UNIVERSITY OF ŽILINA
... university with tradition
Scientific achievements are presented mainly through publication activities, submitted applications for patents and inventions, presentations at international scientific symposiums and conferences, but also at trade fairs and exhibitions, etc.

The yearly capacity of domestic and foreign grants solved by University work places is nearly 800,000 hours. The total sum of obtained grants from domestic grant schemes (VEGA, KEGA, APVV) is ca 2 mil Eur per year. The University has been involved in 40 international research schemes including 12 EU framework programmes.

The outcomes of research and development activities contribute remarkably to an excellent interconnection of the University with practice and business sphere which is in compliance with its profile. Nowadays the cooperation is being transformed mainly into demand-oriented research activities and the results are directly implemented into manufacturing and management practice in the form of new materials, technologies, norms and procedures. In numbers, this cooperation represents ca 100 projects solved and 1.7 mil Eur obtained by the University yearly. As for transfer of knowledge into practice, the above mentioned activities and numbers have ranked the University of Žilina among the most active universities in Slovakia.

Cooperation with foreign universities enables students and teachers to participate actively in international educational and research projects (ERASMUS+, ERASMUS-MUNDUS, TEMPUS, COST, CEEPUS, the 7th Framework Programmes, Horizon 2020, etc.).

The University belongs to the most active universities in the ERASMUS Programme. Within its ERASMUS Programme, the University – as the only one in Slovakia – has been listed among the most successful universities of the EU in the field of teacher mobility. As for the number of outgoing ERASMUS students and the number of teaching staff mobilities, the University has one of the prominent positions among Slovak universities participating in the Programme.
The Faculty of Operation and Economics of Transport and Communications was established in 1953 as one of the first faculties of the contemporary University of Žilina. The primary mission of the Faculty is to provide university education and creative scientific research in the fields of transport and communications technology; economics and management of transport and communications branches; economics and management of transport, postal and telecommunications enterprises; transport services and logistics; and economics and transport enterprise management as an economic, financial, social and legal system. The Faculty has established itself as a significant institution in the area of transport and communications in Slovakia. In the accredited three-level study programmes, the Faculty prepares future generations of specialists who are able to design, control and develop transport, logistics and communications systems and technologies as well as operational and economics enterprise activities. Students of the study programmes focusing on economics, management and electronic business are prepared on the basis of complex economic and management education requirements in order to meet enterprise practice needs.

Departments
Department of Road and Urban Transport, Department of Railway Transport, Department of Air Transport, Department of Communications, Department of Economics, Department of Water Transport, Department of Quantitative Methods and Economic Informatics

Accredited Study Programmes

BACHELOR’S STUDY PROGRAMMES

MASTER’S STUDY PROGRAMMES

DOCTORAL STUDY PROGRAMMES
Transport Methods and Technology, Postal Technologies, Transport Services, Economics and Management of Enterprise, Economics of Transport, Communications and Services
Graduate’s Career Prospects

The study programmes in individual fields of study focus mainly on services and they train students for work in transport, transport and postal services, electronic business and entrepreneurship. The study of enterprise economics and management prepares students for work in the field of economic, financial and social system of the society. The graduate in the Bachelor’s Study Programme of the particular field of study is prepared to solve issues of a routine character at the mid level of management of corporations and/or institutions. The graduate in the Master’s Study Programme features skills evolving inventiveness which can be used in top managerial functions or when new procedures, technologies and innovative solutions are searched for. The Doctoral Study Programme prepares for research and development activities in the area specified by the study programme; the graduate is prepared for scientific work in the particular area.

The graduate’s profile in the study programme Forwarding and Logistics in the Master’s degree meets the requirements for obtaining the international diploma “Forwarding Expert” (Expert of Forwarding) set by FIATA (World Federation of Forwarding Unions).

“I use my theoretical knowledge and experience gained during the study at the Faculty of Operation and Economics of Transport and Communications continuously and I apply them in the management of my department. Graduation didn’t cut my connection with the Faculty; on the contrary, it is even more intense. After getting some practical experience, I decided to apply for a part-time doctoral study which I successfully completed. My ties with my Alma Mater, however, have never been torn; they were here, are here and will still remain. Demands made on applicants, who are applying for different jobs in the area of operation and economics of transport and communications, have been continuously increasing. I know from my own experience that progressive knowledge acquired during the study at the Faculty will return several times in practice. Therefore, I would definitely recommend to potential candidates for higher education to apply for the study at the Faculty of Operation and Economics of Transport and Communications of the University of Žilina. Even though the choice is always up to you, don’t miss your chance.”

Ing. PETER BLAHO, PhD.
HEAD OF THE INSTITUTE OF EDUCATION ŽILINA, RAILWAYS OF THE SLOVAK REPUBLIC
THE GRADUATE OF THE FACULTY OF OPERATION AND ECONOMICS OF TRANSPORT AND COMMUNICATIONS
The Faculty of Mechanical Engineering has a long-time tradition in technical education and research. It concentrates mainly on the issues of construction materials; production technology linked with the development of the technical basis of vehicles, machines, instruments and constructions; vehicles construction; mobile work machines, lifting, handling and energetic equipment designing; designing with virtual reality support; Rapid Prototyping; Finite Element Method analyses of structures; operation and renovation of machines and equipment; robotics; logistics; enterprise management; industrial engineering; Digital Factory; systems of quality control and assurance; design, operation, analysis and simulation of manufacturing and logistics systems; modern production technologies; and more recently on alternative sources of energy.

