UNIVERSITY OF ŽILINA

Description of the study programme

Source: SAAVŠ

Name of the higher education institution: **University of Žilina**
Address of the higher education institution: Univerzitna 8215/1, 010 26 Žilina
Identification number of the higher education institution:
Name of the faculty: **Faculty of Civil Engineering**
Address of the faculty: Univerzitna 8215/1, 010 26 Žilina

Institution body for approving the study programme: **Accreditation Board of UNIZA**
Date of the study programme approval or the study programme modification: 17.8.2022
Date of the latest change[1] in the study programme description: 17.8.2022
Reference to the results of the latest periodic review of the study programme by the institution:
https://www.uniza.sk/index.php/component/content/article/5565-spravy-o-hodnoteni-studijnych-programov-na-svf-za-akademicky-rok-2023-2024?catid=2:uncategorised&Itemid=101
Reference to the assessment report of the application for accreditation of the study programme under § 30 of Act no. 269/2018 Coll.: 166692022/139-VS-OAC

1.	Basic information about the study programme			
a	**Name of the study programme**	Construction Management	**Number according to the register of study programmes**	103625
b	**Degree of higher education**	3	**ISCED-F education degree code**	864
c	**Place(s) of delivery of the study programme**			
d	**Name of the field / Combination of two fields of study**	Civil Engineering	**Number of the field of study**	3659V00
			ISCED-F codes of the field/fields	3659
e	**Type of the study programme**			
f	**Awarded academic degree**	PhD		
g	**Form of study**			
h	**Cooperating institutions and the range of study obligations the student fulfils at each of the given institutions**			
i	**Language or languages in which the study programme is delivered**			
j	**Standard length of the study expressed in academic years**	years		
k	**Capacity of the study programme (planned number of students)**	1.grade: 2.grade: 3.grade:		
	Actual number of applicants	The new study program		
	Actual number of students			

2. Graduate profile and learning objectives

a **Learning objectives of the study programme such as student's abilities at the time of completion of the programme and the main learning outcomes**

Graduate profile

It is based on the requirements of a specialist in the field of construction management and technology, which is focused on the complexity of the solution using the latest knowledge of science, research, and practice in the field of construction. He masters the scientific methods of research and development can independently solve serious problems of scientific discipline and professional practice and can apply the principles of transfer of knowledge of science and research into practice.

[1] If the change is not a modification of the study programme according to § 30 of Act no. 269/2018 Coll.

2. Grduate profile and learning objectives

The graduate of the doctoral study is a highly qualified expert in the field of construction with the main focus on technology theory and construction management. He can manage the preparation and implementation of large investment projects and manage construction processes based on the latest technologies and management systems. Can prepare and assess a feasibility study, including economic revenue analyzes. He can manage the management of engineering and transport infrastructure in particular, including the application of decision optimization methods. He masters scientific research methods and can creatively apply existing methods and theories in the field. He can apply the theoretical knowledge gained by studying the methodology of scientific work in the preparation and implementation of a scientific experiment. He can carry out research activities about the ethical and social aspects of scientific activities and their contribution to practice. He masters progressive methods of mathematical-computer simulations based on which he optimizes the construction technology design system. The graduate can use the knowledge of diagnostics and probability theory to design optimization of maintenance, repairs, and reconstructions of buildings. He can optimize technological processes about the life cycle of buildings, their life, and environmental aspects. The graduate can apply knowledge to increase the reliability and safety of traffic construction. The graduate masters the principles and principles of scientific work, ethical and social aspects of scientific work, presentation of results, development of the field of study, and contribution to practice. The graduate can independently solve research problems, cooperate with foreign countries and use foreign professional literature.

Learning objectives

The goals of education within the study program are as follows:

[CV 1] - acquisition of complex skills in the framework of investment preparation, including the competence to develop and assess investment projects from the point of view of their life cycle.

[CV 2] - acquisition of competence and transferable knowledge in the field of project and investment management and project implementation management

[CV 3] - professional and methodological skills in construction production management based on optimization processes and quality control management systems

[CV 4] - acquisition of cognitive competencies in the field of development and implementation of construction technologies, including their energy and environmental assessment

[CV 5] - knowledge, application, implementation, and development of GIS and BIM information systems, especially in project activities, economy, and management of construction objects and infrastructure

[CV 6] – competences in the field of performing control based on system methods and testing

[CV 7] - the ability to perform top management positions in the management of transport infrastructure based on management systems of management and asset management

[CV 8] - Ability and competence to carry out scientific research activities in the field of technology theory, construction management, and infrastructure operation.

Education outcomes

The learning outcomes follow the learning goals and are identified through individual subjects. Compulsory subjects are the basis for all outputs. Mandatory optional subjects characterize individual outputs. The breakdown of outputs is carried out through descriptors within the information sheets of individual subjects.

[VV1] - preparation of investment projects The graduate can develop the project part of the investment preparation of projects - feasibility studies and investment intention, including an assessment of the economic - project.

- Covering subjects: economics, management and information systems in construction, analysis of the life cycle of transport structures

[VV2] - management of investment projects

Ability to manage managerial management of large investment projects using modern system methods and information systems

- Supporting subjects: economics, management, and information systems in the construction industry,

[VV3] - optimization of construction production processes

Competences in the preparation and management of construction processes based on optimal time plans and controlling systems

- Ensuring subjects: theory and implementation of construction technologies, comprehensive quality management

[VV4] - design of the most modern construction technologies

Ability to design and implement modern technologies of construction processes, including their assessment from the point of view of environmental and energy burden

- Supporting subjects: environmental studies

[VV5] - information systems

Competences in the implementation and use of current information systems GIS, BIM, and databases in the management and

2. Graduate profile and learning objectives

administration of engineering infrastructure

- Providing subjects: modeling and information systems of building constructions, mathematical and computer simulation

[VV6] - quality assessment

Ability to perform quality control of construction materials and processes based on modern diagnostic and experimental methods.

- Securing subjects: reliability and reconstruction of engineering structures

[VV7] - infrastructure operation

Ability to manage engineering constructions and transport infrastructure based on asset management systems

- Ensuring subjects: economics, management, and information systems in the construction industry

[VV8] - scientific methods of work

Competences in carrying out scientific and research activities, including the use of methods of scientific work in the design of technology and management of works in the construction industry

- Securing subjects: scientific activity /5x/

b **Indicated professions for which the graduate is prepared at the time of completion and the potential of the study programme from the point of view of graduate's employability**

The ability to manage civil engineering and transport infrastructure based on management and asset management systems indicated professions for graduates of the study program are defined as highly qualified top management positions, which are currently not defined in the systems of qualifications and occupations. These are mainly the following professions.

Investment project management specialist
Specialist in the preparation and management of construction technologies and construction processes
Specialist, and researcher in the management of construction operations and transport infrastructure management systems

The investment project management specialist can develop a project proposal in its entire complex, i. carry out a feasibility study, ensure investment preparation and carry out the project. Within the whole complex of project preparation and implementation, it can ensure its assessment in terms of environmental impact, economic assessment of its effectiveness through revenue analyses, and requirements in terms of land use planning and construction proceedings.

The specialist in preparation and management of construction technologies and construction processes carries out project documentation of the construction organization plan based on the use of new progressive materials with low energy intensity, time schedules of technological processes developed based on optimization methods.

The specialist and researcher of construction management and transport infrastructure management systems perform activities related to diagnostics of parameters of evaluation of operational reliability and operational performance of transport infrastructure and design of construction interventions based on calculations of optimization and economic efficiency. Performs research in deriving the degradation functions of variable parameters, designing modern technological processes, and defining optimization decision-making methods for maintenance planning and modernization of building modifications.

the potential of the program in terms of employment

The graduate can perform jobs within consulting companies as a project preparation manager, investment preparation manager, and project implementation manager. At the same time, he can work as the chief analyst of controlling and quality systems. It is used within the employment of a leading researcher within the system of road databank and management systems of transport infrastructure.

c **Relevant external stakeholders who have provided the statement or a favourable opinion on the compliance of the acquired qualification with the sector-specific requirements for the profession**

Slovak Chamber of Civil Engineers

3. Employability

a **Evaluation of the study programme graduates employability**

Based on the completed study program, graduates are employed in top managerial positions, especially in the areas of investment project management, investment project preparation, construction management and quality management, administration performance management within transport infrastructure, civil engineering, and civil engineering. They are used in research companies, including the business sector. They use the capabilities of scientific management methods, including GIS information systems, building modeling, and decision-making optimization systems.

