



FACULTY OF CIVIL ENGINEERING

DOCTORAL DEGREE STUDY

UNIVERSITY OF ŽILINA

Faculty of Civil Engineering

CONTACT

University of Žilina

Faculty of Civil Engineering

Univerzitná 8215/1, 010 26 Žilina

tel.: 041/513 55 01

e-mail: studref@fstav.uniza.sk

<http://svf.uniza.sk>

<https://www.facebook.com/StavebnaFakultaZUZ>

All the questions concerning your studies you can direct to the Department of Science and Research and International Relations and Development:

tel.: 041/513 55 49

Coordinator for work with students with special needs:

doc. Ing. Janka Šestáková, PhD., Vice-dean for educational and pedagogical activity at the Faculty of Civil Engineering

tel.: 041/513 58 07

e-mail: janka.sestakova@fstav.uniza.sk

ACCREDITED STUDY PROGRAMMES OFFERED FOR THE ACADEMIC YEAR 2019/2020

DOCTORAL DEGREE STUDY PROGRAMMES	
FULL-TIME	PART-TIME **
STANDARD LENGTH OF STUDY 3 YEARS	STANDARD LENGTH OF STUDY 4 YEARS
Theory and Construction of Building Structures *	Theory and Construction of Building Structures*
Theory and Construction of Civil Engineering Structures *	Theory and Construction of Civil Engineering Structures *
Applied Mechanics *	Applied Mechanics *
Construction Technology and Management *	Construction Technology and Management *
<i>* study programme is also accredited in the English language</i>	
<i>** standard tuition fee for part-time study programmes is 1.000 € for an academic year</i>	

Detailed information on particular study programmes

- syllabus,
- course information sheets

can be found at <http://vzdelavanie.uniza.sk/vzdelavanie/plany.php>.



EXPECTED NUMBER OF ACCEPTED APPLICANTS TO THE FIRST YEAR

DOCTORAL DEGREE STUDY		
STUDY PROGRAMME / FIELD OF STUDY	PLANNED CAPACITY	
	FULL-TIME	PART-TIME
Theory and Construction of Building Structures / Buildings	2	1
Theory and Construction of Civil Engineering Structures / Engineering and Traffic Structures	3	1
Applied Mechanics / Applied Mechanics	1	1
Construction Technology and Management / Building Industry	2	1
TOTAL NUMBER	8	4



TERMS AND CONDITIONS OF ADMISSION

1. **The fundamental prerequisite** of being accepted to the postgraduate study programme (third degree) is full completion of the second degree of the university study (Higher Education Act, n. 131/2002 Coll.).
2. **Health certificates** – the faculty does not require any health certificates and accepts all the applications without health certificates for all degrees of the university studies.



FORMS OF ADMISSION

The condition of being accepted to the doctoral study programmes (study programmes of the third degree) at the Faculty of Civil Engineering UNIZA for the academic year 2019/2020 is the completion of the second degree study programme (Engineer) in the same or related field of study.

Selection Procedure

The part of the selection procedure is an entrance examination that consists of:

- a written examination in the form of a test in one of the world foreign languages (foreign language is other language as the candidate's mother tongue),
- an oral examination in front of the Selection Committee of the respective field of study. The purpose of the examination is to verify the candidate's knowledge, his/her professional and scientific orientation in the field he/she is applying for, including the reasons for the choice of the topic of dissertation and methods foreseen to be used when solving the topic as well as the anticipated outcomes of the dissertation.

Rules of Selection Procedure

The selection procedure for the doctoral study at the Faculty of Civil Engineering UNIZA is regulated by the UNIZA Directive no. 110, as amended by amendment no. 1 and 2 The Study Regulations for the third degree of university studies at the University of Žilina.

A necessary condition is to submit the application form for university studies (doctoral degree - the third degree) within the stipulated deadlines under the „Notice on Selection Procedure for the Doctoral Study at the faculty of Civil Engineering UNIZA“.

The course of the entrance examination is regulated by the UNIZA Directive no. 110, as amended by amendment no. 1 and 2 The Study Regulations for the third degree of university studies at the University of Žilina.

The Selection Committee issues a recommendation on the result of the selection procedure and the proposal of the successful candidates that is submitted to the Dean of the Faculty of Civil Engineering UNIZA.

The Dean of the Faculty of Civil Engineering UNIZA, after consulting with the Selection Committee and the guarantors of doctoral degree study programmes, makes the final decision on the result of the entrance examination and admission within 30 days from the date of the entrance examination.

Evaluation of the results of the entrance examination

The Selection Committee evaluates the results of the entrance examinations at a non-public meeting, concluding „passed“ or „failed“.

If more candidates apply for one topic of the dissertation, the Committee will determine their ranking on the basis of the result of the entrance examination. When ranking, the Committee takes into account the scope and quality of the previous professional publications of each candidate and the results of his/her other professional activities (e.g. the results of students' research, professional or artistic works or competitions, his/her professional experience, etc.). At the same time the Committee will determine the order of all successful candidates.