Departments
Department of Applied Mathematics, Department of Transport and Handling Machines, Department of Design and Machine Elements, Department of Material Engineering, Department of Applied Mechanics, Department of Industrial Engineering, Department of Automation and Production Systems, Department of Machining and Production Technologies, Department of Technological Engineering, Department of Power Engineering

Accredited Study Programmes
BACHELOR’S STUDY PROGRAMMES: Transport Machines and Equipment, Vehicles and Engines, Environmental Technology, Mechanical Engineering Technologies, Industrial Engineering

MASTER’S STUDY PROGRAMMES
DOCTORAL STUDY PROGRAMMES

Graduate’s Career Prospects
The graduate in the Bachelor’s Study Programmes acquires theoretical knowledge and practical experience with currently used technologies in mechanical engineering production and its management and skills in design and technological activities while using modern technical devices.

The graduate in the Master’s Study Programmes is qualified to work in design and technological groups working with CAD systems as a managing or technological engineer in modern operation and renovation of machinery, transport technology and other technological devices; in quality management and control; in development and implementation of new materials and technologies; as a manager at all levels of enterprise management; as a designer and a manager in the field of automation of mechanical engineering, energetics, heat and water economy; in solving problems of flexible automation, technological processes and manufacturing systems.

“I studied rail vehicles at the former Faculty of Mechanical and Electrical Engineering in the 1960s. I have unforgettable memories of the building “A” with its gloomy corridors, especially before exams which often lasted into the late hours. I remember, it used to be said that who passed the exam in Strength and strain, can already buy a shirt and a tie for the graduation ceremony. At school, in those times, great excitement reigned among teachers and it also passed to students. The study at the University with focus on mechanical engineering and specialisation in rail vehicles became the basis for my lifelong career.

I did not forget about my Alma Mater after graduation. I have been trying to keep in touch with teachers and students of the Faculty of Mechanical Engineering in various ways – through supervision of students’ projects and diploma theses, or even through teaching.

The Faculty of Mechanical Engineering provides attractive conditions for studying at tens of departments whose quality facilities give students good assumptions not only for quality study, but also for their future career. Mechanical engineering has its irreplaceable role in the development of industry and the Faculty remarkably contributes to the current urgent need for progress in industry within the economic development of the state.”

Ing. EMIL BUC
HIS CAREER HAS DEVELOPED PROGRESSIVELY IN A WAGON INDUSTRY – AS A DESIGNER, CHIEF CONSTRUCTOR, TECHNICAL DIRECTOR AND ADVISOR TO THE GENERAL MANAGER

The graduate in the Doctoral Study Programmes acquires knowledge and skills necessary when solving the most complex tasks of technological practice, research and development. The graduate is capable of independent scientific work and he/she is ready to develop and deepen his/her knowledge in the field.
The Faculty of Electrical Engineering originally focused on electrotechnical aspects of transport. Later on, the Faculty started to concentrate on information and communication technologies, information and safety systems, modern telecommunication technologies, networks and services, optoelectronics, photonics, intelligent transport systems, electrotechnologies and materials, development of power semiconductor systems, traction driving systems, modern control of electric networks, electric traction systems for railways and also on interdisciplinary branches – mechatronics and biomedical engineering. The research in biomedical engineering is carried out in cooperation with Jessenius Medical Faculty of Comenius University in Martin. Since 2002 the Faculty has had the Institute of Aurel Stodola located in Liptovský Mikuláš providing Bachelor’s degree study programme Digital Communications.

Departments
Department of Physics, Department of Theoretical Electrical Engineering and Biomedical Engineering, Department of Measurement and Applied Electrical Engineering, Department of Mechatronics and Electronics, Department of Power Electrical Systems, Department of Control and Information Systems, Department of Telecommunications and Multimedia, Institute of Aurel Stodola in Liptovský Mikuláš

Accredited Study Programmes
BACHELOR’S STUDY PROGRAMMES
Automatization, Biomedical Engineering, Digital Technologies, Electrical Engineering, Multimedia Technologies, Telecommunications

MASTER’S STUDY PROGRAMMES
Biomedical Engineering, Electric Drives, Electric Power Systems, Process Control, Multimedia Engineering, Telecommunication and Radiocommunication Engineering, Power Electronic Systems

DOCTORAL STUDY PROGRAMMES
Electroenergetics, Electrotechnologies and Materials, Process Control, Power Electrical Engineering, Telecommunications, Theoretical Electrical Engineering

Graduate’s Career Prospects
The graduate in the Bachelor’s Study Programmes is qualified to work in the field of mechanics, automation, applied microprocessor technology, electronics and optoelectronics and computer design; in computer-controlled production and testing systems, particularly in the TPD (Total Product Design) system; in information transferring and processing of all kinds (speech, text, picture, data); or as a managing, executive or private entrepreneur.
The graduate in the Master’s Study Programmes is qualified to work in design, management, construction and operation of industrial enterprises, in all branches of power electrical engineering; in design of systems related to the application and realization of information services for advisory management supported by automation and computing technologies; in design of safe and reliable telecommunication and information networks and services including diagnostic systems for progressive maintenance in all areas where services of information and communication technologies are provided; in biomedicine – in utilisation of technical devices, assessment of their functioning, setting up conditions for mutual communication with doctors and in utilisation of information technologies and staff training.

