UNIVERSITY OF ŽILINA
Faculty of Mechanical Engineering

BACHELOR´S DEGREE STUDY

CONTACT

The University of Žilina
Faculty of Mechanical Engineering
Univerzitná 8215/1, 010 26 Žilina
Tel.: 041/513 25 01
e-mail: dsjf@stroj.uniza.sk
www.fstroj.uniza.sk

ll questions concerning study can be directed to the Department for Education:
Tel.: 041/513 25 07, 25 08, +421 907 864 366
e-mail: studref@fstroj.uniza.sk

Coordinator for work with students with special needs:
Assoc. Prof. Mgr. Branislav Ftorek, PhD.
Tel. No.: +421/41/513 25 19, 49 50
e-mail: branislav.ftorek@fstroj.uniza.sk

ACCREDITED STUDY PROGRAMMES OFFERED FOR THE ACADEMIC YEAR 2027/2028

BACHELOR´S DEGREE STUDY PROGRAMMES	
FULL-TIME STUDY LENGTH OF STUDY 3 YEARS	**PART-TIME STUDY** LENGTH OF STUDY 3 YEARS
Computer Design and Simulation	-
Mechanical Engineering Technologies	-
Energy and Environmental Technology	-
Industrial Engineering	-
Vehicles and Engines	-
Automation and Digitization of Production	-
-	Mechanical Engineering

** tuition fee for part-time study programmes is € 700 for an academic year*

Detailed information about the study programmes:

- curriculum,
- course information sheets

EXPECTED NUMBER OF ACCEPTED APPLICANTS TO THE FIRST YEAR

BACHELOR´S DEGREE STUDY		
STUDY PROGRAMME / FIELD OF STUDY	**PLANNED CAPACITY**	
	FULL-TIME	**PART-TIME**
Computer Design and Simulation / Mechanical Engineering	80	-
Mechanical Engineering Technologies / Mechanical Engineering	80	-
Energy and Environmental Technology / Mechanical Engineering	80	-
Industrial Engineering / Mechanical Engineering	80	-
Vehicles and Engines / Mechanical Engineering	80	-
Automation and Digitization of Production / Mechanical Engineering	80	
Mechanical Engineering / Mechanical Engineering		40
TOTAL	480	40

In case of a low number of applicants for a specific full-time or part-time study programme, the Faculty retains the right not to open this study programme and to offer applicants another study programme.

TERMS AND CONDITIONS OF ADMISSION

Basic conditions of admission

The basic condition for admission to the bachelor‘s degree study (the first-degree study programme) is the full completion of secondary education or full secondary vocational education (Act No. 300/2025 Coll. on Higher Education Institutions and amending certain Acts; hereinafter referred to as the ‘Higher Education Act’). In the case of a foreign applicant or a student who completed secondary education abroad, the education is comparable to that completed by a school leaving examination in the Slovak Republic. An applicant who completed secondary education abroad shall submit, along with the application form or more precisely, no later than on the date of enrolment, the decision on the recognition of the certificate of completion of secondary education recognized by a relevant institution in the Slovak Republic, or the certificate of recognition, together with an extract from the register of documents.

Other conditions of admission:

Selection procedure - All applicants undergo a selection procedure. The rules of the selection procedure are published on the Faculty‘s website https://www.fstroj.uniza.sk/index.php/uchadzaci/moznosti-studia/prijimacie-konanie
(Principles and rules of the admission procedure for the 1st degree of higher education at the Faculty of Mechanical Engineering UNIZA).

Language competence
Written and oral command of the Slovak language or the Czech language is required for study at the Faculty. Knowledge of at least one foreign language (English, German, Spanish, French) is expected.

ADMISSION OF FOREIGHN STUDENTS

Foreign students who study in a foreign language (i.e. not Slovak), pay the tuition fee as stated in of the Higher Education Act. The tuition fee is specified by the UNIZA directive and published for the respective academic year 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 can use the form valid in the Czech Republic to submit their application for study. Applicants who do not actively speak Slovak or Czech are required to successfully complete their language training (it is possible to attend the Slovak language courses at UNIZA).