ADMISSION OF FOREIGN STUDENTS

The same terms and conditions of admission are applicable as for the applicants from abroad as for the applicants from Slovakia.

Foreign students who study in a foreign language (i.e. not Slovak), pay the tuition fee as stated in § 92 Subsection 8 (Higher Education Act). The tuition fee is specified by the UNIZA directive for the respective academic year and can be found on the university website.

Students from abroad who study in the Slovak language do not have to pay the tuition fee. Applicants from the Czech Republic can use the application form available in the Czech Republic. Applicants who do not actively speak Slovak or Czech are required to attend the language training. (It is possible to attend the Slovak for Foreigners courses at UNIZA).

For foreign applicants who were accepted on the basis of intergovernmental agreements, bilateral agreements or Slovak government grants, terms and conditions stated in respective documents are applicable.



HOW TO APPLY

Application forms are to be submitted for individual study programmes and for a topic listed by a supervisor of a given study programme.

In case the applicant is interested in more study programmes, it is necessary to apply for each one individually, including payment of the respective admission procedure fees.

Applicants have to fill in the form Prihláška na vysokoškolské štúdium - 3. stupeň or they can also use an electronic application form that can be found on the university website: <https://vzdelavanie.uniza.sk/prijimacky/index.php> or on the education portal: [https:// prihlaskavs.sk/sk/](https://prihlaskavs.sk/sk/).

Even in case of electronic application form, it is required to print it, sign it, enclose other required documents including the proof of payment of the fee and send it to the address of the Faculty of Civil Engineering UNIZA within the stipulated deadlines.

Incomplete application form or application form sent after the deadline will not be accepted.

In the absence or failure of entrance exams, the faculty does not refund the admission fee.

If an applicant wants to take part in entrance exams at more faculties of UNIZA, the application forms have to be sent separately to each faculty and the respective admission procedure fees paid separately to each faculty.

Enclosures for the doctoral degree programmes (to be sent with application forms):

- Curriculum Vitae,
- certified copies of the highest level of education (the Diploma on completion of university education of the 2nd degree, the Certificate on the state examination, the Diploma Supplement). Documents issued by the Faculty of Civil Engineering UNIZA do not need to be verified.
- a list of published professional and scientific papers,
- other evidence indicating any professional activities,
- the original proof of payment of the admission fee,
- the document from the Ministry of Education, Science, Research and Sport of the Slovak Republic on the recognition of the university studies of the 2nd degree completed outside the Slovak Republic (applies to foreign and Slovak applicants who have graduated from universities of the 2nd degree abroad, including the Czech Republic).

Admission fee:

Send **20 €** to:

Žilinská univerzita v Žiline, Univerzitná 1, 010 26 Žilina
Bank: Štátna pokladnica
IBAN: SK59 8180 0000 0070 0026 9896
const. symbol: 0308
variable symbol: 10433 - doctoral study

Payment method:

payment can be paid by bank transfer or postal order to the account above.

Proof of payment:

proof of payment is to be sent to the Faculty with the application form.

Tuition fees - in accordance with the Higher Education Act, information about the amount of tuition for the respective academic year will be announced on the website of the University of Žilina.

With payment of the admission fee from the EU member states, the EES countries, territories that are considered a part of the EU (Treaty of Rome, Section 299) and SEPA countries, it is necessary to use BIC: **SPSRSKBAXXX**, IBAN: **SK59 8180 0000 0070 0026 9896**.



USEFUL DATES

Deadline for submitting the application form	Entrance exams
until May, 31, 2019	June, 27, 2019



ACCOMMODATION

Accommodation facilities of the University of Žilina provide accommodation according to their capacity and distance between the student's residence and the main location of the university.

Student accommodation facilities cost approx.: **70 € - 140 € per month**.



BOARD

Students can use services of catering facilities of the University of Žilina in Žilina. **Price for food: 9 € per day**.



SCHOLARSHIPS

Full time students of the doctoral degree study programmes are granted a scholarship pursuant to Higher Education Act, n. 131/2002 Coll. (On universities and on amendments to certain laws), §54 Subsection 18.