Graduates work mainly in:

3. Employability

- companies carrying out research and development in the field of investment projects,
- management companies of transport and civil engineering,
- construction companies,
- companies performing construction production management and construction budgeting,
- in educational institutions,
- in expert and expert assessment activities.

Based on individual surveys conducted over the remaining years, the employment of doctoral graduates is 100%.

b Successful graduates of the study programme

Ing. Pavol Kajánek, PhD - Deputy General Director, VUD a.s. Žilina

Ing. Milan Čuraj, PhD - General Director of MM Silnice SK a.s.

Ing. Martin Noga, PhD - manager FIRST SK a.s.

Ing. Anastázia Urdová, PhD - VUC Žilina, Department of Transport

Ing. Lukáš Játy, PhD - Secondary Industrial School of Civil Engineering, director

Ing. Martin Rázga, PhD - construction manager, Makas s.r.o

Ing. Aurelia Chytčákova, PhD - manager, Paullart s.r.o

Ing. Dominika Ďureková, PhD - construction preparation and management manager, ENVIS s.r.o

Ing. Martina Margorínová, PhD - manager, Metrostav a.s. Bratislava

Ing. Branislav Nemec, PhD - construction management manager, Metrostav a.s.

Ing. Lubom Pepucha, PhD - EU fund management manager, entrepreneur

Ing. Peter Časnocha, PhD - economic analysis manager, entrepreneur

Ing. Ján Filipovský, PhD - Manager, Road Scanner Central Europe s.r.o

c Evaluation of the study programme quality by employers (feedback)

Slovak Chamber of Civil Engineers - Bratislava
Trasnport Research Institute - Žilina

4. Structure and content of the study programme

a Rules for the design of study plans within the study programme

At the university level, it defines processes, procedures and structures:

Directive 203 - Rules for the creation of recommended study plans for study programs at UNIZA (LINK: directive-UNIZA-c-203.pdf)

Directive 204 - Rules for the creation, modification, approval and cancellation of study programs at UNIZA (LINK: smernica-UNIZA-c-204-u

Directive 205 - Rules for the assignment of teachers to the provision of study programs at UNIZA (LINK: directive-UNIZA-c-205.pdf),

Directive 212 - Rules for defining the workload of UNIZA creative employees (LINK: directive-UNIZA-c-212.pdf).

Directive No. 110 - Study Regulations for the PhD. Degree of University Studies at the University of Žilina

For the conditions of the faculty, the information is summarized in the materials: Information on study 2021/2022 and Information on study 2

b Recommended study plans for individual study paths

The recommended profiles - trajectories, and studies are based on educational outcomes and indicated occupations and jobs. At the same t professional path, the student will be able to apply himself in defined indicated occupations and jobs based on the system of occupations. At skills, especially in the areas of investment project management, construction technology management, and building operation managemen

Profile specialization:

1. Management of preparation and implementation of investment

projects indicated profession: investment project management specialist

job performance: project preparation manager,

4. Structure and content of the study programme

2. Preparation and management of construction technologies and construction processes

indicated occupation: specialist in the preparation and management of construction technology and construction processes

job performance: chief analyst of quality control and systems

3. Research and operation management of buildings and transport infrastructure management systems

indicated occupation: specialist, a researcher in the management of the operation of construction and transport infrastructure management s

job performance: senior researcher within the road database and transport infrastructure management systems

The study program is composed of the main topics of the core of the study field of construction. The profiling of the study program is created By choosing from compulsory elective courses, students can create their way of profiling their studies. They can choose it from the following

1. management of the preparation and implementation of investment projects

compulsory elective courses: Environmental Studies, Life Cycle Analysis of Transport Structures

2. preparation and management of construction technologies and construction processes

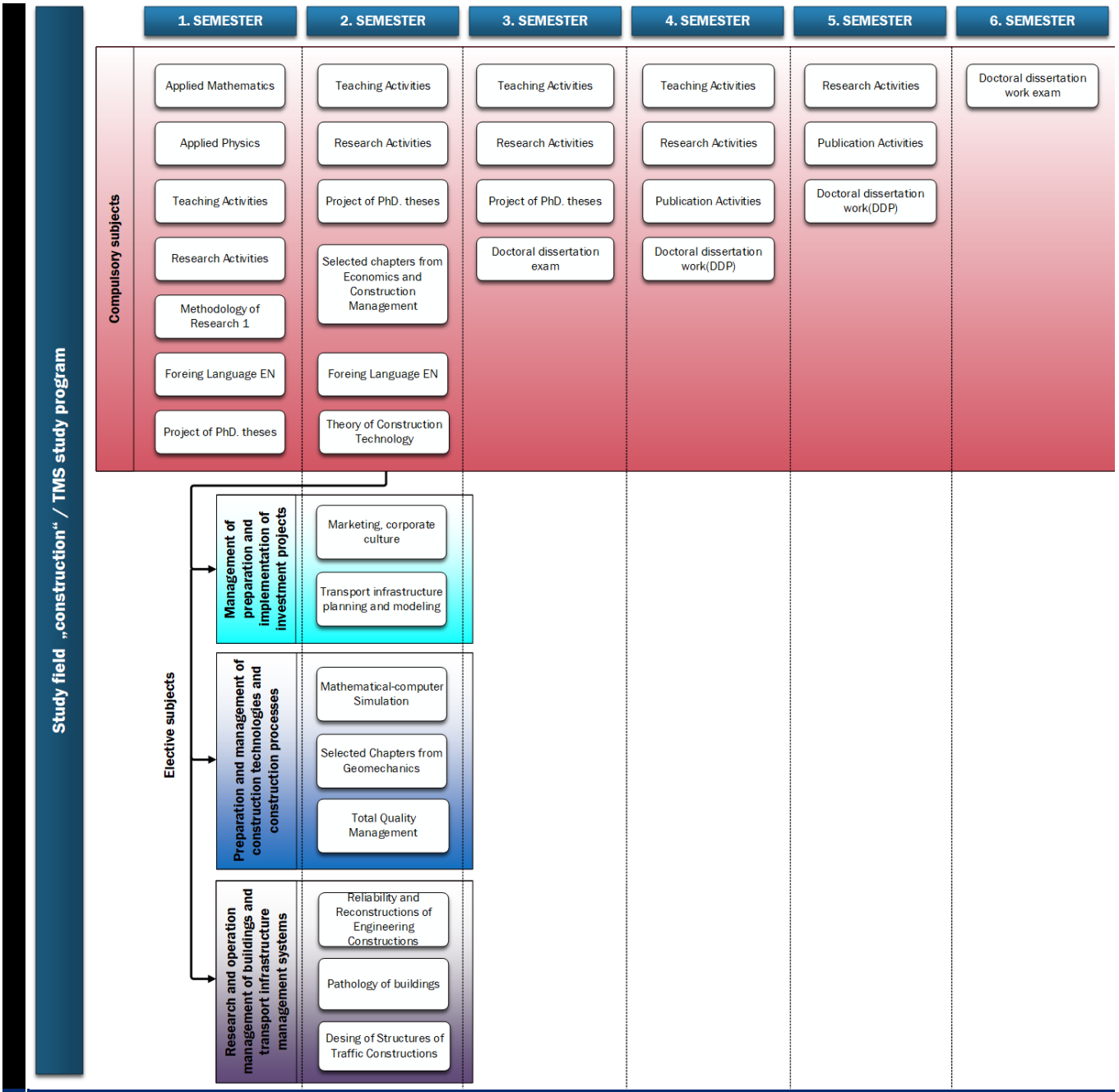
compulsory elective courses: Mathematical - Computer Simulation, Selected Topics in Geomechanics, Complex Quality Management

3. research and management of the operation of constructions and management systems of transport infrastructure

compulsory elective courses: Reliability and Reconstruction of Civil Engineering Structures, Design of Transport Structures, Building

Pathology .