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

APPLICATION FORM

Application forms shall be submitted for the individual study programmes.
If the applicant wants to apply for more than one study programme, it is necessary to submit individual application forms for each study programme separately whereas the payment of the respective admission fee is required.
Applicants fill in the application form Prihláška na vysokoškolské štúdium – 1. stupeň *(Application form for the first degree of the university study)* or they can also use an electronic application form. The electronic application form can be filled via the UNIZA website: https://vzdelavanie.uniza.sk/prijimacky/index.php or on the Portal VS (University Portal): https://prihlaskavs.sk/sk/.

- **Applicants passing the school-leaving examination in the school year 2026/2027 attach to the electronic application form as follows:**
  - a scan of the application form signed by the applicant with a confirmation of correctness of the data by a secondary school stamp,
  - proof of payment of the admission fee,
  - a scan of the certificate of participation in competitions or olympiads (if they have participated in a district, regional or higher round), if applicable,
  - a scan of the CV.
- **Applicants who already completed their secondary education and do not graduate in the academic year 2026/2027 and the correctness of the data in their application form is not confirmed by the secondary school, must attach to their application form as follows:**
  - scans of all year-end reports,
  - proof of payment of the admission fee,
  - a certified scan of the school-leaving examination certificate,
  - a scan of the certificate of participation in competitions or olympiads (if they have participated in a district, regional or higher round), if applicable,
  - a scan of the CV.

If the applicant has not submitted the required scans along with his/her electronic application form, it is necessary to print and sign the application form and to enclose the required documents in printed form, including the proof of payment of the admission procedure fee and send them to the address of the Faculty of Mechanical Engineering UNIZA **within the stipulated deadlines**.

An incomplete application form or application form sent after the deadline will not be accepted. In the event of non-participation in the admission procedure or a failure in the admission procedure the Faculty does not refund the admission procedure fee.

If the applicant wants to take part in the admission procedure at several faculties of UNIZA, **the application forms must be submitted separately to each Faculty with the payment of the relevant fee**.

Upon completion of the school-leaving examination, applicants will attach to their application form (or send via post):
- a certified copy of the school-leaving examination certificate,
- a copy of the year-end report from the last year of secondary school study by a deadline, 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:	SK34 8180 0000 0070 0026 9861
	const. symbol:	0308
	variable symbol:	10231 – bakalárske štúdium
Payment method:	payment can be made by bank transfer or postal order to the above account.	
Proof of payment:	proof of payment is to be sent to the Faculty address with the application form.	

Tuition fees – are set in accordance with the Higher Education Act. The information on the amount of the tuition fee for the relevant academic year will be published on the website of the University of Žilina within the stipulated deadlines.

With payment of the admission fee from the EU member states, the EES countries, territories that are considered part of the EU (Treaty of Rome, Section 299) and SEPA countries, it is necessary to use **BIC: SPSRSKBAXXX**, **IBAN: SK34 8180 0000 0070 0026 9861**.

USEFUL DATES

Open Day	Deadline for submitting the application form	Entrance examination
21 October 2026 and 27 January 2027	until 31 March 2027	16 June 2027

ACCOMMODATION

All first-year bachelor‘s degree students are entitled to accommodation in accordance with the university‘s internal regulations. Accommodation is provided only for students of legal age. **Accommodation fee: €66 - €134/per month**.

CATERING

Students can use the services of the catering facility of the University of Žilina. **Price for food: € 1.10 – € 4.70**.

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**.

FOLLOW-UP STUDIES AFTER COMPLETION OF BACHELOR’S DEGREE STUDY

There is a possibility for continuing the bachelor´s degree study within the follow-up master´s (engineer) degree study programmes at the Faculty of Mechanical Engineering UNIZA in the academic year 2027/2028 in study programmes: Automated Production Systems, Computer Modelling and Simulations in Mechanical Engineering, Mechanical Engineering Technologies, Materials Engineering, Industrial Engineering, Environment Technology, Vehicles and Engines or Mechanical Engineering (part-time study) (the respective information on the particular study programmes can be found on the university website).
After the completion of the bachelor ‘s degree study, it is necessary to verify the current offer of study programmes in a particular academic year.