The graduate in the Doctoral Study Programmes is qualified to work in any area where deep theoretical knowledge of the particular scientific field is required and where practical skills in the following areas are needed: work in complex experimental facilities and computer systems, identification of partial research tasks, team leading when solving tasks, preparation and presentation of research results, and the transfer of knowledge into the processes focusing on technological innovations.

Ing. ONDREJ MACIAK
MANAGING DIRECTOR OF BETAMONT, LTD
THE GRADUATE OF THE FACULTY OF ELECTRICAL ENGINEERING

“I finished my study at the Faculty of Electrical Engineering in 1980. The University of Žilina – at that time called College of Transport and Communications - was already a school with a high quality technical base and a highly qualified team of teachers. After graduation, I started my career in the Czechoslovak Railways in Zvolen where I fully used the acquired knowledge. Here I worked in several positions and gained a lot of practical experience. Later on, I started to work for my own company BETAMONT Ltd. Zvolen where I have been working until today. At the beginning, the company focused mainly on communication engineering. Since 1996, the company has gradually expanded and focused on Intelligent Transport Systems. BETAMONT has close relations with the Faculty of Electrical Engineering UZ, as evidenced by the establishment of two separate laboratories with the aim to support tuition and gaining knowledge of its products. Common development projects of new technologies and innovations supported by the EU only confirm a long-term and growing cooperation. Personally, I appreciate that I have been regularly invited to the examination committee for Bachelor’s state examinations. I am particularly pleased that the quality of my Alma Mater convinced also my sons to follow their father’s path and they chose the University of Žilina for their studies.

I recommend studying at the University of Žilina not only to everyone who is considering where to send his/her application, but also to those who are searching for their way in professional life. If they succeed and become students of this school, they will get not only the opportunity to study at the first-class university under the guidance of qualified and professionally responsible teachers, but also a high chance to succeed in practice.”
Faculty of Civil Engineering

The Faculty of Civil Engineering provides education in the fields of engineering constructions, transport and building constructions, material engineering, transport planning as well as construction technology and management. The research activities of the Faculty focus mainly on theoretical issues of planning, designing, building, rehabilitation and reconstruction of transport infrastructure, including the influence of transport on the environment, while utilising theoretical, experimental and numerical analysis, numerical modelling and numerical simulations. The attention is paid to the issues of geoinformation systems development in the civil engineering practice as well as to the research of sound-insulation and heat-technical properties of building structures and their energetic economy. Except for the departments, three newly opened centres take part in the research focusing on the Faculty and European research projects – Excellence Centre for Transport Engineering, Centre of Applied Research, and Research and Educational Centre for Young Research Workers.

Departments
Department of Structural Mechanics, Department of Geodesy, Department of Geotechnics, Department of Structures and Bridges, Department of Highway Engineering, Department of Railway Engineering and Track Management, Department of Buildings and Urban Planning, Department of Technology and Management of Construction

Research and Development Centres
Excellence Centre for Traffic Engineering, Centre of Applied Research, Research and Educational Centre for Young Research Workers, Accredited Laboratory

Accredited Study Programmes

BACHELOR’S STUDY PROGRAMMES
Geodesy and Cartography, Building Engineering, Civil Engineering, Construction Technology and Management, Civil Engineering – in English language

MASTER’S STUDY PROGRAMMES
Bearing Structures of Buildings, Railway Engineering, Road Engineering, Objects of Transport Constructions, Construction Technology and Management

DOCTORAL STUDY PROGRAMMES

Graduate’s Career Prospects
The graduate in the Bachelor’s Study Programmes is qualified to work in geodetic and building companies and he/she can focus on solving practical problems in design, realization and reconstruction
The study at the Faculty of Civil Engineering of the University of Žilina meant for me an excellent preparation for practice. I draw on my theoretical knowledge all the time, and even several years after graduation, I sometimes have a look into my course book, or call the Faculty department when I need to consult some expert issues. I have great memories of my study. We were a group of 13 enthusiastic students in our class. Any time we wanted to solve a problem, we met and were looking for a solution together until we succeeded. We are still in touch and as far as I know, all of them work in the area they had studied.

In our company, I work with several graduates not only from the Faculty of Civil Engineering but also from other faculties of the University. We actively cooperate with the University on several projects, we also review diploma theses and regularly once a year students come to our company for the excursion.

Ing. VLADIMÍR PITÁK
SENIOR ENGINEERING DESIGNER, REMING CONSULT, PLC. THE GRADUATE OF THE FACULTY OF CIVIL ENGINEERING

“The study at the Faculty of Civil Engineering of the University of Žilina meant for me an excellent preparation for practice. I draw on my theoretical knowledge all the time, and even several years after graduation, I sometimes have a look into my course book, or call the Faculty department when I need to consult some expert issues. I have great memories of my study. We were a group of 13 enthusiastic students in our class. Any time we wanted to solve a problem, we met and were looking for a solution together until we succeeded. We are still in touch and as far as I know, all of them work in the area they had studied.

