Politechnika Świętokrzyska

al. Tysiąclecia Państwa Polskiego 7
25-314 Kielce, POLAND

Department of Staff Development & International Cooperation
Visit the office: Building C rooms 4.09, 4.20

phone numbers:
+48 41 34 24 773,
+48 41 34 24 789/788

e-mail:
international@tu.kielce.pl
erasmus@tu.kielce.pl

international.tu.kielce.pl

Kielce University of Technology

Education - Research - Development

Welcome Words

The Kielce University of Technology is the oldest and the only state-owned technology-oriented higher education institution with the Polytechnic status in the Świętokrzyskie region.

As a research institution, we collaborate with many business and business-related organizations as well as municipal and regional authorities. The University plays an important role in the development of modern industry and the expansion of small and medium-sized enterprises in the Świętokrzyskie voivodship.

As a university, we believe that success depends on satisfied students, staff and external partners. Our priorities are to continually improve the educational offer, support the professional development of the research and teaching staff, improve internationalization, and increase the number of nations and international research projects run in cooperation with business and academic partners.

We are proud of our students and alumni. The qualifications obtained from the Kielce University of Technology are valued by employers in the region and across the country, allowing graduates to choose from a wide range of career possibilities.

We hope that this guide provides useful information on our research and educational activities, furthermore, it will encourage young people to study here, organizations and foreign Universities to use our services and form partnerships with us.

About the Region

Poland is located in the middle of Europe. The country is located at a geographic crossroads that links almost whole European countries. According to the ranking, it's the best country in the EU and fifth in the world for female entrepreneurs. Poland is well-known for the amber beaches of the Baltic Sea in the north and the unique mountains in the south.

Kielce is a town located next to one of the oldest mountains in Europe – the Świętokrzyskie Mountains. The city is in the southeast part of Poland which makes access to other Polish cities very easy. Kielce is the economic, educational, research and cultural heart of the region. The city is a host to many national and international trade fairs. UNESCO's recognition of the Świętokrzyskie Geopark has enhanced the prestige of the town and the neighboring communes as a tourist destination.

The Kielce University of Technology is a higher education institution that was founded in Kielce in 1816 by Stanisław Staszic, a leading figure in the Polish Enlightenment.

Our priorities are to continue improving the educational offer, internationalization and to increase the number of national and international research projects run in cooperation with business and academic partners.

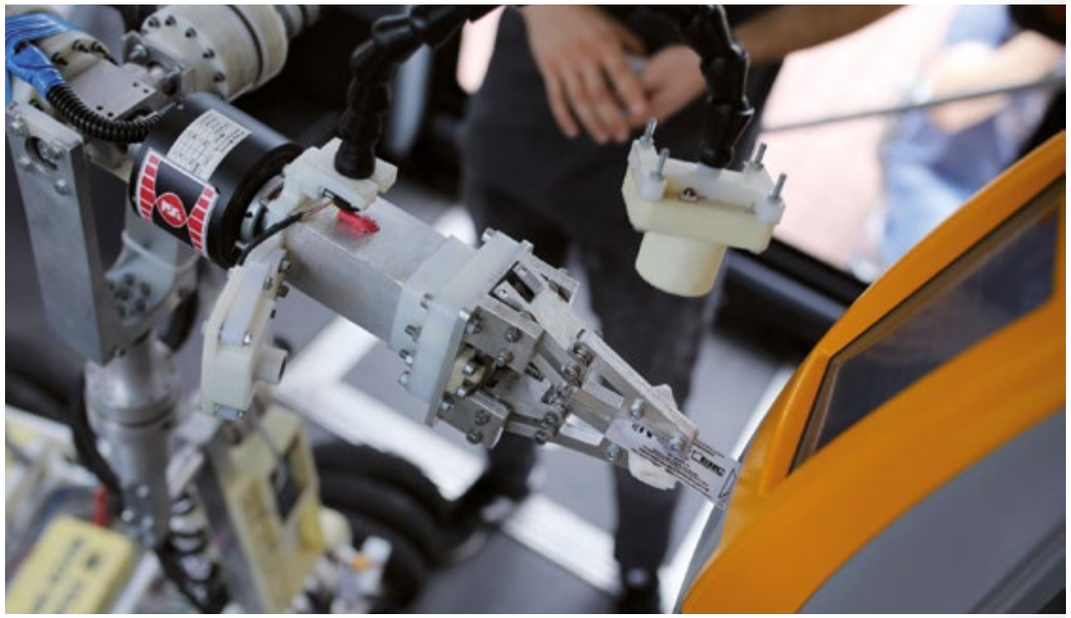
With a strong commitment to continuous development and collaboration, the Kielce University of Technology provides an excellent environment for teaching, learning and research.