GRADUATE PROSPECTS

BACHELOR´S DEGREE STUDY PROGRAMMES – full-time study

COMPUTER DESIGN AND SIMULATION
(Field of study 2381 Mechanical Engineering)
In the first part of the professional study, the graduates of the study programme Computer Design and Simulation acquired knowledge of theoretical subjects such as Mathematics, Physics, Fluid Mechanics, Thermomechanics and Strength and Elasticity which together with Rigid Body Mechanics and structurally and technologically oriented subjects create a theoretical and professional basis for study within the particular study programme. Following this basis, the graduates in

the second part of the professional study acquired knowledge of applied scientific disciplines focused mainly on modelling, calculations, construction, operation and maintenance of technical equipment. On the basis of compulsory optional subjects, students can profile themselves on all areas of technical fields. In addition, graduates are routinely able to handle the work with modern CAD systems for construction and modelling support, as well as systems for calculation, analysis, and simulation of parts of technical systems and their mechanisms in dynamic and FEM analyses. Students can demonstrate their expertise when solving the semester and final projects. The study programme is completed with a final examination and the defence of the final thesis. During their study, students acquire a theoretical and methodological professional basis and practical experience and skills that are necessary to solve a wide range of issues related to the design, projecting, construction and operation of various machines and equipment. Graduates are employable in the fields of design, projecting, construction, operation and maintenance of technical systems.

ENERGY AND ENVIRONMENTAL TECHNOLOGY

(Field of study 2381 Mechanical Engineering)

Graduates during their study acquire basic knowledge especially in the fields of technical and scientific disciplines and knowledge of the theory of fluid mechanics, thermodynamics and heat and mass transfer, which together with the rigid body mechanics create an essential theoretical basis of energy technology. During the study, they are focused primarily on the study of energy sources, distribution networks of energy media, the design and construction of all types of machines that generate, produce and transform energy and of support equipment. Furthermore, they are focused on the facilities for the use of alternative energy sources and facilities for energetic waste recovery, which corresponds to the structure of the study programme and the content of individual subjects. Graduates of the bachelor‘s degree study programme Energy and Environmental Technology with knowledge in the field of construction and operation of energy machinery and equipment, legislation, ecology, ergonomics, economics, business and management are able to work in all spheres of the national economy where they will operate relevant energy and environmental equipment, maintain them in serviceable condition and make simpler construction and design changes.

MECHANICAL ENGINEERING TECHNOLOGIES

(Field of study 2381 Mechanical Engineering)

The professional profile of graduates of Mechanical Engineering Technologies study programme is characterised by theoretical but mainly practical knowledge of construction and engineering technologies, production equipment, quality, economics and production management, as well as habits and ability to skilfully apply this knowledge in practice. Graduates received theoretical but mainly practical knowledge of the most widespread technologies in mechanical engineering production and its management as well as in the field of automation of mechanical engineering. They acquired habits and skills in construction, design and technological activities using modern technological means. Graduates also have basic knowledge in the field of production, testing, technological processing, selection, exploitation and degradation of the properties of the main types of technical materials. They are especially prepared to work in industrial companies in the field of technical material production, their technological processing to semi-finished products and products as well as in the field of quality control, purchase, sale, service and maintenance. Graduates are employable in the operation of industrial mechanical engineering companies, in railway and urban public transport, in all areas of mechanical engineering and in other organisations of administrative, production, operational or repair nature. Graduates have adequate knowledge in the field of electronics, mechatronics, robotics, as well as in the field of computer-aided mechanical engineering production. They have sufficient practical experience and skills in laboratory work, they have adequate knowledge of professional terminology in a foreign language, and they are able to apply the basics of economic methods necessary for the operation of existing systems.

INDUSTRIAL ENGINEERING

(Field of study 2381 Mechanical Engineering)

During the study, undergraduates acquire basic knowledge mainly in the areas of technical and scientific disciplines, business management, production and information technologies, company logistics, organisation of auxiliary and service operations and their economic dependencies. During the study, they are mainly focused on the organisation and management of processes at the level of basic production units (workshops, production plants), which corresponds to the structure of the study programme and the content of individual subjects. Graduates of the bachelor´s degree study programme acquire the theoretical knowledge necessary for effective management of production units and their processes. During the study, graduates acquire the skill of using software applications and they are able to apply basic methods of industrial engineering in practice. Graduates of the bachelor´s degree study programme Industrial Engineering are employable as managerial and

coordination workers, especially in basic production units and in departments of industrial engineering, as well as in selected departments of middle management level of industrial companies. They are prepared to work as technicians of quality and productivity, assistant designers of production systems, production managers, employees in technical preparation of production, industrial engineers, employees of the departments of planning and management of production, logistics departments, quality management departments, maintenance departments, human resources departments, etc.