In our company, I work with several graduates not only from the Faculty of Civil Engineering but also from other faculties of the University. We actively cooperate with the University on several projects, we also review diploma theses and regularly once a year students come to our company for the excursion.”
The activities of the Faculty of Management Science and Informatics are determined by new trends in information and communication technologies development. The main educational and scientific activities concentrate on designing and realization of technical means for information and management systems; analysis, synthesis and design of integrated information and management systems; management; marketing; logistics; enterprise; creation of transport and communication systems; management and optimisation of goods and passenger transport; management and optimisation of databases creation; data transmission and data processing; issues concerning multimedia information systems and simulation tools for communication networks and systems; and mathematical modeling.

**Departments**
Department of Transportation Networks, Department of Information Networks, Department of Informatics, Department of Management Theories, Department of Macro and Microeconomics, Department of Mathematical Methods and Operations Research, Department of Software Technologies, Department of Technical Cybernetics

**Accredited Study Programmes**

**BACHELOR’S STUDY PROGRAMMES**
Informatics, Computer Engineering, Management

**MASTER’S STUDY PROGRAMMES**

**DOCTORAL STUDY PROGRAMMES**
Applied Informatics, Supporting Decision-making Processes, Management

**Graduate’s Career Prospects**
Graduates are qualified to find and present their own solutions in research, development, and design of information systems, computer systems, and, in general, to work in a broader context of information
technology systems; to manage projects and take responsibility for complex solutions; to adapt and implement modern information technologies in various areas; and to work efficiently either as an individual or as a team member/leader. The graduates will find jobs on both domestic and international labour markets in various branches of private or public sectors of economics. In practice, they will be able to demonstrate their abilities in all areas in which information means and information methods are used for control and management of processes (industry, banking, transport, health institutions, educational institutions, etc.).

“I started to study Cybernetics in Transport and Communications at the former Faculty of Mechanical and Electrical Engineering. In retrospect, it was a rather broadly conceived specialisation, ranging from analogue, digital techniques up to the implementation of software solutions to the problems in the field of management that provided a good base and a wide choice to start professional life. In my case this start was quite straightforward, connecting my student days with the present in the Scheidt & Bachmann company which specialises in the management systems in transport infrastructure.

Considering the content and geographical proximity, we have been in close contact with the University of Žilina up to the present time. We have worked together on some projects, cooperated with students on their diploma theses and trained our employees at the University. Luck plays a significant role in life, it is important to be at the right time in the right place. Far more important, however, is to be well-prepared for the moment when the chance comes. In this regard, the study at the Faculty of Management Science and Informatics indisputably provides a very good base which is evident, for example, from the considerable number of its graduates in our company in either developer or IT management positions.”

Ing. RÓBERT KULLA
MANAGING DIRECTOR OF SCHEIDT & BACHMANN SLOVAKIA LTD.
THE GRADUATE OF THE FACULTY OF MANAGEMENT SCIENCE AND INFORMATICS
The Faculty of Security Engineering is a technological-managerial faculty. It has the accreditation in four fields of study at all levels of university education, i.e. in Bachelor’s, Master’s and Doctoral study programmes in both full-time and part-time forms. In the field of Civil Security, the Faculty offers an accredited study programme Crisis Management and Security and Protection of Critical Infrastructure; in the field of Rescue Services, it is the study programme Rescue Services; in the field of People and Property Protection, it is the study programme Security Management. Individual study programmes focus on training of specialists for the needs of public administration, mainly in the area of crisis management, risks evaluation, people and property protection, civil protection and internal security. The Faculty also prepares engineers dealing with fire safety; safety and health protection at work; objects and property protection; and emergency and crisis situations in natural environment, technological environment and transport.

The Faculty has specialised classrooms for training in crisis and security management and the laboratory of fire protection. The IT laboratory and information centre with free utilisation of IT and the Internet are at students’ disposal.

Departments
Department of Crisis Management, Department of Fire Engineering, Department of Security Management, Department of Technical Sciences and Informatics, Research Centre of Crisis Management

Accredited Study Programmes

Graduate’s Career Prospects
Graduates are qualified to work in public administration institutions, business subjects as well as in executive branches of security and rescue systems. The graduates in the Crisis Management study programme are qualified to work in all spheres of public administration where they will take part in prevention and solving of crisis situations, but they will also work in the business sphere. The graduates in the Rescue Services study programme are qualified to solve fire engineering tasks and rescue work in various branches of integrated rescue system with the emphasis on the fire brigade. With his/her agreement, the graduate can obtain the qualification “Specialist of Fire Protection”. The graduates in the Security Management study
programme are qualified to work in civil security services, in protection and security of physical objects, in people and property protection, and in enterprises and organisations providing security protection. The graduates in the study programme Security and Protection of Critical Infrastructure are qualified to design and implement preventive measures, monitor and analyse risk and crisis factors, react adequately in crisis situations, manage continued operation of critical infrastructure and implement effective recovery of systems.

As the study programmes offer not only technological but also managerial specialisation, the graduates gain together with their professional qualifications also knowledge of managerial, economic, juridical, social and psychological sciences so that they gain enough information on management and IT utilisation in management processes and crisis situation solutions.

