UNIVERSITY OF ŽILINA
Faculty of Electrical Engineering and Information Technology

FACULTY OF ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY

BACHELOR´S DEGREE STUDY

CONTACT

University of Žilina
Faculty of Electrical Engineering and Information Technology
Univerzitná 8215/1, 010 26 Žilina
Tel.: 041/513 20 51
e-mail: studref@fel.uniza.sk
http://fel.uniza.sk

All the questions concerning your studies will be attended at the Department of Studies:
Tel.: 041/513 20 63, 20 64

Institute of Aurel Stodola in Liptovský Mikuláš
Faculty of Electrical Engineering and Information Technology, Liptovský Mikuláš ul. kpt. Jána Nálepku 1390, 031 01 Liptovský Mikuláš
Tel: 041/513 14 83
e-mail: studijne@lm.uniza.sk

Coordinator for work with students with special needs:
doc. Ing. Peter Braciník, PhD., Vice–dean for Education
tel.: 041/513 20 57
e-mail: peter.bracinik@fel.uniza.sk

ACCREDITED STUDY PROGRAMMES OFFERED FOR THE ACADEMIC YEAR 2020/2021

BACHELOR´S DEGREE STUDY PROGRAMMES	
FULL-TIME STUDY LENGTH OF STUDY 3 YEARS	**PART-TIME STUDY *** LENGTH OF STUDY 4 YEARS
Automation	-
Autotronics	-
Biomedical Engineering	-
Electro-optics	-
Electrical Engineering	-
Communication and Information Technologies	
Multimedia Technologies	-
** standard tuition fee for part-time study programmes is € 500 for an academic year*	

Note:

- In the study programme Electrical Engineering, by the selection of optional courses, the students may specialise in one of the following areas: Car Electrical Engineering, Electric Drives, Electric Power Systems, Power Electronic Systems.

Detailed information about particular study programmes:

- syllabus,
- course information sheets

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

EXPECTED NUMBER OF ACCEPTED APPLICANTS TO THE FIRST YEAR

BACHELOR´S DEGREE STUDY		
STUDY PROGRAMME / FIELD OF STUDY	**PLANNED CAPACITY**	
	FULL-TIME	**PART-TIME**
Automation / Cybernetics	80	-
Autotronics / Electrical Engineering	50	-
Biomedical Engineering / Electrical Engineering	50	-
Electrical Engineering / Electrical Engineering	160	-
Electro-optics / Electrical Engineering	30	
Multimedia Technologies / Informatics	100	-
Communication and Information Technologies / Informatics	210	
TOTAL	680	

In case of a small number of applicants, the Faculty retains the right not to open the study programme and to offer candidates another study programme in the same or related field of study.
In case of a small number of applicants for the part-time study, the Faculty retains the right not to open the study programme.

TERMS AND CONDITIONS OF ADMISSION

Basic condition of admission

The basic condition for the admission to the bachelor´s degree study programme (first degree) at the Faculty of Electrical Engineering and Information Technology is the full completion of secondary education or full secondary vocational education (Higher Education Act, n.131/2002 Coll.). In the case of a foreign applicant or a student who has completed a secondary education abroad, the education is comparable with an education completed by a school leaving examination in the Slovak Republic. Applicant who has completed secondary education abroad will submit along with the application form or more precisely no later than the date of enrolment a document on completion of secondary education recognized by a relevant institution in the Slovak Republic.

The Faculty of Electrical Engineering and Information Technology UNIZA will not accept candidates who have already failed two or more times at the Faculty of Electrical Engineering and Information Technology UNIZA in any bachelor programme.

Written and oral command of Slovak language or Czech language is required for study at the Faculty. Applicants who have completed secondary education abroad (except the Czech Republic) and apply for study in the Slovak language will submit along with the application form or more precisely no later than the date of enrolment a certificate/document of the level of knowledge of the Slovak language.