University Full of Innovation

In recent years, there has been a substantial increase in the number of contracts for research services as well as research and development projects that the University has undertaken. All the efforts aim to have the results implemented by business partners collaborating with the University.

The research and development projects that KUT is involved in are a response to modern challenges and a need for the transfer of technologies to be used in the industry. The undertaken by the Kielce University of Technology projects are supported under national, international and strategic schemes by the National Centre, the National Centre for Research and Development.

Moreover, the Kielce University of Technology cooperates with a large number of businesses, some of them being regular clients of our research services. As a result of reliability, many collaboration agreements have been signed with almost 100 companies which have trusted us and our experts over the last five years.



KUT has 139 research laboratories with a wide range of services, including five with accreditation, which provide a wide range of research services in areas such as road materials, automotive electrical engineering, lighting engineering, dimensional metrology, scanning electron microscopy and X-ray microanalysis. As a part of practical courses, our students and PhD students have many opportunities to gain professional experience during classes in the laboratories. The latest modern laboratory - the Research and Innovation Centre for Smart Specialization is equipped with advanced instrumentation and software.

The aim of the Research and Innovation Centre for Smart Specialization is to improve the commercialization of the research and development activities of our University by creating new and modernizing the existing laboratories, purchasing state-of-the-art research equipment, and providing contract research services to business partners. The establishment of the Centre is a chance to perform a wide range of science and technology experiments, develop prototypes, test and implement new solutions.

The newest laboratories that have been developed as a part of the Research and Innovation Centre for Smart Specialization project:

- Energy-Efficient Materials Technologies and Material Engineering Laboratory
- Structural Condition Assessment Laboratory
- Automated Metalworking Laboratory
- Radiography and Computer Tomography Laboratory
- Industrial Laboratory for Low Emission and Renewable Energy Sources
- Low Carbon Power Sources Laboratory
- Renewable Energy Systems Modelling and Prototyping Laboratory
- Solid Biomass and Biogas Energy Engineering Laboratory
- ICT, IoT and Cybersecurity Laboratory
- Artificial Intelligence Laboratory
- Virtual Reality Section
- Innovative 3D Modelling and Prototyping Laboratory
- Smart Production Systems Modelling Section
- Advanced Nanotechnology and Nanomaterials Laboratory

Staff Development

Currently, the University employs over 400 academic staff including 171 researchers, who are experts in mechatronics, mechanical engineering, and civil engineering, including road construction, computer science, automatic control engineering, electrical engineering, logistics, environmental engineering, production engineering, management and other disciplines of science and technology.

In October 2019, the Doctoral School replaced all the postgraduate doctoral programmes run by the University faculties. The Doctoral School aims to support interdisciplinarity in scientific research and the development of advanced competencies valuable to the Polish economy. The new model of doctoral education is also associated with a significant improvement in the financial situation of doctoral students, because each of them receives a scholarship.