“When I was asked how the knowledge gained at the Faculty of Security Engineering (before Special Engineering) helped me in my professional career, I remembered the lectures that I had attended. Some were really difficult, others I remember with a smile on my face. When I sum it up, I am sure that the mixture of theoretical and practical knowledge and experience gained during my study has been really fully used in my work. I can clearly divide my memories of studying into two categories – funny, I could talk a lot about, but also those which would hardly make smile on my face – such as the exam in Logistics. Although several years have passed since my graduation, I am still in touch with people at the university. I respect them, not only for their expertise, but also for their human side. These are the reasons why the company where I work always welcomes the opportunity to cooperate with the University of Žilina, whether in the form of seminars or consultations. It is said that a man can be happy only if he/she has a fully-fledged family life and a job that he/she enjoys. Thanks to study at the University of Žilina I got a job that I like. I would like to give some advice to young people: to be really successful in professional life, consider a course that would make you really interested. I succeeded thanks to the University of Žilina.”

Ing. RÓBERT GROMAN
REGIONAL MANAGER OF SECURITY AND CONTROL, COCA-COLA HBC SLOVAK REPUBLIC
THE GRADUATE OF THE FACULTY OF SECURITY ENGINEERING

The Graduate of the Faculty of Security Engineering
The Faculty of Humanities arose on 20th December 2010 from the then Faculty of Science in compliance with the Act of Ministry of Education, Science, Research and Sport SR. The Faculty of Science was established in 1998 as a workplace integrating teachers and scientists specialising in natural sciences. After the separation of Pedagogical-Catechetical Faculty in Ružomberok from the University of Žilina, the Faculty of Science was assigned to develop studies in the fields which had been missing in the region (Mathematics, English Language, Music and Religion). The profile of the Faculty has been gradually transformed; departments of humanities and natural sciences were established, the spectrum of offered study programmes enabling graduates to assert themselves on the European labour market has been extended.

**Departments**
- Department of Mediamatics and Cultural Heritage
- Department of Music
- Department of Mathematics
- Department of Pedagogical Studies, Department of English Language and Literature, Department of Religious Studies

**Accredited Study Programmes**

**BACHELOR’S STUDY PROGRAMMES**
- Teaching of Musical Arts, English Language and Literature – Citizenship Education
- English Language and Literature – Musical Arts
- English Language and Literature – Religious Studies
- English Language and Literature – Mathematics
- Mathematics – Citizenship Education
- Mathematics – Musical Arts
- Mathematics – Religious Studies
- Applied Mathematics
- Missionary Work with Children and Young People
- Mediamatics and Cultural Heritage
- Social Pedagogy

**MASTER’S STUDY PROGRAMMES**
- Applied Mathematics
- Mediamatics and Cultural Heritage

**DOCTORAL STUDY PROGRAMMES**
- Applied Mathematics
- Mediamatics and Cultural Heritage

**Graduate’s Career Prospects**
- Bachelor’s Study Programmes
- Missionary Work with Children and Young People: The graduates
A decision to study at the Faculty of Humanities of the University of Žilina was in my case very good and definitely beneficial. During my study, lectures, consultations and opinions of real experts in the field were a great source of unique experience and now I can use them and further develop not only in my work but also in my literary output.

I work as a researcher in the Slovak Literary Institute of Matica Slovenská and also in the editorial offices of several literary periodicals that focus on publishing contemporary literature. I am the author of twelve books.

I am currently dealing with literature as a doctoral student at the Department of Mediamatics and Cultural Heritage. Since I am surrounded by great people, excellent professionals and also interesting and intelligent students, I believe that my work will be successful. I would strongly and honestly recommend studying at the FH UZ, because I know that the University of Žilina is a modern, dynamic, attractive and prospective school with everything that belongs to this designation.

Mgr. MARIÁN GRUPAČ
WRITER, POET, EDITOR AND LITERARY SCHOLAR, CURRENTLY PHD STUDENT AT THE FACULTY OF HUMANITIES

“A decision to study at the Faculty of Humanities of the University of Žilina was in my case very good and definitely beneficial. During my study, lectures, consultations and opinions of real experts in the field were a great source of unique experience and now I can use them and further develop not only in my work but also in my literary output.

I work as a researcher in the Slovak Literary Institute of Matica Slovenská and also in the editorial offices of several literary periodicals that focus on publishing contemporary literature. I am the author of twelve books.

I am currently dealing with literature as a doctoral student at the Department of Mediamatics and Cultural Heritage. Since I am surrounded by great people, excellent professionals and also interesting and intelligent students, I believe that my work will be successful. I would strongly and honestly recommend studying at the FH UZ, because I know that the University of Žilina is a modern, dynamic, attractive and prospective school with everything that belongs to this designation.”
The centre of biological high mountain research was established in 2000. It is located in Tatranská Javorina in the Belianske Tatras. With the enormous effort of the Institute employees, a modern work place with the botanic, zoology and molecular biology laboratories was created. The Institute has continuously been investing not only in its own development; it invests a significant amount of its resources in the development of biological research in the University environment as well as in whole Slovakia.

