life Sciences in my last year of study." *(Pavína N., a 2008 graduate of the Applied Ecology programme at FES. In the same year, she was hired for the position of Sales Associate in Carbon Capital Markets, London, a company specializing in the sale of CO₂ permits).*

"At first, the programme was a bit challenging for me, but I'm very glad that I got over that. Later, I had no more serious problems. Towards the end of my studies I got a position at the environmental department of our municipal office. Sometimes of course I deal with trifling matters, but some cases are interesting and I often use what I learned at the faculty." *(Tereza K., a graduate of the Applied Ecology programme in 2005, currently head of the environmental department of a municipal office).*

"The structure of the programme and the quality of the courses enabled me to become an independent land consolidation planner a few months after graduating. In two years, I am going to take the authorization exam and start my own planning office." *(Petr J., a graduate of the Landscape Engineering programme in 2007, currently working as a planner in a private planning office).*

"I've always wanted to do fieldwork and to use my knowledge to protect plants and animals. Immediately after graduating, I won a competition for a position of that kind against 11 other applicants." *(Tomáš K., a graduate of the Applied Ecology programme in 2004, since when he has been working as a specialist in managing a Specially Protected Area).*

"I've always wanted to be able to see tangible results of my work. Looking back after 15 years in my working life, I see new gardens and elements in the open landscape - new woods, hedgerows, biocentres, biocorridors, paths, ponds, as well as reconstructed village chapels and a revitalized stream." *(Karel H., a graduate of the Landscape Engineering programme in 1993, currently executive head of a company specializing in garden and landscape design).*

"My Ph.D. studies at the Czech University of Life Sciences, Faculty of Environmental Sciences have prepared me for success in my current job as a Lecturer at the University of Massachusetts, Department of Landscape Architecture and Regional Planning. I also serve as the Director for the Bachelor of Science in Landscape Architecture programme, and I coordinate all study abroad opportunities in my department. My PhD has also allowed me to focus my research on projects located in Belize, Guatemala and Brazil." *(Peter A. Kumble, a graduate of the Applied and Landscape Ecology programme in 2009, currently a Lecturer at the University of Massachusetts and Director for the Bachelor of Science in Landscape Architecture programme).*





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Sciences**





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Kamýcká 129
165 21 Praha 6 - Suchbátov

Tel: +420 224 384 351
Fax: +420 234 383 778

E-mail: dekanat_fzp@fzp.czu.cz
www.fzp.czu.cz