Other conditions of admission

1. No entrance exams

Applicants will be admitted to the study without entrance exams *(except for applicants for the study programme Multimedia Technologies)* if they meet the legal conditions for bachelor's study (see Basic condition for admission).
If the applicant has submitted all the required enclosures to the application form, the admission procedure takes place without the personal participation of the applicants.

2. Entrance exam for the **study programme Multimedia Technologies**

Applicants for the study programme Multimedia Technologies will undergo entrance exam consisting of three parts:

- presentation of the applicant's motivation to study the study programme,
- evaluation of the applicant's learning outcomes and his/her general overview,
- presentation of multimedia activities and secondary school knowledge of the applicant, including clarification of the procedures and techniques used.

3. Written and oral command of Slovak language or Czech language is required for study at the Faculty. Applicants who have completed secondary education abroad (except the Czech Republic) and apply for study in the Slovak language will submit along with the application form or more precisely no later than the date of enrolment a certificate/document of the level of knowledge of the Slovak language.

ADMISSION OF FOREIGN STUDENTS

The basic and other terms and conditions of admission are applicable as for the applicants from abroad as for the applicants from Slovakia. Foreign students who study in a foreign language (i.e. not Slovak), pay the tuition fee as stated in § 92 Subsection 8 (Higher Education Act). The tuition fee is specified by the UNIZA directive for the respective academic year, which can be found on the university website. Foreign students who study in the Slovak language do not have to pay the tuition fee. Applicants from the Czech Republic who want to apply and study in Žilina can use the application form valid in the Czech Republic. Applicants who do not actively speak Slovak or Czech are required to attend the language training (it is possible to attend the Slovak language courses at UNIZA). For foreign applicants who were accepted on the basis of intergovernmental agreements, bilateral agreements or Slovak government grants, terms and conditions stated in respective documents are applicable.

APPLICATION FORM

Application forms are to be submitted for individual study programmes.
In case the applicant is interested in more study programmes, it is necessary to apply for each one individually, including payment of the respective admission procedure fees.
Applicants have to fill in an electronic application form that can be found on the website of the Faculty of Electrical Engineering and Information Technology: (http://fel.uniza.sk/ in the section Uchádzači o štúdium) or on the university website https://vzdelavanie.uniza.sk/prijimacky/index.php or on the education portal: https:// prihlaskavs.sk/sk/.
Concerning application form, it is necessary to enclose all the required documents and send it electronically or by post to the address of the Faculty of Electrical Engineering and Information Technology UNIZA within the stipulated deadlines.
In case of incomplete application form, applicants will be requested to complete it.
In the absence or a failure of entrance exams, the Faculty does not refund the admission fee.
If the applicant wants to take part in entrance exams at several faculties of UNIZA, the application forms must be submitted separately to each faculty and the respective admission procedure fees paid separately to each faculty.

Enclosures for the bachelor´s degree study programmes (to be sent with application forms):
1. Curriculum Vitae,
2. proof of payment of the admission fee,
3. copies of annual secondary school certificates.

Upon completion of the school-leaving examination, applicants will send or enclose with the application form a copy of the school-leaving examination certificate and the year-end report from the final year of secondary school study to date, which will be announced to each applicant in writing.

Admission fee:

Send **20 €** to:	Žilinská univerzita v Žiline, Univerzitná 1, 010 26 Žilina
Bank:	Štátna pokladnica
IBAN:	SK74 8180 0000 0070 0026 9917
const. symbol:	0308
variable symbol:	10331 - bakalárske štúdium
Payment method:	payment can be paid by bank transfer or postal order to the account above.
Proof of payment:	proof of payment is to be sent to the Faculty with the application form.

With payment of the admission fee from the EU member states, the EES countries, territories that are considered a part of the EU (Treaty of Rome, Section 299) and SEPA countries, it is necessary to use BIC: **SPSRSKBAXXX**, IBAN: **SK74 8180 0000 0070 0026 9917**.

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

USEFUL DATES

Open Day	Deadline for submitting the application form	Entrance exams
February, 4, 2020	until March, 31, 2020	June, 22, 2020

ACCOMMODATION

All the students of the first year of the bachelor degree study are entitled to accommodation in accordance with the internal regulations of the university.