The termovision analyses of temperature differences of the alpine vegetation levels, water chemism and its biotic monitoring, atom absorption spectrophotometry and X-raymetry are only some of the techniques with which the young research team works not only in laboratories, but also in high mountain alpine terrain. The dynamic tempo of the Institute growth arises from the quality work realized in impact periodicals but also from the ability to acquire finances from various project sources in both Slovakia and abroad. This enables research workers to work on international projects not only in Slovakia but also in the Alps, Rile and Kirghiz Ťan Šan. The Institute employees guarantee the publishing of the international scientific periodical Oceologia Montana which has been published since 1992.

Since 2006 the Institute has been providing teaching of so far the only whole university study programme Protection and Utilisation of Countryside with the specialisation in education of rangers of national parks. This study programme has a favorable response in the European Union countries. Based on the agreement between the Norwegian Telemark University in Bo and the University of Žilina, the students of the Institute, after successful completion of their Bachelor’s study programme, can continue in Master’s degree in Norway.
Institutes

Institute of Forensic Research and Education
It has been a part of the University for 25 years. During this period, expertise activities have been extended with the education (mostly of experts) and also scientific research activities. The first Slovak professor in the scientific branch Forensic Engineering was inaugurated and the first monograph on this field was published at this Institute. The Institute’s mission as a methodical centre of the Ministry of Justice Slovak Republic for expertise activities is of high importance as well. It has developed vast international relationships and international cooperation with various reputable institutions. It has trained thousands of experts with a significant place in both theoretical and applied spheres of forensic engineering.

CETRA – Centre for Transport Research
It was established in 2000 when it was (as one of two institutions in Slovakia) supported by the European commission within the support project of chosen centres of excellence in the countries of Central and Eastern Europe. It focuses on eight basic research fields in transport which copy the scientific research orientation of individual faculties. It also serves as an advisory and consulting work place for projects of EU framework programmes. It is the organiser of the annual international symposium EURO – ZEL focused on the closer interlinking of science and practice in the field of railways.

Institute of Competitiveness and Innovations
It is an interdisciplinary, research, development, application and training institute, focusing on the issues of technological research, entrepreneurship and innovations which are the basis for productivity and competitiveness growth. Its main aim is to create interdisciplinary teams of research workers dealing with industry applications. When solving projects, they utilize the existing laboratories of the University and newly built departments and laboratories mostly at the faculties FME, FEE and CEIT (Central European Technological Institute).

Institute of Continuing Education
Since its beginning in 1997, it has gradually formed into a work place providing language, senior and other professional education of university employees. The University School of Languages had formed the basis of its activities since 2001. Ten years later, it became an authorised Cambridge ESOL Examination Centre and since 2012 it has been offering the possibility to take exams in the Russian language. In 2005, The Activities for Senior Learners were incorporated into its structure. The three-year study at the University of the Third Age UŽ (U3V) was gradually extended and today it offers a wide range of programmes. The senior periodical and numerous events connected with senior volunteering belong to its significant activities as well. The continuing education of university employees and the general public has been so far the last sphere of activities of the Institute.
University Science Park
The University Science Park focuses on scientific approach to problem solving applied in practice. Its key topics are aimed at transport systems (solutions to problems and innovative features in monitoring and control of intelligent transport regulation), at manufacturing systems (research of intelligent manufacturing systems prototyping and reverse engineering, new production technologies, new concepts of assembly and modelling and simulation of intelligent manufacturing systems with the application of the solutions into industry), at development of new materials and technology (systemic applications on the basis of optical fibres and photonic components, research methods and applications in biomedical engineering as well as research of unconventional drives and their components) and at information and communication technologies (sensor networks and uncertain information processing, audio-visual information processing as well as research of knowledge technologies and decision support).

Research Centre
The Research Centre of the University of Žilina is a unique research and development institution established in 2013 at the University of Žilina. Its primary aim is to create the environment encouraging acceleration and integration of innovative research activities of all parts of the University of Žilina and swift implementation and commercialization of their research outcomes.

The main research areas are: control and operation of transport, new material design, construction, mechanical engineering and smart systems focusing mainly on smart buildings operation and renewable energy sources. The Research Centre mainly focuses on three fields:– monitoring and evaluation of transport infrastructure condition;– progressive materials for transport infrastructure and vehicles;– design and operation of smart buildings and renewable energy.

Institute of Foreign Languages
It belongs to educational and research institutes of the University which is proved by extensive publication activities of its employees who at the same time provide teaching of foreign languages at all faculties, all three levels of university studies and in all study programmes. They also work as heads of school-leaving examination committees and Cambridge FCE examiners. The Institute employees take an active part in both home and foreign projects supported by the EU. Since 2004, every year the Institute has been successful in the selection procedure of SAAIC for the organisation and pedagogical provision of intensive courses of the Slovak language for ERASMUS students. From 2009 to 2013 its teachers participated in the most extensive national project in the SR “Education of Primary Schools Teachers in the Sphere of Foreign Languages in Connection with the Teaching Concept of Foreign Languages at Primary and Secondary Schools”. They coordinated this project in the whole Žilina region and provided teaching of practical language courses and also gave lectures on English, German and Russian linguistics and didactics.