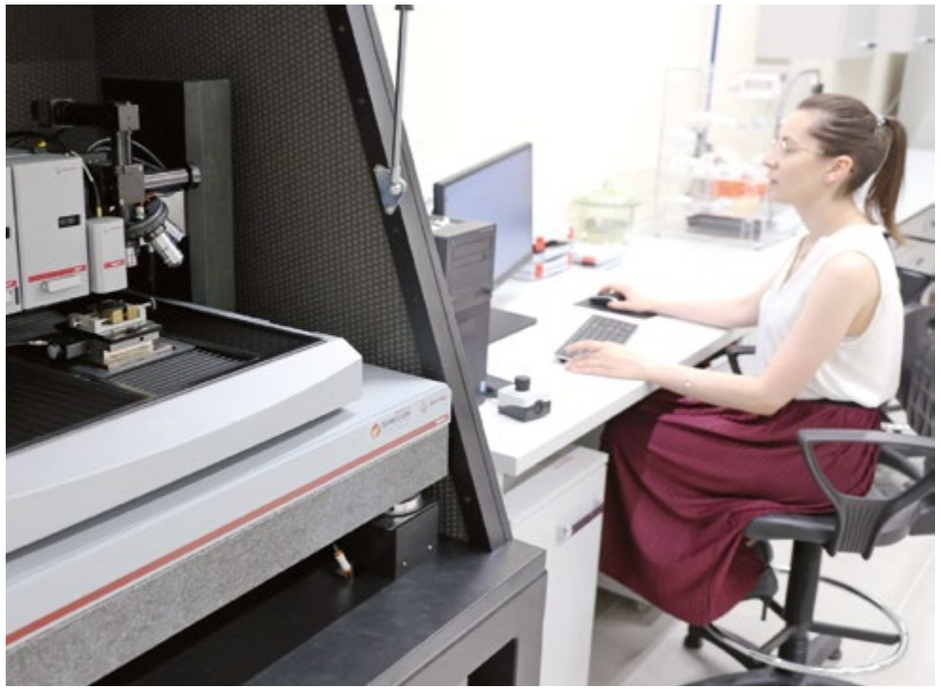
Cooperation with Industry

Research is responsible for much of the University's collaborative work with the business, industry and the public sector. These connections provide opportunities for work experience and demonstrate the commitment of the University to develop the professionally-minded graduates that employers want to recruit.

Innovative solutions can be established thanks to the governmental and EU grants that KUT is awarded. The University cooperates among others with the Technology Transfer Centre and the Kielce Technology Park, which are responsible for the implementation of the developed innovations in the industry.

Currently, the Kielce University of Technology owns 163 industrial property rights. These are 105 patents for innovations, of which 4 have obtained the status of the European patent. Another 103 applications are under review by the Polish Patent Office. All the exclusive rights in the University's portfolio allow technology transfers to commercial entities, generally through licensing agreements.

The Kielce University of Technology maintains contacts with regional, national and foreign companies, where the students can do internships and gain practical experience. Those are the main advantages that create transferable skills so important for success in today's competitive market.



International Cooperation

Our University cooperates with numerous foreign universities in the field of scientific research as well as student exchange programmes. Each year several dozen of our students study abroad within the programmes Erasmus+ or CEEPUS. At the same time students from Italy, Spain, Turkey, Portugal, Germany, Greece, Lithuania, Slovakia or the Czech Republic decide to study at the Kielce University of Technology.

Thanks to the bilateral agreements carried out, our University hosts students from Malaysia or even distant Brazil. Our University is more and more popular among young people not only from Eastern European countries, but also from Asian and African countries. They eagerly take up regular studies in Kielce and graduate successfully. We offer courses in Polish and English which make our University attractive to international students.

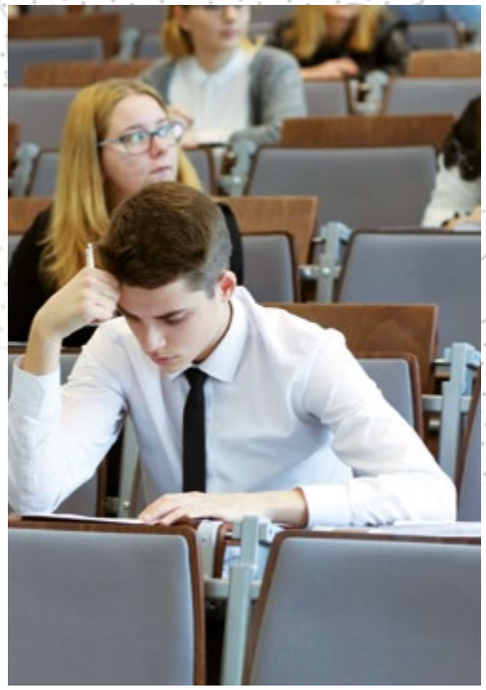
Science and Education

The Kielce University of Technology not only supports the development of entrepreneurship and innovation but also provides well-qualified staff to the job market. We offer a range of undergraduate and postgraduate programmes across our five faculties. If necessary, we create new programmes or reshape the existing ones.