The structure of the subjects of compulsory and optional subjects is described by the flow chart. At the same time, it defines the possibilities.



4. Structure and content of the study programme

c **The study programme, in the structure of compulsory, compulsory optional and optional courses**
Profile courses of the relevant study path (specialization) within the study programme - Appendix 1

Number of credits, the achievement of which is a condition for proper completion of studies

120

Other requirements that the student must meet within the study programme and for its proper completion, including the requirem

Conditions during the study: completion and positive continuous and final evaluation of individual subjects with the weight of credits stated in scientific - research activities, elaboration of a dissertation project

The doctoral student's study plan consists of a study part, which ends with a dissertation examination, a scientific part, and the defense of th

The number of credits for individual activities is determined by the TKIS study plan and approved by the Trade Union Commission and the S

The study part of the doctoral student's study plan consists mainly of participation in lectures, seminars, and individual study of professional study credit system. The individual study plan of the doctoral student contains a list of subjects to be completed by the doctoral student, a lis list of compulsory and recommended literature. The scientific part of the doctoral student's study plan consists of individual or team scientific doctoral student's study plan is professionally guaranteed by the supervisor. The number of credits for individual activities is determined by t Board of the Faculty of Civil Engineering.

The supervisor submits to the dean an annual evaluation of the fulfillment of the doctoral student's study program no later than 31 August fo The supervisor evaluates the status and level of fulfillment of the doctoral student's study program, adherence to deadlines, awards credits,

The doctoral student registers for the dissertation examination in the full-time form of doctoral studies no later than 18 months from the date prepared for the dissertation examination together with the application. The written work for the dissertation exam consists of a dissertation an overview of the current state of knowledge on the topic, an outline of the theoretical foundations of its future solution, and an analysis of t a report on the written work for the dissertation examination. The dissertation examination consists of a part consisting of a discussion of the demonstrate theoretical knowledge in the specified subjects of the dissertation examination. The dissertation examination takes place befor based on a proposal by the chairman of the trade union commission. The commission has at least four members, at least one of whom is no have the scientific-pedagogical title of professor, the other members must have the title of at least Ph.D. The examination board evaluates th "failed". Minutes of the dissertation examination is prepared, where the commission concludes its recommendation, or proposal to modify th

d **Conditions for proper completion of studies**: The study ends with the completion of the study according to the relevant study program. T

1. completion of all compulsory subjects,
2. completion of the required number of compulsory elective courses,
3. elaboration of the dissertation project and its defense
4. elaboration of the dissertation and its defense
5. publishing activity

The condition for the proper completion of doctoral studies is the completion of the dissertation examination, obtaining the required number degree of university study in SP TKIS ability and readiness for independent scientific and creative activity in the field of research. The work p of the dissertation should be the acquisition of new knowledge in the field. Scientific research is the process of acquiring new scientific know systematic understanding of the field of study, must demonstrate skills in research work, and correctly apply the methods of scientific resear research himself, that he sketched it, constructed it, realized it, optimized it, and all this in an ethically clean way.

The doctoral student submits to the dean an application for permission to defend the dissertation by the study schedule if he/she has obtain will be accompanied by other documents required by Directive no. 110, which also defines the structure of the dissertation, and Directive no. After receiving the application for permission to defend the dissertation, the dean submits to the chairman of the trade union commission the of the defense commission and the opponents' proposal. Commission and min. 2 opponents are then appointed by the dean of the faculty.

A for permission to defend the dissertation, together with all the requisites, including the opponents' opinions, to the chairman of the defense c dean the time and place of the dissertation defense. The dissertation together with its defense forms one subject. The defense of the dissertation no later than in the last month of the last academic year of his / her standard length of study. The defense of the dissertation takes place in t and benefits. Opponents will present their opinions, on which the doctoral student will give an opinion. The discussion verifies the accuracy, take place only in the presence of at least two-thirds of the members of the defense commission entitled to vote, including at least two oppo end of the defense, a closed meeting of the commission is held, which is attended by its members, including opponents and the trainer. The results of the dissertation in practice. At the same time, the commission and the opponents will decide in a secret ballot whether the commits will evaluate the defense of the dissertation with a mark, while the classification is carried out according to the classification scale specified i reasoned vote to the doctoral student and the other participants present at its public meeting. A proposal for the award or non-award of an a student, shall be submitted by the chairman of the defense commission to the dean. After a positive assessment of the proposal of the disse graduate of the doctoral study, the Dean will submit to the Rector documents on the completion of the study. The academic title of "doctor" (" successful defense of the dissertation.

e **For individual study plans, the institution states the requirements for completing the individual parts of the study programme and**

number of credits for compulsory courses required for proper completion of studies/completion of a part of studies

number of credits for compulsory optional courses required for the proper completion of studies/completion of a part of studies

number of credits for optional courses required for the proper completion of studies/completion of a part of studies

4. Structure and content of the study programme

number of credits required for the completion of studies/completion of a part of the studies for the common foundations and for the relevant translation combination study programme

number of credits for the final thesis and the defense of the final thesis required for the proper completion of studies

number of credits for professional practice required for the proper completion of studies/completion of a part of studies

number of credits required for the proper completion of studies/completion of a part of the studies for project work with the indication of relev

number of credits required for the proper completion of studies/completion of a part of the studies for artistic performances in addition to the

Rules for the verification of learning outcomes, students' assessment and the possibilities of appealing against the assessment

Doctoral studies are evaluated according to the principles of the credit system by the Decree of the Ministry of Education of the Slovak Repu the principles set out in Directive no. 216: Quality Assurance of Doctoral Studies at the University of Žilina in Žilina. The quality of the docto completed doctoral study is considered to be one in which, in addition to meeting the schedule, all required criteria have been met and the c she has stated in the individual study plan.

At the university level, the processes, procedures, and structures are defined by Directive 110 - Study Regulations for the Third Degree of U

At the faculty level, verification of educational outcomes is included in the methods of evaluating the overall educational outcomes of the stu not all outputs need to be specifically measurable, they are verified exactly through the learning outcomes of the subjects. Learning outcome their evaluation as well as the evaluation methods are by the document Methodological Recommendations for the Creation and Harmonizati individual subjects t. j. whether it is a lecture in combination with exercise or laboratory exercise, resp. only the nature of the lecture, resp. ex stated in each Information Sheet and evaluated by the number of credits.

f

During the implementation of the study program, the subject of the evaluation is mainly the facts related to the fulfillment of the content of th the academic year by the supervisor and approved by the guarantor of the study program and subsequently by the dean. The decisive facts fulfilled all the obligations arising from the individual study plan and does not have sufficient credits cannot apply for the dissertation examin by the scientific council of the faculty once a year as part of the evaluation of the level of the public university in educational activities and th Part of the doctoral study is the quality publishing activities of the doctoral student in cooperation with his supervisor. Successful completion doctoral students in the individual study plan of the doctoral student and the minimum criteria for doctoral study outcomes in individual fields 1 Directive no. 216. The quality of the doctoral student's outputs and their presentation at conferences, seminars, or journals are regularly e guarantor or the dean. The quality of all publications, patents, utility models, or other achieved results is evaluated by the commission and o to the development of the relevant field of study and originality of results. The quality of the outputs, especially of the ending doctoral studen

The learning outcomes at the subject level are clearly measurable by defined assessment methods, which are listed in the individual informa subjects is applied to the principles of evaluation at UNIZA stated in the UNIZA Methodological Recommendation on p. 39. Assessment cor combination with exercise or laboratory exercise, resp. only the nature of the lecture, resp. exercise or laboratory exercise, ie according to th by the number of credits.

Conditions for the recognition of studies or a part of studies

At the university level, the processes, procedures, and structures are defined by Directive Directive No. 110 - Study Regulations for the Thir of Doctoral Studies at the University of Žilina in Žilina.

g

In the case of foreign mobility and internships, Directive 219 - Mobility of students and employees of the University of Žilina abroad defines t

In the case of the TMC study program, the guarantor of the study program decides on the recognition of the study, its part, or individual subj core knowledge of the study program.