VEHICLES AND ENGINES

(Field of study 2381 Mechanical Engineering)

Graduates of the bachelor´s degree study programme Vehicles and Engines in the field of study Mechanical Engineering are able to analyse problems and possibilities that occur in various areas of practice related to the field of transport means and their most important subsystems. They acquired basic knowledge from the subjects of general technical education; they have a general overview of mechanical engineering production and its management, professional knowledge in the field of transport means, combustion engines, hydraulic and pneumatic machines and equipment, knowledge of quality assessment and testing of transport means and knowledge regarding methods of compliance with legislative requirements imposed on the production and operation of transport means and their subsystems. Graduates are able to design and provide construction solutions of the transport means parts and their subsystems using modern computer-assisted technologies. They are able to find work in the operation of transport means, especially road vehicles, rail vehicles, combustion engines, hydraulic and pneumatic machines and equipment, in their diagnostics, maintenance and repairs. Graduates meet conditions for further education in master´s (engineer) degree study, especially in the study programmes Vehicles and Engines and Vehicle Maintenance.

AUTOMATION AND DIGITIZATION OF PRODUCTION

(Field of study 2381 Mechanical Engineering)

The professional profile of a graduate of the study programme Automation and Digitisation of Production is characterised by theoretical but mainly practical knowledge of construction and mechanical engineering technologies, production equipment, quality, economics, and the field of automation of mechanical production based on the integration of computer support across levels of the corporate structure with an emphasis on robotised and flexible production systems with CNC machines and devices with automatic production control. The graduate has acquired theoretical but mainly practical knowledge of the most widespread technologies of mechanical engineering production, its management and the application of conventional and innovative production technologies with an emphasis on digital and additive manufacturing in modern mechanical engineering manufacturing companies. The spectrum and depth of knowledge and skills in the areas of mechanical engineering production automation, production digitization, additive technologies, robotics, computer systems integration, mechatronics, machining, and metrology, as well as the teaching method with practical exercises and laboratory tasks, ensure the prerequisites for the graduate‘s rapid adaptability and his/her successful application in practice. Graduates can find wide employment in the operation of industrial mechanical engineering companies, in railway and urban public transport, in all areas of mechanical engineering and in other organisations of an administrative, production, operational or repair nature. They have sufficient practical experience and skills in laboratory work, have adequate command of professional terminology in a foreign language, and know the basics of economic methods necessary for the operation of existing systems. Graduates of the bachelor‘s degree study programme Automation and Digitization of Production are prepared to continue on the second level of university study in the given area – in the follow-up study programme Automated Production Systems, or in related study programmes.

BACHELOR´S DEGREE STUDY PROGRAMMES – part-time study

MECHANICAL ENGINEERING

(Field of study 2381 Mechanical Engineering)

The professional profile of graduates of Mechanical Engineering study programme is characterised by theoretical but mainly practical knowledge of construction and engineering technologies, production equipment, quality, economics and production management, as well as habits and ability to skilfully apply this knowledge in practice. Graduates received theoretical but mainly practical knowledge of the most widespread technologies in mechanical engineering production and its management as well as in the field of automation of mechanical engineering. They acquired habits and skills in construction, design and technological activities using modern technological means. Graduates also have basic knowledge in the field of production, testing, technological processing, selection, exploitation and degradation of the properties of the main types of technical materials. They are especially prepared to work in industrial companies in the field of technical material production, their technological processing to semi-finished products and products as well as in the field of quality control, purchase, sale,

service and maintenance. Graduates are employable in the operation of industrial mechanical engineering companies, in railway and urban public transport, in all areas of mechanical engineering and in other organisations of administrative, production, operational or repair nature. Graduates have adequate knowledge in the field of electronics, mechatronics, robotics, as well as in the field of computer-aided mechanical engineering production. They have sufficient practical experience and skills in laboratory work, they have adequate knowledge of professional terminology in a foreign language, and they are able to apply the basics of economic methods necessary for the operation of existing systems.