Aviation Training and Educational Centre
It provides practical air training not only for students of the study field Professional Pilot, but also for other interested people from both Slo-
vakia and abroad. The Centre has been cooperating with the Slovak armed forces in air training of military pilots. During trainings, thousands of flying hours were flown and hundreds of business pilots and business pilots with the IR qualification have been trained. Most of the graduates have found employment in airlines within the Slovak or Czech Republic but also in other countries. The Centre has 16 single engine and 4 twin engine airplanes at its disposal.

National Training Centre for Safety in Civil Aviation
It provides trainings for aviation personnel, also cooperates with Civil Aviation Authority of the Slovak Republic, Ministry of Transport, Construction and Regional Development, passport and immigration police, pyrotechnists of the Slovak police force, safety management of air transport operators, and with many other experts in civil aviation. During its existence, the Centre has trained nearly 8,000 attendees.

Institute of Physical Education
The former Department of Physical Education was transformed into the Institute in 1992. Its activities can be divided into several basic areas – physical education classes, sports courses, sports events and scientific research activities. The sports fans can choose from nearly thirty attractive sports. The Institute also offers recreational activities for the university employees and a whole range of regular events – ski courses, cross-country cycling, rafting, canoeing, and recreational stays at the seaside. The University Sports Days are regularly organized in November on the occasion of Students’ Day. Students participate in various sports competitions on regional, national and international levels. The Universiad of the Slovak Republic belongs to the most significant ones. In 2014, the Institute organised the second year of the event entitled Sports Day of Rector of the University of Žilina. Many sportsmen - University employees and PhD students competed in various sports disciplines according to the rules of fair play.

Institute of Information and Communication Technologies
In the last decade, the Institute has reacted in its activities to the intensive development of information and communication technologies. The results are: the high accessibility of information sources, the support of users with mobile devices, the implementation of safety mechanisms into ICT infrastructure, virtualization and creation of a university data centre. The institute services focus on the content administration, support of management of the main university processes, e-learning, digital signature, complex administration and distribution of multimedia content and IP TV technologies. The educational process and the whole life cycle of a student at the University are covered by Academic Informational and Educational System.

National Service for Electronic Cooperation
The National Service for Electronic Cooperation of Schools at the University of Žilina was established in 2004. During its existence it has organised numerous national and international conferences, meetings and several tens of seminars and trainings for teachers in various Slovak towns. The accredited eTwinning courses for teachers, which NSECS started to realize in 2009, are interesting as well.
University Library
The mission of this academic library is to promote educational and scientific research activities of the University by collecting, processing, storing and providing access to professional and scientific literature. There are more than 200,000 library items (including e.g. 2,000 electronic documents and 34,000 STN norms) in the Library funds. 279 periodicals in print form including 151 foreign titles come to the Library. The Library offers an online catalogue, electronic journals and full-text and abstract electronic information resources on its website. Building a database of publications, the Library registers publishing activities of the university staff in Slovakia and abroad and provides tracking of citations to their publications. Full text information on final theses defended at the University is also a part of the electronic library catalogue. The Library organises consulting, lecturing and other educational activities.

EDIS - Publishing Centre of UZ
It has published more than 3,700 publications and as for the number of published titles, it belongs to the biggest printing houses in Slovakia. With the wide range of its activities and with its portfolio of offered services, it belongs to the most complex university printing houses in Slovakia. It publishes numerous specialised publications and journals of individual faculties and institutes. It also publishes the university periodical Spravodajca and provides polygraphic production of the student periodicals ŽUŽO and Kontakt. Since 1999 it has been publishing the university scientific journal Communications – Scientific Letters of the University of Žilina.

Scientific-technological Park Žilina
Since 2001 the University has been trying to build a modern scientific-technological complex. The first success in this field was the opening of a technological incubator. Since 2003 tens of companies and approximately 100 young, innovative and devoted people relying mainly on their knowledge and abilities have found space for their business activities in it. The next step was the implementation of projects within which new and better services were created, many of which were included in the Framework Strategy of the Žilina Region for the sphere of innovative development. A significant success for the orga-
nisation is the course Profession of Entrepreneur that students of the University can attend. During its existence, it has acquired several awards, e.g. The Innovation of the Žilina Region for the year 2010 and The Slovak nomination for European Entrepreneur Award. It also implements the project of Entrepreneur Angels with the goal to search for investors for good entrepreneurial ideas and plans.

**Scientific-technological Society at the University of Žilina**

It has focused on activities connected with the promotion of science and technology since 1955. Today it has approximately 80 members who concentrate on the organisation of scientific and professional events, educational programmes for employees and students, expertise activities for enterprises and companies, visits of exhibitions, excursions, and foreign business trips.

**Slovak Centre of Productivity**

The Centre is a highly respected institution which actively participates in spreading of new knowledge and best practice in the field of productivity, competitiveness and innovations. It is a member of European Association of National Productivity Centres and World Confederation of Productivity Sciences. Its key activities comprise the realization of the National Programme of Productivity and Competitiveness Enhancement of Slovak Economics; organisation of the conference National Forum of Productivity; support of its members; organisation of the competition National Award for Productivity; development of solutions for innovation management and productivity enhancement; publication, educational and project activities.

**Central European Institute for Technologies (CEIT)**

It was established on the initiative of the University of Žilina and the Slovak Centre of Productivity and in a relatively short time it has become one of the most successful spin-offs of the University. As a dynamic and progressive institute with the orientation to the applications in industrial research and innovations, it first got established in Slovakia, later on in the whole central Europe. The projects of the Institute which have gone down into the history of the Slovak industrial engineering are e.g.: The Rescue of Cultural Heritage in Slovakia in the form of digitalisation using 3D laser scanning; Digitalisation of Bridge Connection Žilina – Včince; Digitalisation of Mines in Halemba (Poland) and Design of Catalytic Converter Discharge for Slovnaft Bratislava.

**Trade Union of Workers in Education and Science**

In 2013 there were organized 270 permanent employees and doctoral students in eight basic organisations. Since the conference in 2012, the trade union activities have been managed by the Board of University Trade Union Organisation belonging to the Trade Union of Workers in Education and Science at the UŽ.

**Housing Facility Hliny**

It provides accommodation for fast 2,000 students and it also has 31 flats for employees and doctoral students. In a former canteen, students can utilise a fit centre, a climbing wall, two rings for thai box, Finnish and infra saunas, a gym for triathlon and a COPY-centre. There is also room for aerobic, basketball, floorball, football, volleyball, squash, table tennis, tennis, and badminton. There is a hairdresser for both women and men, a dentist, and a massage salon available in this Facility. Several organisations and associations are situated here as well.

**Housing Facility Veľký Diel**

It provides accommodation for both home and foreign students, employees and guests. During an academic year, nearly 2,300 students are accommodated here. All rooms have the Internet access and a modern self-service laundry. In the premises of individual buildings there is a gym, a fitness centre, several clubrooms, a cinema, a modern buffet and a pizza restaurant. There is a health centre, a hairdresser and a lot of student organisations situated in this Facility.

**Dining Facility**

The dining facility was put into operation in September 1997. It provides distribution of meals in several canteens. With its capacity of meals preparation and its dining possibilities of 600 diners at the same time, it belongs to the biggest facilities of this type in Žilina and its near surroundings. The Facility provides suitable conditions for the organisation of big working and social events and family celebrations.
Board of Accommodated Students
It is a non-profit organisation which serves as an advisory body when managing and improving the life of students accommodated on the dormitory premises. As for its activities, it concentrates on the defense of students’ rights and at the same time it points out the necessity to follow the rules.

Student Information Centre
The Centre provides students with access to computers and to the Internet. It also informs students about events at the University, distributes leaflets in the University premises and displays information on the students’ portal.

i-Těčko
Its main activity is the transmission through computer network on dormitory premises. i-Těčko creates its own programme oriented to university students and it helps to develop practical skills of students who are interested in work in television.

Internet Club
It has been operating since 1998. Its main task was the administration of the server dorm.utc.sk and students’ email boxes. It was also responsible for the development of data network in accommodation facilities. Later on, 24-hour monitoring of the network condition was added to its basic tasks. Today it has 15 active members and it provides services which are utilised by approximately 3,000 active users.

The Friends of Railway Club
Its roots date back to the College of Transport era, but it was officially established in 1995. Today it has approximately thirty members who regularly meet and organise excursions to various interesting railway work places. They also collect technical literature, railway periodicals, time tables and other objects which are available not only to its members. During summer a team consisting of club members regularly participates in the Slovak Championship in driving draisines in Vrbové.

GAMA Club
The Club was established in 1996 and in its beginnings, it focused exclusively on theatre performances. Today it offers the projection of films to students.

ŽUŽO
The student periodical has been published since 1996. It belongs to the most read student periodicals with its circulation of 1,500 copies. As the only student periodical, it was admitted to the Office of the President and in the competition of Štúrovo pero it has regularly been awarded among three most successful university periodicals.

Radio X
At present it is the only dormitory radio studio in Slovakia. It provides students with the news and information blocks within eight broadcasting circuits. It was established in October 2010 and except for
music, it offers a programme focused mostly on events held in the university environment, in Žilina and its surroundings. The part of the studio is a recording studio which, apart from its creative production, serves as a training space for beginning presenters and technicians.

Rapeš Radio
The first dormitory radio studio in Slovakia which had two broadcasting circuits – Rapeš Hliny (1974) and Rapeš Veľký Diel (1987 – 2009). They were named after dormitories where they were located. After the separation of Rapeš Veľký Diel, Rapeš Hliny continues in its broadcasting tradition.

OMNIA
The mixed singing choir OMNIA was established in 2003 through the transformation of a female choir which was enlarged by a male vocal section. During its existence, the choir has participated in numerous international competitions and festivals where it successfully represented the University and acquired numerous awards. In 2014, in the World Choir Games in Latvian Riga it proved its qualities. Conducted by Monika Bažíková, it competed at the level “The Champions Competition” and represented Slovakia in the category Chamber Mixed Choirs and in the category Musica Sacra a capella. In the huge international competition of 470 choirs from more than 80 countries it won gold medals in both categories.

Stavbár – folklore ensemble
Its main area of interest is the presentation of authentic folklore. It was established in 1959 at the Building Constructions Company in Žilina. Since 1997 it has been acting at the University of Žilina. During its 55-year history, it has taken part in more than 2,000 performances in Slovakia and abroad – in the countries of Europe, Asia, Africa and South America. It is a holder of numerous significant national and international awards from various folklore competitions and festivals.