Topics of final theses of the study programme (or a link to the list)

The assignment of the topics of final theses, for the doctoral study of dissertations, is determined by Directive no. 110 Study Regulations for rigorous and habilitation theses in the conditions of the University of Žilina in Žilina

h

The topics of the dissertations, on the proposal of the supervisors, are approved by the dean, who approves them no later than two months in the admission procedure. For each topic, the name of the study program, the name of the supervisor, the form of study (full-time, part-tim Proposals for dissertation topics are published and published on the official board of the faculty's website, which also publishes the method determined by the academic calendar of the training workplace.

i **Rules for the assignment, processing, opposition, defence and evaluation of final theses in the study programme; list of the super**

At the university level, the processes, procedures, structures of education, and evaluation of dissertations are defined by the following guide

Directive no. 110: Study regulations for the third degree of university studies at the University of Žilina

Directive no. 219: Quality Assurance of Doctoral Studies at the University of Žilina and

Directive no. 215 on final, rigorous, and habilitation theses in the conditions of the University of Žilina in Žilina

Proposals for dissertations on the proposal of supervisors, with the consent of the chairman of the trade union commission, are approved by for doctoral studies, which can be applied. For each topic, the name of the study program, the name of the supervisor, the form of study (full are given. Proposals for dissertation topics are published and published on the official board of the faculty's website, which also publishes th determined by the academic calendar of the training workplace.

The entrance examination takes place in front of an admissions committee of at least four members. The Admissions Committee consists of a trainer for the listed topic. The Admissions Committee evaluates the result of the entrance examination in a closed session with the conclu their order according to the success of the entrance examination. In determining the order, the commission also takes into account the scop professional activities. Based on the results of the entrance examination, the Dean will decide on the admission of the candidate within 30 d shall also state the name of the supervisor and the topic of the dissertation in his / her decision. The written decision must also contain a sta decision and be delivered to the tenderer in his own hands.

During the implementation of the study program, the facts related to the fulfillment of the content of the individual study plan of the doctoral s the supervisor and approved by the guarantor of the study program and subsequently by the dean. The decisive facts are the dissertation ex

4. Structure and content of the study programme

obligations arising from the individual study plan and does not have sufficient credits cannot apply for the dissertation examination or apply f

Ensuring the required level of course and learning outcomes is achieved through the development of:

General content of the dissertation project
Supervisor's proposal to appoint an opponent and an examination board
Dissertation exam application
Exam report from the selected subject before the dissertation exam
General content of the dissertation
Proposal for the appointment of opponents and members of the commission to defend the dissertation
Abstract

The student fulfills his / her study obligations based on an individual study plan. It consists of three parts:

1st study part

2nd scientific part

3. defense of the dissertation

The study part consists of taking examinations within the study plan of the relevant study program, from compulsory and optional subjects. study part ends with a dissertation exam, performed no later than 18 months after the start of the study. The student is obliged to prepare a dissertation examination in front of the examination commission. Through the dissertation, the student demonstrates the acquisition of basic profile subjects of the study program, and orientation in the topic of the dissertation. The student presents the ability to study professional an

From the beginning of the study, the student performs scientific work related to the topic of his dissertation by his study plan. Elaborates on t in the laboratory or experimental sections. The scientific part ends with the defense of the dissertation.

As part of his studies, the student also performs publishing activities, where he publishes his achieved results. Articles must be published at

Within the deadline set for the submission of the thesis, the author of the thesis personally uploads its electronic version identical to the bou of the Final Thesis (hereinafter EZP). Access to EZP is via the page: http://kniznica.uniza.sk/ezp. UNIZA will send the work in electronic for originality of the submitted work will be verified. Along with the dissertation, the relevant opinions of opponents, supervisors, supervisors of fi opinions are stored in the Central Register of final, rigorous, and habilitation theses together with the relevant work for the period of its reten

From the CRZP, the university will obtain the information needed to verify the degree of originality - evaluation of originality. The result is des of originality based on the result of the text compliance check. In his opinion, he shall state whether he considers the work to be original or p work. The basis for the decision of the committee on the final thesis is the opinion of the final thesis supervisor, the opinion of the dissertatio

The doctoral student submits to the dean an application for permission to defend the dissertation by the study schedule if he/she has obtain dissertation, the dean submits to the chairman of the trade union commission the doctoral student's application together with the dissertation Commission and min. 2 opponents are then appointed by the dean of the faculty.

The dissertation evaluates the method of processing the work (scope, balance, internal continuity of parts of the work), the fulfillment of the value of the achieved own results, theoretical or practical applicability of the proposed conclusions, and recommendations in practice are ev thesis, work with literature, other information sources (scope, structure, representativeness, observance of the citation standard), formal side thesis and systematic work of the student, ability to work independently and creatively, participation in consultations.

After receiving all the opinions from the opponents, the Dean forwards the doctoral student's request for permission to defend the dissertatio committee. After receiving the materials, the chairman of the defense committee will propose to the dean the time and place of the dissertati dissertation is a state examination and in the standard length of study, the doctoral student must complete it no later than in the last month o place in the form of a scientific debate. The doctoral student will present the content of his dissertation, results, and benefits. Opponents will accuracy, justification, and scientific origin of the knowledge contained in the dissertation. The defense may take place only in the presence opponents, and at least one member of the commission must be from a workplace outside UNIZA.

At the end of the defense, a closed meeting of the commission is held, which is attended by its members, including opponents and the traine the results of the dissertation in practice. The Commission will decide on the originality of the work after the defense. The basis for the decis dissertation opponents, the protocol on the control of originality, and the defense of the final thesis by its author. At the same time, the comm the doctoral student an academic degree. Subsequently, the commission will evaluate the defense of the dissertation with a mark, while the chairman of the defense committee shall announce the result of the reasoned vote to the doctoral student and the other participants present student, together with the minutes and file material of the doctoral student, shall be submitted by the chairman of the defense commission to award or non-awarding of the academic title "doctor" to the graduate of the doctoral study, the Dean will submit to the Rector documents on "PhD.") Is awarded by UNIZA with effect from the date of successful defense of the dissertation.

Evidence of completion of the TKIS doctoral study program in the field of study Construction is a university diploma, a state examination cer student by the dean at a graduation ceremony, organized according to the traditions and customs of UNIZA.

At the end of the study on the chosen topic, the student will prepare a dissertation. Its defense is carried out before the dissertation defense the relevant study program.

Opportunities and procedures for participation in student mobility

In the case of foreign mobility and internships, Directive 219 - Mobility of students and staff of the University of Žilina abroad defines the pro c-219.pdf)

Within the study program in question, the study plan is compiled from the offer of study subjects at a foreign university and contains the equi her study program for the relevant academic year at UNIZA.

Foreign mobility of scientific and pedagogical staff is required within the fulfillment of the conditions for habilitation and inauguration proceed

Rules for adherence to academic ethics and rules for drawing consequences

4. Structure and content of the study programme

At the university level, the processes, procedures and structures are defined by Directive 207 - Code of Ethics of the University of Žilina and

The essence of the code of ethics is that all persons employed or studying at the university are governed by the following ethical principles: duty, respect for the dignity of others and awareness of one's own dignity and honor, while respecting fundamental human rights and freedo are defined.

The Disciplinary Code for UNIZA students defines: disciplinary offense, person responsible for the disciplinary offense, disciplinary measure imposing a disciplinary measure.

Both documents have not yet been applied at the level of the study program.

Procedures applicable to students with special needs

At the university level, Directive 198 - Support for Applicants and Students with Special Needs at the University of Žilina defines processes, studies at the University of Žilina in Žilina and Directive No. 219: Quality Assurance of Doctoral Studies at the University of Žilina -

The procedures defined by these guidelines also apply at the faculty level.