While studying, students are invited to join research groups, where they can develop their academic passions and creativity and get opportunities to take part successfully in national and international competitions. They are also encouraged to participate in international exchange programmes such as Erasmus+ or CEEPUS which offer the opportunity to study abroad at over 100 partner universities. The academic qualifications obtained from the Kielce University of Technology are valued by employers in the region and across the country. Furthermore, the University Academic Career Centre offers many possibilities for work in the biggest and most innovative companies in Poland and abroad.

The Kielce University of Technology offers 21 programmes of study, provided by five faculties:

- Faculty of Civil Engineering and Architecture
- Faculty of Electrical Engineering, Automatic Control and Computer Science
- Faculty of Environmental Engineering, Geomatics and Renewable Energy
- Faculty of Mechatronics and Mechanical Engineering
- Faculty of Management and Computer Modelling



Faculties

Faculty of Civil Engineering and Architecture

This Faculty is the best option for people interested in engineering, design and construction of apartments, houses, office buildings, roads, bridges or airports.

The Faculty employs highly skilled construction engineers and architects, who use their knowledge and skills to contribute both to study and to research processes and to educate future construction engineers in specialities such as engineering and building construction, road, street, and highway construction, railroad construction, engineering structure theory, bridge construction, underground structures, and construction organization technology.

The faculty laboratory equipment is available for R&D services and the researchers provide professional services to businesses.

FIELDS OF STUDY

- **ARCHITECTURE**
- **CIVIL ENGINEERING** - *first cycle programme in English*

Faculties

Faculty of Electrical Engineering, Automatic Control and Computer Science

The offer of the Faculty of Electrical Engineering, Automatic Control and Computer Science is for people with mathematics, computation and physical sciences skills.

The Faculty provides an optimum environment for research and scholarly efforts of academic staff members and students in electrical, electronic, control and computer engineering fields.

This Faculty concentrates on the fields of science related to information society technology, microelectronic technologies, digital signal conversion, theoretical and applied computer science, software, databases, design and construction of computer equipment, basis and techniques of creating computer networks, sustainable development – renewable sources of energy.

FIELDS OF STUDY

- **ELECTRICAL ENGINEERING**
- **ENERGY ENGINEERING**
- **COMPUTER SCIENCE** - *first cycle programme in English*
- **ELECTROMOBILITY**
- **COMPUTER SYSTEMS AND NETWORKING**
- **INDUSTRIAL AUTOMATION AND ELECTRICAL ENGINEERING**

Faculties

Faculty of Environmental Engineering, Geomatics and Renewable Energy

The Faculty offers unique programs, spanning a variety of disciplines - all with a focus on making positive change in the world.

The academic staff with extensive professional experience creates knowledge, nurtures learning and promotes actions to achieve sustainable futures in developing and implementing the smart solutions needed to address today's most pressing environmental challenges.

This faculty enable students to obtain advanced knowledge on various aspects related to sustainability, water and wastewater engineering, climate change adaptation, resiliency, health and infrastructure and others.

FIELDS OF STUDY

- **SURVEYING AND CARTOGRAPHY**
- **ENVIRONMENTAL ENGINEERING** - *first cycle programme in English*
- **RENEWABLE ENERGY SOURCES**

Faculties

Faculty of Mechatronics and Mechanical Engineering

The offer of this faculty is addressed to people interested in designing robots and automation production lines, who would like to be specialists in building cars, building weapons and ammunition, laser technology or would like to construct and manufacture innovative and designer industrial products.

The highly qualified staff provides theoretical and practical knowledge connected with mechanical engineering, materials engineering, automatic control and robotics, production engineering, power engineering, transport, mechatronics, and space engineering which creates an excellent opportunity to study mechanical engineering in its widest meaning – constructions, technologies, automation, diagnostics.

All the programs are designed to produce skilled problem solvers, leaders and innovators able to create mechanical systems and electro-mechanical designs that impact industries and improve the world.

FIELDS OF STUDY

- **AUTOMATION AND ROBOTICS**
- **SAFETY ENGINEERING**
- **MECHANICAL ENGINEERING** - *first cycle programme in English*
- **AUTOMOTIVE ENGINEERING AND TRANSPORT MANAGEMENT**
- **COMPUTER SCIENCE FOR MANUFACTURING ENGINEERING**
- **DESIGN FOR INDUSTRY**

Faculties

Faculty of Management and Computer Modelling

This faculty is aimed at students who would like to become industry professionals and work within the remit of project management and/or building information modelling.

The academic teachers provide students with knowledge and skills in technology, economics, and competency in information technology. Efficient communication and learning skills and the ability to follow the changing environment are some of the other areas of study at the Faculty.

As a result of the best preparation during studies, the graduates are better equipped to identify, model and control business processes in today's environment. This Faculty is a reply to newly arising needs they develop projects which create a regional knowledge-based economy.

FIELDS OF STUDY

- **ECONOMICS**
- **DATA ENGINEERING**
- **LOGISTICS**
- **MANAGEMENT AND PRODUCTION ENGINEERING**
  - first cycle programme in English
- **BIOMEDICAL ENGINEERING**

Achievements of our students

Student research groups and well-equipped laboratories play an important role in youth development. The University takes care of fulfilling the dreams and passions of students and always helps them to become the best versions of themselves.

The **IMPULS** Mars Rover, the flagship of the Faculty of Mechatronics and Mechanical Engineering, designed and built by the IMPULS students, has taken part in the European Rover Challenge events in 2014 - 2nd place, 2015 - 5th place, 2016 - 2nd place, 2018 and 2019 - 1st place.

The team has also entered the University Rover Challenge in the Utah desert in the US three times – in 2018 - 3rd place, 2019 - 1st place and in 2022 - 5th place.

Our students have been among the winners of the National Student-Inventor Competitions, initiated by the Kielce University of Technology in 2010. Afterwards, they have been invited to participate in the International Exhibitions of Inventions of Geneva, each time receiving gold, silver or bronze medals.

The F24+ electric car, designed and constructed by the TU Kielce Greenpower team of the **KLAKSON** students research group at the Faculty of Mechatronics and Mechanical Engineering has also been a great success. It won the 1st prize in the 2018, 2nd ECO SAFE Race on the Kartodrom circuit in Bydgoszcz. In the same year, it came 3rd both in the F24+ LAP RACE and the final race of the F24+ Greenpower Poland Competition on the circuit in Poznań.

In 2019, the team finished 1st and 2nd in the 3rd ECO SAFE Race on the Kartdrom circuit in Bydgoszcz, 3rd and 4th in the 2019 F24+ LAP RACE and the final race on the Poznań circuit. In 2020 all the races were cancelled as a result of the pandemic.

Every year Computer Science students from the Faculty of Electrical Engineering, Automatic Control and Computer Science join and are among the winners of the **Huawei Seeds for the Future** competition. The prize is a visit to the head office of Huawei Technologies Co. Ltd. in China to participate in the Seeds for the Future training programme.

Advantages for Students

Our campus is situated in the centre of the town. It has been designed to the students' needs in mind and is equipped to provide up-to-the-minute teaching and learning facilities. There are six dormitories offering cosy and comfortable rooms for students, which are situated in a close neighbourhood to the faculties buildings.

KUT takes care of sports events. All the activities for students, staff and the community are organised by our Sports Centre and the Kielce University of Technology Club of the Polish University Sports Association. The official opening ceremony of the new outdoor track and field stadium took place in June 2021. The facilities meet all the necessary criteria, which means our University will be able to host regional and national events.

Each year during a festival called Juwenalia our students become "the rulers of Kielce". You can see then a colourful procession of students in different fancy dresses walking along the city's streets. The young people have great fun while taking part in many concerts and parties.

Every day young people are offered a lot of forms of entertainment, in pubs, clubs, cafes or bars. They have many opportunities for relaxing after studying hard.

Contact details

Politechnika Świętokrzyska

al. Tysiąclecia Państwa Polskiego 7
25-314 Kielce, POLAND

Department of Staff Development & International Cooperation
Visit the office: Building C rooms 4.09, 4.20

phone numbers:
+48 41 34 24 773, +48 41 34 24 789/788

e-mail:
international@tu.kielce.pl & erasmus@tu.kielce.pl

Politechnika Świętokrzyska
Kielce University of Technology

www.international.tu.kielce.pl