Student accommodation facilities cost approx.: € 41 € – € 51 per month.

BOARD

Students can use services of catering facilities of the University of Žilina in Žilina. **Price for food: 1,10 € – 2,40 €.**

SCHOLARSHIPS

Students of all study programmes can obtain motivational scholarships (for excellent results or exceptional achievements) in accordance with the stated criteria. **Students of all study programmes can obtain motivational departmental scholarships in accordance with the stated criteria. Students can apply for a social scholarship at any time during the study.**

FOLLOW-UP STUDY AFTER COMPLETION OF BACHELOR'S DEGREE STUDY

There is a possibility for continuing bachelor´s degree study within follow-up master´s (engineer) degree study programmes at the Faculty of Electrical Engineering and Information Technology UNIZA in the academic year 2020/2021 – Applied Telematics, Biomedical Engineering, Electric Power Systems, Electric Drives, Photonics, Process Control, Telecommunications and Radio-communications Engineering, Power (and) Electronic Systems (respective information about particular study programmes is available at the university website). After completing the bachelor's degree, it is necessary to verify the current state of the offer of study programmes in a particular academic year.

GRADUATE PROSPECTS

BACHELOR´S DEGREE STUDY PROGRAMMES

AUTOMATION

(Field of study - Cybernetics)

Graduate has acquired education in the field of automation and process control with the support of information and communication technologies. He/she has also practical experience in application of safety critical control and communication systems performed mainly based on PLC and industrial networks. He/she will successfully apply in the operation of control and information systems at the process and operative level. Theoretical knowledge acquired during the bachelor study will create good prerequisites for further education, either within the further forms of university study or within lifelong education.

Software skills: C language, C++, MATLAB, PLC, ATMEL, MS ACCESS, HTML, CSS, Tia Portal.

AUTOTRONICS

(Field of study - Electrical Engineering)

Graduate has acquired basic and general knowledge required in wide spectrum of electrical proficiency especially in areas of automobile electronics, hybrid vehicles and electric vehicles. Gained knowledge is needed for the second degree study programmes in this study

programme or affinitive ones. Even if the graduate does not continue in the next level of the university study, he/she will gain required wide professional profile and he/she is able to adapt in different technical or other businesses. Graduates of Autotronics study programme should be professionals who are able to identify various electronic faults in cars. They can successfully apply mainly in car services and repair workshops, car selling shops and in education institutions.
Software skills: C language, C++, MATLAB, Simulink, CodeWarrior, CodeComposer, Asembler, AVR Studio, Vissim, PLECS.

BIOMEDICAL ENGINEERING

(Field of study - Electrical Engineering)

Graduate has acquired knowledge in the subjects of a theoretical and technical basis, as well as in a theoretical basis of medical disciplines with emphasis on the structure and functioning of biological objects, biochemical, physiological and pathophysiological processes. He/she has gained knowledge of medical technique and its applications, modern tools of biomedicine, principles of their activities, conditions for operation and their safe utilisation for diagnostic and treatment purposes. He/she is able to evaluate functionality of technical and computer aided equipment under given conditions of a health care facility or other operations and laboratories and at the same time able to lead qualified communication with the health care staff. He/she will successfully apply as an expert in medical and biological laboratories, in the operation of biomedical technique, in business and service organisations.
Software skills: C language, MATLAB, EAGLE.

ELECTRO-OPTICS

(Field of study - Electrical Engineering)

Electro-optics is a field at the interface of physical and several technical sciences, which is connected mainly to optics and electronics. It is a young field that has already found a firm place in the study programmes at many universities around the world. Graduates of the bachelor degree study programme Electro-optics are able to continue their study in the engineering study programme Photonics that has a close connection and thus the application especially in telecommunications, information technology, medicine, industrial technologies, aviation, military technology, construction industry, but it is also used in consumer devices and entertainment industry.
Graduates of Electro-optics should be able to orientate themselves in the following areas: geometric optics; optical radiation properties; principles of fibre optics; electronics and microprocessors; principles of nanotechnologies; principles of photonics; analysis and testing of fibre optic lines; testing of laser devices and components for telecommunications, medicine and other purposes; testing of optical, photonic or imaging prototypes and devices; determining the commercial, industrial or scientific use of electro-optical applications or elements.