Procedures for filing complaints and appeals by students

5. Course information sheets of the study programme (In the structure according to Decree no. 614/2002 Coll)

Compulsory courses

Grd.	Sem.	Course	Name	Short.	Hours	End	Credits	Profile	Core	Guarantor
1	Z	4D0D101	Applied mathematics	AM	2 - 0 - 0	S	5	yes	yes	doc. Ing. Mária Kúdelčíková, PhD.
1	Z	4D0D102	Applied physics	AP	2 - 0 - 0	S	5	-	yes	prof. RNDr. Jozef Kúdelčík, PhD.
1	Z	4D0D106	Methodology of scientific work	MSW	0 - 2 - 0	V	5	yes	yes	prof. Ing. Marián Drusa, PhD.
1	Z	4D0D107	Foreing language EN	FL	0 - 2 - 0	V	2	-	-	PaedDr. Lenka Môcová, PhD.
1	Z	4DTD103	Teaching activity	Ta	0 - 4 - 0	V	4	-	-	doc. Ing. Juraj Šrámek, PhD.
1	Z	4DTD104	Scientific activity	SA	0 - 2 - 0	V	3	yes	yes	prof. Ing. Ján Mikolaj, CSc.
1	Z	4DTD105	Dissertation project	DP	0 - 2 - 0	V	5	yes	yes	doc. Ing. Katarína Zgútová, Dr.
1	L	4D0D205	Foreing language EN	FL	0 - 2 - 0	S	3	-	-	Mgr. Eva Leláková, PhD.
1	L	4DTD201	Teaching activities	Ta	0 - 4 - 0	V	4	-	-	doc. Ing. Juraj Šrámek, PhD.
1	L	4DTD203	Dissertation project	DP	0 - 2 - 0	V	5	yes	yes	doc. Ing. Katarína Zgútová, Dr.
1	L	4DTD204	Scientific activity	SA	0 - 2 - 0	S	3	yes	yes	prof. Ing. Ján Mikolaj, CSc.
1	L	4DTD208	Theory of construction technology	TCT	2 - 0 - 0	S	5	yes	yes	doc. Ing. Katarína Zgútová, Dr.
1	L	4DTD209	Selected chapters from economics , construction management and information systems	SCHCM	2 - 0 - 0	S	5	yes	yes	prof. Ing. Ján Mikolaj, CSc.
2	Z	4DTD301	Teaching activities	TAC	0 - 4 - 0	V	2	-	-	doc. Ing. Juraj Šrámek, PhD.
2	Z	4DTD302	Scientific activity	RAC	0 - 2 - 0	V	8	yes	yes	prof. Ing. Ján Mikolaj, CSc.
2	Z	4DTD303	Dissertation project	POT	0 - 2 - 0	V	5	yes	yes	doc. Ing. Katarína Zgútová, Dr.
2	Z	4DTD304	Dissertation exam	DT	0 - 5 - 0	V	15	yes	yes	doc. Ing. Martin Pitoňák, PhD.
2	L	4DTD401	Teaching activities	TAC	0 - 4 - 0	V	2	-	-	doc. Ing. Juraj Šrámek, PhD.
2	L	4DTD402	Scientific activity	RAC	0 - 6 - 0	V	12	yes	yes	prof. Ing. Ján Mikolaj, CSc.
2	L	4DTD403	Publishing activity	PAC	0 - 6 - 0	V	10	yes	yes	doc. Ing. Martin Pitoňák, PhD.
2	L	4DTD404	Doctoral dissertation (DDP)	DDP	0 - 6 - 0	V	6	yes	yes	doc. Ing. Katarína Zgútová, Dr.
3	Z	4DTD501	Scientific activity	RAC	0 - 6 - 0	V	12	yes	yes	prof. Ing. Ján Mikolaj, CSc.

5. Course information sheets of the study programme (In the structure according to Decree no. 614/2002 Coll)

3	Z	4DTD502	Publishing activity	PAC	0 0	4 -	V	8	yes	ves	doc. Ing. Martin Pitoňák, PhD.
3	Z	4DTD503	Doctoral dissertation	PTH	0 0	5 -	V	10	yes	ves	doc. Ing. Katarína Zgútová, Dr.
3	L	4DTD601	Dissertation and its defense	DF	0 0	15 -	T	30	yes	ves	prof. Ing. Ján Mikolaj, CSc.

Compulsory optional courses

Grd.	Sem.	Course	Name	Short.	Hours	End	Credits	Profile	Core	Guarantor
1	L	4D0D206	Mathematical-computer Simulation	MCS	2 - 0 - 0	S	5	yes	-	doc. Ing. Juraj Mužík, PhD.
1	L	4D0D207	Selected Chapters from Geomechanics	SChG	2 - 0 - 0	S	5	yes	yes	prof. Ing. Marián Drusa, PhD.
1	L	4D0D210	Environmental science	EnVS	2 - 0 - 0	S	5	yes	-	doc. Ing. Dušan Jandačka, PhD
1	L	4D0D212	Reliability and reconstructions of engineering constructions	RREC	2 - 0 - 0	S	5	yes	yes	CSc. prof. Ing. Josef Vičan, CSc.
1	L	4DTD213	Total quality management	TQM	2 - 0 - 0	S	5	yes	yes	doc. Ing. Katarína Zgútová, Dr.
1	L	4DTD214	Life cycle assessment of traffic constructions	LCAoTC	2 - 0 - 0	S	5	yes	yes	doc. Ing. Eva Remišová, PhD.
1	L	4DTD215	Desing of structures of traffic constructions	DSTC	2 - 0 - 0	S	5	yes	yes	doc. Ing. Martin Pitoňák, PhD.

Optional courses

Grd.	Sem.	Course	Name	Short.	Hours	End	Credits	Profile	Core	Guarantor

6. Current academic year plan and current schedule

Current academic year plan

Dean's Order No. 11/2021 on the academic calendar for doctoral studies at the Faculty of Civil Engineering of the University of Žilina in the academic year 2021/2022 https://shportal1.uniza.sk/unizadocs/SVF/Pr%C3%ADkazy/2021/11_prikaz_dekana_akademicky_kalendar_2021_2022dokdok. pdf

Current schedule

The current schedule can be found folowing this link:

https://vzdelavanie.uniza.sk/vzdelavanie/rozvrh2.php

7. Persons responsible for the study programme

a **A person responsible for the delivery, development, and quality of the study programme (indicating the position and contact details)**

Prof. Ing. Ján Mikolaj, CSc

head of the department

jan.mikolaj@uniza.sk

b **List of persons responsible for the profile courses of the study programme**

-
c

Contents is generated from Study plans.

Name, surname, titles	Course	Name
prof. Ing. Marián Drusa, PhD.	4D0D106	Methodology of scientific work
prof. Ing. Marián Drusa, PhD.	4D0D207	Selected Chapters from Geomechanics
doc. Ing. Daniela Ďurčanská, CSc.	4D0D210	Environmental science
doc. Ing. Mária Kúdelčíková, PhD.	4D0D101	Applied mathematics
prof. Ing. Ján Mikolaj, CSc.	4DTD209	Selected chapters from economics , construction management and information systems
doc. Ing. Juraj Mužík, PhD.	4D0D206	Mathematical-computer Simulation
doc. Ing. Eva Remišová, PhD.	4DTD214	Life cycle assessment of traffic constructions
prof. Ing. Josef Vičan, CSc.	4D0D212	Reliability and reconstructions of engineering constructions
doc. Ing. Katarína Zgútová, Dr.	4DTD208	Theory of construction technology

7. Persons responsible for the study programme

Name, surname, titles	Course	Name
doc. Ing. Katarína Zgútová, Dr.	4DTD213	Total quality management

d

List of teachers of the study programme (including doctoral students) with the assignment to the course

Contents is generated from Study plans.