GRADUATE PROSPECTS

DOCTORAL STUDY PROGRAMMES

THEORY AND CONSTRUCTION OF BUILDING STRUCTURES

(Field of study 5.1.4 Buildings)

Graduates of the doctoral study are highly qualified experts in the field of study Buildings with the main focus on the theory of designing of architectural structures of buildings and their parts with theoretically justified creation of advanced covering structures and details in line with the trend of current world development. Graduates of the study programme, based on gained theoretical engineering knowledge from the master's degree study, understand principles, master methods in the field and are able to formulate a scientific problem, the object and purpose of the research and development in technology of

architecture. They master scientific methods of research and development of architectural designs of buildings, equipment and climate imitation – creation of an artificial architectural environment of buildings and their production and technological processes in terms of their economic efficiency. They are able to clearly formulate benefits of research outputs for the development of science in the chosen field of study and for the construction and architectural practice and are capable of independent scientific work. Graduates of the study programme have acquired advanced knowledge of mathematics and physics in civil engineering. They have deepened the already acquired knowledge of the theory of preparation, design, construction and reconstruction of civil engineering buildings and structures. They further expand their knowledge of the diagnostics and pathology of buildings, evaluating of the energetic performance of buildings, the strategy of renewal of civil engineering buildings and also of the environmental engineering, intelligent buildings and environmental sciences. The level of knowledge ensures their ability to solve problems of the economics of buildings on a scientific basis. Graduates are able to scientifically analyse problems and provide their own solutions in the area of their qualification. Graduates of the doctoral studies can apply in particular in research institutions, science parks, research centres as single or head researchers, at universities in the development of science technology in architecture, or in corporate research and development. They are employable also in top managerial positions in project teams of different nature. They are qualified to apply in investor organisations, construction companies and in consulting and advisory companies as well.

THEORY AND CONSTRUCTION OF CIVIL ENGINEERING STRUCTURES

(Field of study 5.1.5 Engineering and Traffic Structures)

Graduates are highly qualified experts in the field of Engineering and Traffic Structures with the main focus on theory of design and analysis of engineering structures, transport and civil engineering structures and their parts. They are able to creatively apply principles of scientific research, to suggest new approaches and to improve the existing methods of the theory of civil engineering structures. They master progressive tools of the design theory and engineering buildings, methodology of diagnostics and rehabilitation of constructions. Their theoretical knowledge acquired in the course of the study can be applied in the experimental analysis of behaviour of civil engineering buildings and in their combination with model solutions and results of numerical simulations. Graduates of the doctoral studies can mainly apply in research institutions, science parks, research centres as independent or head researchers, at universities in the development of science of engineering constructions and transport structures, or in corporate research and development. They can apply in top managerial positions and in project teams of different nature. They also find application in investor organisations, construction companies, in consulting and advisory companies. The content and structure of the study programme follows the curriculum of the master's degree study at the Faculty of Civil Engineering UNIZA in the field of study of Engineering and Traffic Structures. They correspond with the structure and scope of the Slovak Chamber of Civil Engineers required to qualify for the profession of an authorized engineer. Completion of the study programme and the achievement of higher education of the third degree provide the graduates with sufficient basis upon which, after appropriate experience following the graduation, he/she can apply for the appropriate authorisation.

APPLIED MECHANICS

(Field of study 5.1.7 Applied Mechanics)

Graduates are highly qualified experts in the field of Applied Structural Mechanics, focusing particularly on the development of numerical models of building structures and their solutions utilising modern methods of calculation and the experimental analysis and diagnostics of these structures. Graduates have acquired a broad theoretical basis in the field of modelling of static, dynamic, linear and nonlinear problems of the theory of structures based on modern numerical calculation methods and application of currently existing software engineering tools. They master new procedures, methods and tools applied in the design and construction of complex mechanical systems and building constructions as well as their diagnostics and experimental analysis. They are employable in research and design organisations. They are ready to solve specific and particularly technically challenging engineering projects. They are also employable in scientific and research institutions and universities.

CONSTRUCTION TECHNOLOGY AND MANAGEMENT

(Field of study 5.2.8 Building Industry)

Graduates are highly qualified experts in civil engineering with the main focus on the theory of Construction Technology and Management. They master scientific methods of research, and are able to creatively apply the existing methods and theories in the field. They are able to apply theoretical knowledge gained by studying of the research methodology in the preparation and realisation of scientific experiments. They are able to perform research activities with regard to ethical and social aspects of scientific activities and their contribution to practice. They master progressive methods of mathematical and

computer simulations based on which they are able to optimise system design of construction technology. Graduates are capable of using the knowledge of probability theory and diagnostics when designing optimisation of maintenance, repair and reconstruction of buildings. They are able to optimise technological processes in relation to the life cycle of buildings, their lifetime as well as the environmental aspects. Graduates are able to apply their knowledge in order to improve operational safety of road constructions. They are employable in investor organisations of the governmental administration, regional authorities and municipalities, in the construction companies, in consulting and advisory companies, in research organisations and governance structures. They are also employable in the sphere of investment preparation, preparation and construction of buildings, economic analysis and case studies and asset management. Graduates can also apply in the preparation and management of investment projects in building industry. They are competent to work in scientific and research institutions and universities, too. Completion of the study programme and the achievement of higher education of the third degree provide the graduate with sufficient basis upon which, after appropriate experience following the graduation, he/she can apply for the appropriate authorisation.