ELECTRICAL ENGINEERING

(Field of study - Electrical Engineering)

Graduate has acquired knowledge of the subjects of theoretical base applied in the fields of power electronics, utilisation of applied microprocessor technique and programming, electric drives, electrical traction, electric power systems and mechatronics. He/she has gained knowledge in the field of quality management and reliability in a production company, marketing and trade, electrical standards, law and legal regulations related to the field of study. Graduates may further specialise in the field of automobile electrical engineering, electrical traction, electric drives, electric power systems, and power electronic systems and mechatronics systems. Graduates have obtained theoretical knowledge and practical experience in order to acquire the principles, installations, operations, functions, service and repairs of electrical products, devices and equipment in compliance with international standards. He/she will successfully apply in all fields of power electrical engineering, in the field of mechatronics, robotics, applied microprocessor technique, electronics, optoelectronics, power electronics, computer design and construction in organisations of administrative, production, operation or repair character.
Software skills: MS Office, MATLAB, SIMULINK, FEMM, MOTORSOLVE, SICHR, DIALUX, DSPACE, CODE WARIOR, LABWIEV, EMPT-ATP, MODES, GE-PSLF, RUPLAN, RS Logix, RS Link, RS View, Assembler, AVR Studio, EAGLE, OrCAD-PSPICE, PLECS.

COMMUNICATION AND INFORMATION TECHNOLOGIES

(Field of study - Informatics)

Graduates of the bachelor‘s degree study programme - Communication and Information Technologies in the field of study - Informatics will acquire the ability to specialize and adapt to the latest and future needs and requirements of practice in manufacturing companies of network operators and in service companies in the field of electronic communications. They will be prepared for a continuous deepening of knowledge from the field. They can work as qualified workers for the operation and design of technology of communication networks and services and will be able to solve the tasks of practice in team. They can work at the positions of executives, operators of electronic communications, network specialists in enterprises and institutions and developers of communication services and in companies developing technologies of Industry 4.0. Graduates can work as designers, system designers or specialists for various areas of ICT.

MULTIMEDIA TECHNOLOGIES

(Field of study - Informatics)

Graduate has acquired knowledge in acquisition, processing and presentation of digital signal at an adequate technical, aesthetical, ethical and art levels. The synergy of technical and art education will make the graduate a specialist in creating multimedia presentations. Graduate has gained knowledge and practical experience in working with the screen and the sound element of multimedia that predetermines him/her for work in organisations focused on information technologies, advertising and counselling activities, in public administration institutions, in studios producing multimedia products.

Software skills: C language, C++, MATLAB, Java, JSP, Blender, Cinema 4D, Adobe Premiere, Adobe Audition, Adobe Photoshop, Adobe Illustrator, Adobe InDesign, Protools, HW, SQL, PSpice, Microsim, Corel Draw, QuarkxPress, LaTex.

ADDITIONAL EDUCATIONAL ACTIVITIES

In addition to education in a selected study programme, the Faculty of Electrical Engineering and Information Technology enables its students to obtain a QUALITY MANAGER certificate which allows them to significantly extend their application in practice, especially in production-oriented companies. During the study students complete professional experience, thereby directly obtain practical experience in quality management.

The faculty offers its students the opportunity to obtain the CLAD – Certified LabVIEW Associate Developer certificate from National Instruments company through the LabVIEW Academy which operates at our faculty. This certificate represents an excellent entry asset for job seekers in companies dealing with automation, measurement, testing, industrial production or computer vision in LabVIEW.

The Cisco Academy also operates at the Faculty where students can take advantage of free preparation for obtaining Cisco Certified Network Associate industrial certificates.

Our faculty, together with its industrial partners, offers students free tuition of professional English and German, enabling them to expand their language competence in the area they study.