Name, surname, titles	Org.form	Course	Name
prof. RNDr. Peter Bury, CSc.	Lecture	4D0D102	Applied physics
prof. Ing. Marián Drusa, PhD.	Lecture, Seminar	4D0D106	Methodology of scientific work
prof. Ing. Marián Drusa, PhD.	Lecture	4D0D207	Selected Chapters from Geomechanics
doc. Ing. Dušan Jandačka, PhD.	Lecture	4D0D210	Environmental science
prof. RNDr. Jozef Kúdelčík, PhD.	Lecture	4D0D102	Applied physics
doc. Ing. Mária Kúdelčíková, PhD.	Lecture	4D0D101	Applied mathematics
PaedDr. Lenka Môcová, PhD.	Seminar	4D0D107	Foreing language EN
doc. Ing. Juraj Mužík, PhD.	Lecture	4D0D206	Mathematical-computer Simulation
doc. Ing. Eva Remišová, PhD.	Lecture	4DTD214	Life cycle assessment of traffic constructions
Ing. Štefan Šedivý, PhD	Seminar	4DTD209	Selected chapters from economics , construction management and information systems
doc. Ing. Juraj Šrámek, PhD.	Lecture	4DTD208	Theory of construction technology
prof. Ing. Josef Vičan, CSc.	Lecture	4D0D212	Reliability and reconstructions of engineering constructions
doc. Ing. Katarína Zgútová, Dr.	Lecture	4DTD208	Theory of construction technology
doc. Ing. Katarína Zgútová, Dr.	Lecture	4DTD213	Total quality management

e - f

List of the supervisors of final theses with the assignment to topics

The new study program

g

Student representatives representing the interests of students of the study programme

Ing.Juraj Mušuta

h

Study advisor of the study programme

Doc.Ing.juraj Šrámek, PhD

Supervisors according to individual dissertation topics

i

Other supporting staff of the study programme - assigned study officer, career counsellor, administration, accommodation department, etc.

Doctoral study department: Ing. Andrea Husáriková - https://svf.uniza.sk/index.php/fakulta/pracoviska-fakulty/dekanat

International Mobility Officer, study abroad (Erasmus +): Mgr. Zuzana Pudiková

https://svf.uniza.sk/index.php/studenti/studentsky-zivot/studium-v-zahranici

Career advisor: PhDr. Miroslava Bruncková, Ph.D.

https://www.uniza.sk/index.php/studenti/prakticke-informacie/poradenske-a-karierne-centrum-uniza

7. Persons responsible for the study programme

UZ Veľký Diel accommodation: Jozef Lacek (director of UZ Veľký Diel)

https://vd.internaty.sk/

Accommodation facility UZ Hliny V: Ing. Miroslav Stromček (director of UZ Hliny V)

http://hliny.internaty.sk/?i=ubytovanie

8. Spatial, material, and technical provision of the study programme and support

a **List and characteristics of the study programme classrooms and their technical equipment with the assignment to learning outcomes and courses** (laboratories, design and art studios, studios, workshops, interpreting booths, clinics, priest seminaries, science and technology parks, technology incubators, school enterprises, practice centres, training schools, classroom-training facilities, sports halls, swimming pools, sports grounds).

A computer room and a tunnel control simulator classroom have been set up to teach profile subjects. Equipped laboratories of the Faculty of Civil Engineering are available for teaching laboratory and experimental tests.

AC014 - above standard (specialized software for computer graphics, optimization methods, economic efficiency) - KTMS

AC015 - above-standard tunnel control simulator

There are also other classrooms available, which are assigned to the subjects by the UNIZA Rector's Schedule Department:

AC205 - above standard (software), AC105 - above standard (software), AC206 - above standard (software), AE102 - standard, AE103 - standard, AE202 - standard, AE203 - standard, AE303 - standard

AF016 - laboratory, AE013 - production and testing of fresh concrete, non-destructive testing of construction materials, BJ3 - pavilion type laboratories

BI25 - pulsator - preparation and testing (static and dynamic) of large samples or entire structural load-bearing elements

BJ40 - preparation and testing of hardened materials (eg concrete)

Standard - means standard equipment - computer, data projector, whiteboard, wi-fi, connection by a separate computer

All classrooms are suitable for disabled students.

Material and technical equipment of laboratories and laboratory classrooms is registered at: https://vav.uniza.sk/vevysun.php?id=1

In addition, SvF has processed virtual tours of laboratories with a description of material and technical equipment at: http://priestory.uniza.sk/svf/

In addition to the above classrooms, university-wide classrooms registered at: https://vzdelavanie.uniza.sk/vzdelavanie/rozvrh2.php are used.

With these classrooms, it has a schedule department, which assigns them to individual study programs and subjects according to the number of students and the requirements of faculties / departments. The technical equipment of these classrooms is presented in the form of virtual tours at: https://vzdelavanie.uniza.sk/vzdelavanie/rozvrh2.php.

Department of CM - has at its disposal top equipment for experimental measurement of quality and fatigue of asphalt mixtures, accredited road testing / ATZ / - use pattern - for measuring long-term effects of road construction and tunnel operation control simulator. In cooperation with the Research Center, it uses a unique diagnostic technique for mass data collection and roadworthiness assessment.

The DGt laboratory concentrates the basic program of soil and rock mechanics tests, and some special geotechnical tests to determine filtration and technological properties. The laboratory has at its disposal a unique large-scale device for shear and deformation tests for testing earth structures reinforced with geosynthetics and a unique mobile device - the static penetration set PAGANI TG 63-200.

DBPUP has the necessary equipment for research into the resistance of load-bearing components (hydraulic pulsator and breaking track, ALPHA press, MATEST press), as well as for monitoring stresses and deformations in experimental analyzes of the behavior of load-bearing elements under load. It has a measuring line for sensing deformations of building structures and bridges SPIDER 8 with applications in laboratory conditions as well as in situ. The department's instrumentation includes a SONAGAG ultrasonic thickness gauge, a PUNDIT ultrasonic device, a DYNAMETER tear test device, a PROFOMETER 5 reinforcement position device, a EQUOTIP hardness and subsequent strength tester, a reinforcement corrosion analyzer, etc.

Experimental measurements in the DHEE laboratory in the BJ037 building are supplemented by laboratory tests aimed at determining the heat and technical characteristics of road construction materials. In the field of materials used in the construction layers of road roads, the department has sufficient instrumentation to determine the quality parameters of aggregates and top instrumentation to determine the quality parameters of various types of binders and asphalt mixtures according to current STN EN. It also has sufficient instrumentation to simulate the effects of climatic influences on road construction materials and has a penetration radar to detect layers of road structures. The department is equipped with devices for automated monitoring of traffic flow elements and analysis of emission and noise conditions along roads.

For educational and scientific research activities, DRETM uses an experimental base, which includes an outdoor test stand, air-conditioned cabinet, hydraulic press, pulsator, equipment for determining the deformation resistance of structural layers of the basement and a device for determining the penetration module. The department also has instruments and equipment for measuring and recording the geometric parameters of the track (measuring trolley KRAB-Light), deformation and temperature characteristics, various types of compaction equipment and equipment for particle size distribution of bulk materials (vibrating table, sets of screens,

8. Spatial, material, and technical provision of the study programme and support

dryers).

b

Characteristics of the study programme information management (access to study literature according to Course information sheets, access to information databases and other information sources, information technologies, etc.)

The information necessary for the effective management of study programs at UNIZA can be found in the UNIZA Academic Information and Education System (AIVS). Details on sources of information in this area are in Directive no. 217 Resources to support educational, creative and other related activities of the University of Žilina in Žilina no. 16 https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-217.pdf and in Directive no. 218 Directive on the collection, processing, analysis and evaluation of information to support the management of study programs. https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-218.pdf.

The Department for Schedules, in cooperation with the relevant study departments of the faculties and the Center for Information and Communication Technologies (CeIKT), collects in information systems data on the passportization of available premises and on the inventory of technology used in study programs. Objects that are also accessible to students and employees with disabilities are specially marked in the system. Relevant sources of information for applicants and students are information on faculty study programs as well as information on university-wide study programs. Essential information about the study, including study programs, instructions for the admission procedure, graduation, etc. are part of UNIZA's internal regulations or parts thereof. Access to these documents is available on the UNIZA website at www.uniza.sk in the Applicants section. Detailed information on the study programs is located on the faculty website with the option to use the links on the main page. Information on currently provided full-time study programs in the relevant academic year is always available on the Study Programs website.

Access to study literature is provided by the UNIZA University Library (UK) http://ukzu.uniza.sk/ - see also Directive no. 217, Art. 17: Resources to support educational, creative and other related activities.

Access to the compulsory literature listed in the Information Sheet (available in the Education system) of the relevant subject is available either in the UK, either directly or through its sub-libraries at the relevant departments, depending on the type and form of literature and study materials. Most of the newer titles published by the University of Žilina in Žilina are also available in the EDIS university publishing house.

Another frequently used form is the provision of study materials needed for the processing of specific tasks directly by the relevant teachers, unless it is freely available material (especially presentations from lectures, some sample solutions, excerpts from technical standards and various illustrative examples. These materials are most often available either in the LMS Moodle learning platform, through shared materials in MS-Teams, or by e-mail, rarely only in exceptional cases in the form of physical copies.

Departmental libraries have been set up at the departments of the faculty with access for students through authorized employees. At lectures and seminars, students are regularly informed about access to online resources.

c

Characteristics and extent of distance education applied in the study programme with the assignment to courses. Access, manuals of e-learning portals. Procedures for the transition from contact teaching to distance learning

The focus of the work of distance education and study control at FCE UNIZA is e-education, built on the basis of LMS Moodle. The organization of the courses is based on guided study with the support of information and communication technologies in close connection with AIVS.

Currently, the MS Teams system is used to conduct online lectures and exercises, there are instructions from the Center for Information and Communication Technologies (CIKT):

https://ikt.uniza.sk/uniza-wiki/microsoft-teams-informacie/
https://ikt.uniza.sk/uniza-wiki/vzdelavacie-skupiny/

d

Institution partners in providing educational activities for the study programme and the characteristics of their participation

Slovak Chamber of Civil Engineers - study plans and authorization of graduates for the performance of authorized professions and professional qualifications.

Doprastav a.s. - study plans

Strabag a.s - excursions

Proma s.r.o. Žilina - BIM lectures

Kros a.s. - computer software, construction calculation, construction production management

Odis s.r.o. - Valuation and Information Systems

First sk, S.r.o.- construction software

e

Characteristics of the possibilities for social, sports, cultural, spiritual and social activities

At the university level, the possibilities of social, sports, cultural, spiritual and social activities are described in directive no. 217 Resources to support educational, creative and other related activities of the University of Žilina https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-217.pdf - especially Articles 17, 18 and 19 .

UNIZA creates conditions and supports students' sports and cultural activities through various clubs and the university pastoral center, while creating conditions and supporting other student activities, especially the activities of student organizations and student associations that operate at UNIZA and their activities are in the interest of students.

The creation of these organizations and associations is governed by the procedures set out in Directive no. 123 “Modification of the basic principles in the formation of groups of students and staff at the University of Žilina in Žilina”, with the approval of the UNIZA Rector granting the consent for the establishment of a student organization / club / association based on the opinion of a three-member commission headed by the Vice-Rector for Education. These organizations are governed by statutes approved by the Rector.

8. Spatial, material, and technical provision of the study programme and support

The leaders of their organizations are responsible for the activities of these organizations. List of student organizations / clubs / associations operating in UNIZA:

a) GAMA club,
b) Council of accommodated students Veľký Diel,
c) Council of accommodated students of Hlina,
d) Internet club,
e) Tečko,
f) Railway Friends Club,
g) Rapeš,
h) Radio X,
i) Erasmus Student Network (ESN),
j) UNIZA University Firefighting Club,
At the same time, the Stavbár Folklore Ensemble and the University Pastoral Center, a purpose-built facility for the church and religious society, also operate at UNIZA.

Students of the Faculty of Civil Engineering take advantage of the opportunities for social, sports, cultural, spiritual and social activities offered by UNIZA.

The focus of individual organizations is available at:
https://www.uniza.sk/index.php/studenti/studentsky-zivot/studentske-organizacie

Sports activities for UNIZA students and employees are provided by the UNIZA Institute of Physical Education (hereinafter "ÚTV") as a university-wide workplace with the aim of developing a program of physical activities for UNIZA students and employees.

Substantial information is available at: https://utv.uniza.sk/

f **Possibilities and conditions for participation of the study programme students in mobilities and internships, application instructions, rules for recognition of this education**

At the university level, Directive 219 - Mobility of students and staff of the University of Žilina abroad defines the processes, procedures and structures (Link: smernica-UNIZA-c-219.pdf) and https://uniza.sk/index.php/studenti/general-information/erasmus.

At the faculty level, these activities have a dean for development and foreign relations in his portfolio.

Link to page Erasmus +: https://svf.uniza.sk/index.php/studenti/studentsky-zivot/studium-v-zahranici-erasmus

Contact person: Assoc.prof. Petra Bujňáková, PhD.

Contact (mail): fstav-erasmus@uniza.sk

9. Required abilities and admission requirements for the study programme applicants

a **Required abilities and necessary admission requirements**

At UNIZA level, Directive no. 206: Principles and rules of admission procedure to study at the University of Žilina in Žilina - https://akreditaci

Faculties and other components also guarantee, through respect for and application of the principles and rules of the admission procedure f
a) the admission procedure is reliable, fair and transparent,
b) the conditions of the admission procedure are inclusive and guarantee equal opportunities for each candidate who demonstrates the nec
c) the selection of applicants is based on appropriate methods for assessing their eligibility for study,
(d) the criteria and requirements for tenderers are published in advance and easily accessible.

Pursuant to Act 131/2002 on Higher Education Institutions and on Amendments to Certain Acts, the basic condition for admission to doctora a foreign applicant or student who has completed his / her studies abroad, he / she shall submit to the application for university study at the l a certificate of completion of a second degree by the relevant institution in the SR, resp. UNIZA will apply for recognition of the diploma.
Other conditions for admission to study are set at the faculty level:
The selection of candidates is made on the basis of an evaluation of the entrance examination, which. The entrance exam is conducted as a program, the content of which is to verify the knowledge of foreign language, mathematics and professional and scientific orientation of the c reasons for choosing the topic. in solving the topic, as well as the expected conclusions of the work. The evaluation includes an assessment applicant's independent scientific work.

b **Admission procedures**

At the university level, doctoral studies are governed by the rules defined in Directive no. 110: Study regulations for the third degree of unive www.fri.uniza.sk/uploads/files/1490171294-smernica-110-stud-por-pre-3-st-v-zneni -dod-1-a-2 -verejnene.pdf and Directive no. 219: Quality https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-216.pdf.

The rules, procedures and structures for admission to the 3rd level of higher education are defined by Directive 206 - Principles and rules of akreditacia.uniza.sk/doc/S_206_2021.pdf.

Applicants for the TKIS study program apply for dissertation topics written by the FCE and published on the official bulletin board. The topics consent of the chairman of the TKIS trade union commission, are approved by the dean, who writes them out no later than two months befo For each topic, the name of the study program, the name of the supervisor, the form of study (full-time, part-time), the deadline for submissio given.

The entrance examination takes place in front of an admissions committee of at least four members. The Admissions Committee consists of dean. Another member of the commission is a trainer for the listed topic. The Admissions Committee evaluates the result of the entrance ex "failed". If more than one topic has been logged in candidates, determine their order according to the success of the entrance examination. I

9. Required abilities and admission requirements for the study programme applicants

account the scope and quality of the applicant's previous professional publishing activities and the results of his other professional activities.

Based on the results of the entrance examination, the Dean will decide on the admission of the candidate within 30 days from the date of th applicant, he / she shall also state the name of the supervisor and the topic of the dissertation in his / her decision. The written decision mus possibility of submitting a request for review of the decision and be delivered to the tenderer in his own hands.

Results of the admission process over the last period
The new study program

10. Feedback on the quality of provided education

Procedures for monitoring and evaluating students' opinions on the study programme quality

At the university level, it defines processes, procedures and structures https://svf.uniza.sk/index.php/fakulta/vseobecne-informacie/vnutorny-system-kvality-svf and Directive no. 223 - Monitoring and continuous evaluation of study programs, https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-223.pdf.

At the UNIZA level, for the needs of monitoring and evaluation of students' opinions on the quality of the study program, Directive no. 223 Monitoring and continuous evaluation of study programs https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-223.pdf.

The process of monitoring and periodic evaluation of study programs takes place at UNIZA at three levels:
(a) at Council level, the study program;
b) at the level of UNIZA faculties and institutes;
c) at the level of the UNIZA Accreditation Board.

The following participate in the monitoring and periodic evaluation of the environment:
(a) internal stakeholders:
i. UNIZA students through subject-level and annual program-level feedback;
ii. teachers through regular annual evaluation of subjects and feedback mapping their perception of the teaching process on a three-year basis;
(b) external stakeholders:
i. UNIZA graduates through feedback mapping their entry into the labor market and adaptation in employment on a three-year basis;
ii. employers through feedback mapping the readiness of graduates for internships carried out on a three-year basis.

a

SvF obtains data for monitoring quantitative and qualitative indicators of the quality of the study program through:
a) data collection from information systems for the collection and processing of information from education at UNIZA (AIVS, IS admission procedure, PowerBI, IS Sofia - SAP HR ...),
(b) direct measurement describing student performance, which provides direct evidence of both the education and learning process; direct evidence is the output of education - passing tests and examinations, progress mapping - score (number of points) before and after measurement (testing), performance evaluation in relation to the subject of study (presentations, discussions ..), evaluation of final / dissertation theses, etc.);
c) indirect measurement capturing stakeholders' perceptions of learning, learning experiences, levels of satisfaction, attitudes, links to learning outcomes and practice needs (student surveys, including questionnaires assessing subjects, focus groups, surveys of university teachers, graduates and employers, external control processes) .

The process of collecting data from information systems takes place in cooperation with the Vice-Dean for Research, the guarantor of the study program and the department for doctoral studies with the support of CeIKT. The process of preparation, implementation and statistical processing of direct measurements describing the performance of students is the responsibility of individual teachers in coordination with the guarantors of study programs. The process of preparing and exporting data from indirect measurements capturing the perception of education by stakeholders is coordinated at the level of the UNIZA Science and Research Department. The person responsible for communication with stakeholders for the needs of monitoring and periodic evaluation is the guarantor of the study program in coordination with the dean of the faculty. The person responsible for monitoring at the faculty is the vice-dean for research in coordination with the dean of the faculty. The person responsible for the periodic evaluation of study programs at the level of the Study Program Council is the guarantor of the study program, at the faculty level the dean. Monitoring capturing the perception of education by stakeholders is carried out mainly through questionnaires.

At the department level, subject guarantors conduct their own anonymous questionnaire surveys at the end of the semester in an effort to obtain feedback. The findings are then projected into the teaching process in the next academic year.

b **Results of student feedback and related measures to improve the study programme quality**

The results of the feedback are carried out through student surveys - (https://svf.uniza.sk/index.php/fakulta/vseobecne-informacie/vnutorny-system-kvality-svf), which are regularly evaluated. At the level of teachers, the feedback and measures taken take place mainly at the meetings of the relevant department.

The results of the questionnaire survey have been published since the academic year 2010/2011. An example of a specific evaluation for the last academic year can be found at https://svf.uniza.sk/subory/September_2021/2020_2021_dotaznik_studenti.pdf.

10. Feedback on the quality of provided education

Feedback at the level of the study program is obtained through a regular anonymous questionnaire designed for students graduating from all levels of education. It is used to map the entire study program. General set of questions
consists of items organized at least into topics:

Content of education (fulfillment of set outcomes of SP education, interconnection of subjects, identification of possible duplications ...);
Organization of education (workload, involvement in the life of the faculty, solving professional tasks at the faculty / department / workplace, degree of internationalization, internships and compulsory internships ...);
Access to study and other counseling services;
Leadership and support in the process of preparing a bachelor's, master's or dissertation thesis.

At the level of study programs, the guarantor of the study program analyzes the feedback obtained, identifies opportunities and suggestions for strengthening the strengths, suggestions for eliminating the identified weaknesses and possible threats.

The results of the feedback on the implemented education and the identified opportunities for improvement are subsequently analyzed, evaluated and are the basis for the creation of the Report on the evaluation of the study program within the periodic evaluation of the study program by the Study Program Board.

The key findings and results obtained from surveys and feedback from students are then published on the website of the Faculty of Medicine UNIZA (), where they are available to all members of the academic community and the public.

c	**Results of graduate feedback and related measures to improve the study programme quality**
	Feedback from graduates of study programs maps the effect and impact of completed higher education at the appropriate level. The anonymous questionnaire is intended for all graduates who have completed their studies in a given study program in the last three years. The general set of questions consists of items organized at least into topics: Scope of application Transition to employment Relevance of the study in relation to employment, subject composition, comparison of knowledge, skills and competencies acquired through the study and required by the internship; The need for further education. Graduates are contacted by the Council of the study program in cooperation with the dean of the faculty to fill in the questionnaire. The application shall include information on the place of publication of previous monitoring and periodic evaluation results. The guarantor of the study program and senior staff analyze the data from the relevant part of the feedback obtained, identify opportunities and suggestions for strengthening strengths, eliminating identified weaknesses and possible threats, propose measures to improve the quality of education. The key findings and the results obtained from the surveys and feedback from the graduates are subsequently published on the website of the FIF UNIZA (), where they are available to all members of the academic community and the public. The results of the feedback on the implemented education and the identified opportunities for improvement are subsequently analyzed, evaluated by the Study Program Board and are the basis for the preparation of the Study Program Evaluation Report within the periodic evaluation of the study program by the Study Program Council.

11. References to other relevant internal regulations and information concerning the study or the study progra student (e.g study guide, accommodation regulations, fee directive, guidelines for student loans, etc.)

Internal regulations and information / Link	
http://uniza.sk/document/Zasady_SI_ZU_VI-2015.pdf	
S 149_2016 Organizational rules as amended Supplements no. 1 to 17	https://www.uniza.sk/images/pdf/uradna-tabula/smernice-predpisy/2021/02092021_S-149-2016-Organizacny-poriadok-UNIZA-D16-07062021.pdf
S 152_2017 Principles of publishing activities of UNIZA as amended by Appendix no. 1	SM152-zasady-edicnej-cinnosti-31032020.pdf (uniza.sk)
S 1592017 Work regulations	https://www.uniza.sk/images/pdf/uradna-tabula/smernice-predpisy/S-Pracovn-poriadok_03112017.pdf
S 1632018 Accommodation regulations of accommodation facilities UNIZA	https://www.uniza.sk/images/pdf/ubytovanie/27082018_Ubytovaci-pood-01092018.pdf

11. References to other relevant internal regulations and information concerning the study or the study progra student (e.g study guide, accommodation regulations, fee directive, guidelines for student loans, etc.)	
S 167_2018 Rules of Procedure disciplinary. UNIZA commissions as amended Add_No_1	https://www.uniza.sk/images/pdf/uradna-tabula/smernice-predpisy/2021/09072021_S-167-2018-Rokovaci-poriadok-disciplinarn UNIZA.pdf
S 180_2019 Grant system of the University of Žilina in Žilina as amended by D1 to D2	04082021_S-180-2021-Grantovy-system-Zilinskej-univerzity-v-Ziline-Dodatku-c-2-26072021.pdf (uniza.sk)
S 200_2021 Principles of staffing procedure	https://www.uniza.sk/images/pdf/uradna-tabula/smernice-predpisy/2021/02092021_S-200-2021-Zasady-vyberoveho-konania.p
S 202_2021 Criteria for staffing of professors and associate professors and principles of staffing_functions host_professors	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-202.
S 207_2021 UNIZA Code of Ethics	https://www.uniza.sk/images/pdf/uradna-tabula/smernice-predpisy/2021/12072021_S-207-2021-Eticky-kodex-UNIZA.pdf
208_2021 Rules for obtaining_consolidate_adjustment and revocation_of_habilitation and inaugural proceedings	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-208.
S 210_2021 Statute of the UNIZA Accreditation Board	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-210.
S 211_2021 Procedure for obtaining scientific-pedagogical-titles and artistic-pedagogical-titles	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-211.
S 213_2021 Quality Assurance Policies at UNIZA	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-213.
S 214_2021 Internal quality system structures	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-214.
S 216_2021 Quality assurance of doctoral studies at UNIZA	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-216.
S 220_2021 Evaluation of creative activity of employees in relation to ensuring the quality of education at UNIZA	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-220.
S 221_2021 UNIZA cooperation with external practitioneer partners	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-221.
S 222_2021 Internal quality assurance system at UNIZA	https://www.uniza.sk/images/pdf/kvalita/2021/smernica-UNIZA-c-222.
UNIZA website	www.uniza.sk
UNIZA internal quality management system	https://www.uniza.sk/index.php/univerzita/vseobecne-informacie/vnut system-kvality

Signature: Date: