



POZNAŃ UNIVERSITY OF TECHNOLOGY



TECHNOLOGY

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POZNAŃ

UNIVERSITY OF TECHNOLOGY



Prof. Adam Hamrol
Rector of Poznań University
of Technology

Poznań University of Technology (PUT) grew out of the State School of Mechanical Engineering which was established in 1919. Currently, it is one of the leading technical universities in Poland which has become one of the most recognized landmarks of the region and even the whole country. To a large extent this was possible due to the renowned pragmatism and reliability of the people of Poznań.

Our university is renowned for its outstanding achievements: university staff are academically active in international research in determining new directions for research. Notably, thanks to a solid engineering approach, it is possible to combine theory with practice in implementing scientific solutions in daily life. This attitude is represented by dynamic and flourishing cooperation with regional industry, as well as partnerships with professionals representing different fields of high-tech studies.

Research ambitions are combined with the interests of students' who are the most important

participants in our university life.

Nine faculties, including those with the highest European standards, offer a wide range of studies: from architectural artistic values to nano-technologies, conducted both in Polish and English.

A comprehensive attitude towards education is reflected in the high degree of specialization in different areas of study closely linked with interdisciplinary cooperation.

World-class academics, as well as state-of-the art facilities, modern workshops and laboratories contribute to the teaching activities. Therefore, PUT graduates are sought after as recognized specialists worldwide.

Because of the illustrious past of our university, we strive to maintain extremely high standards and prospects for future development. Cherishing these traditions we focus on young people whom we know are the future. This encouraging conviction continuously inspires us to work even harder.

A handwritten signature in dark ink, appearing to read 'A. Hamrol'.

The highly qualified people of Poznań with their educational potential make it a very attractive place for the development of all types of knowledge based activities. The city, which ranks as the third largest academic and scientific centre in Poland, has 26 institutions of higher education, providing education for almost 130,000 students. There are also approximately 50 scientific research centres and 18 sections of the Polish Academy of Science, which play an extremely important pro-innovative role. PUT takes a leading role in this notable group, attracting new investments to Poznań.



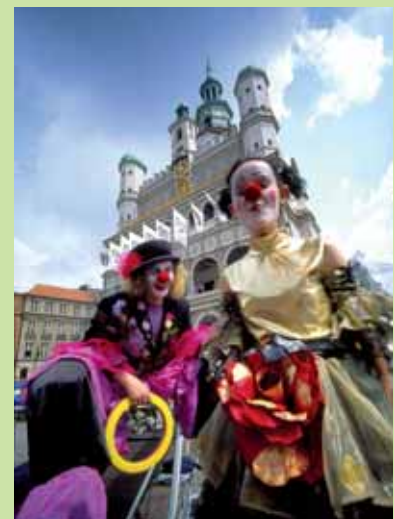
POZNAŃ, A SOCIABLE CITY

Poznań, being a lively and hospitable city, with its population of more than 500,000 offers a unique atmosphere and many attractions to its inhabitants, as well as visitors. Numerous museums, theatres, cinemas and an opera house are always ready to welcome guests, and at the same time, many cultural events take place in the open air. Poznań, which is considered to be the seat of Polish alternative theatre, organises famous Europe-wide international festivals, such as "Malta" and "Maski". The historical Old Town attracts visitors with its bustling pubs and cosy cafés, creating the atmosphere of an old university town nestled among the fascinating medieval buildings.

Enthusiasts of active recreation can also find something interesting to do. A constantly developing sports base and widening opportunities to spend free time outdoors inspire many people to participate in recreational activities. The most popular venue

is the sports complex skirting the picturesque Lake Malta, near the main campus of PUT: the famous rowing racing course, all-year ski slope, toboggan-run, golf course, bicycle and roller blading and skating lanes – these are only a few of its attractions.

Not far from the city's hustle and bustle, one can find peace and quiet in the south where Poznań joins the Wielkopolska National Park. Kórnik – one of the most magnificent aristocratic residences in Poland, with its marvellous





POZNAŃ

DEVELOPING CITY

type in Poland, which cooperates with PUT and the Poznań Supercomputer Network Centre. Another advantage PUT has over other universities in Poznań, is its attractive location. The main campus, situated between the picturesque bank of the River Warta, close to the city centre, and Lake Malta, is an ideal place for students. It provides excellent conditions for them in which to work and relax. It is, in fact, the perfect location where PUT scientists' far reaching vision and Poznań's most ambitious project to date is to be realised, namely the creation of the "Warta Internet Valley".

dendrological park and Rogalin – the largest concentration of monumental oak-trees in Europe, are regularly visited by locals, as well as tourists visiting Poznań.

The convenient location of the city in the geographical centre of Europe along with an up-to-date infrastructure (airport, railways and motorway) make Poznań easily accessible from any location.

PUT, A FRIENDLY UNIVERSITY

In spite of more than a thousand years of history, Poznań is a very young, vibrant city, determined to develop. PUT's

consistent development is one of the factors that makes Poznań's own development possible. The university has already received many awards and been given a very high position in the national university rankings, though our main ambition is to be among the best universities in Europe and the world. Our aspiration is supported by our partners – Volkswagen, GlaxoSmithKline, Philips and many other world – famous companies, whose local offices are situated in the Poznań area. The high level of competence of PUT experts in information technology attracted the Microsoft Innovation Centre to Poznań, the first centre of this





To work and study at such a prestigious university as PUT, one has to effectively combine conceptual impetus, the pragmatism of an engineer, as well as interpersonal skills. Taking all these into consideration and striving for our ideals day by day, we observe the following rules:

WORLD CLASSIC SCIENTIFIC RESEARCH

Our scientists, some of whom are members of the Polish Academy of Science, are leading experts in their areas. Their research is published in prestigious international journals and they often win academic awards.

OPEN-MINDED APPROACH TO SCIENCE

PUT plays an important role in international scientific life: we take an active part in scientific exchange and international projects and cooperate with many companies and research institutions, both in Poland and abroad.

HIGHEST STANDARDS

Students play the most important role in university life, contributing an intrinsic freshness along with new ideas. In providing our students with the highest standards of education, we put great effort in helping them develop an innovative approach to life and work, as well as the competence to be independent thinkers, along with the ability to learn quickly.

STANDARDS

POZNAŃ UNIVERSITY OF TECHNOLOGY

SCIENCE FOR PEOPLE

We do not avoid the world: technological development is accompanied by the greatest respect for human beings, protection of the natural environment and sustainable economic development.

PRACTICAL EXPERIENCE

The tempo of economic life demands continuous education and adaptation to the realities of the global market. For this reason, the university combines the development of the latest scientific disciplines with the transfer of this knowledge



and technology into the practical dimension.

EXTENSIVE EDUCATION

Our main objective in education is the well-rounded growth of our students. A modern engineer is not only a specialist in his/her field, but also aims for social skills and an acquaintance with the cultural heritage, which is a very important part of the educational process.

MODERN METHODS OF ORGANISATION MANAGEMENT


PUT is a huge company whose efficient functioning is guaranteed by accepted high standards of management. A modern model of organisation, flexibility and a focus on continuous improvement make our work exceptionally productive.

ACTIVE ROLE IN SOCIAL LIFE

We are aware of the challenges and demands arising from the exceptional role of PUT in Poznań, in the region and in the whole country. We participate in many projects important for social life and pay great attention to the dialogue between the university and its environment.

CLOSE RELATIONSHIP WITH BUSINESS

Contacts with numerous business partners are an essential part of university life. Our partners' encouragement and advice help us not only to adjust our educational programmes so as to meet the requirements of the market, but primarily to make our position among other universities stronger.



The slogan of PUT
"Technology in
a Positive Climate"
gives you an idea of the
university's great
concern for its students.
Besides providing
students with specialist
knowledge, well
prepared academic staff
are ready to educate
young hearts and minds
in a comprehensive
manner. Students are
not only to become
great employees and
scientists, but also
interesting and rich
personalities.

TECHNOLOGY

IN A POSITIVE CLIMATE

The process of education and the functioning of the university is aimed at creating the best possible conditions for the development of undergraduates. For the majority of them, activities connected with studying at the university become a source of inspiration, helping them realise their ambitions in science, culture and sport. The university also offers a well-organised system of social services: social scholarships, scientific grants and various types of benefits.

EDUCATION AT THE TOP

PUT is following world trends in education and is constantly adjusting its educational curricula to meet the requirements of the market. To relieve their "intellectual hunger", students can choose between 17 fields of study provided by the university. An up-to-date, two-cycle education system, introduced in accordance with the Bologna Process, allows students to freely choose their education pathway. The Master's degree programme in English is thought to be very attractive. An interesting choice of post-graduate courses completes the extensive range of academic subjects.

www.put.poznan.pl/education/msc
www.podyplomowe.put.poznan.pl

An ultra modern multimedia Conference Centre at PUT, well-equipped laboratories, specialist knowledge and, above all, the commitment of students and academic staff facilitate numerous accomplishments in many different fields of science. PUT is well-known world over for its outstanding experts in information technology – both in algorithm writing and the transition of theory into practice. Every year PUT undergraduates are among the best in the most prestigious global contests. The success of PUT architects are worth mentioning too. They often win well-known competitions organised by prestigious architecture journals.

www.osiagniecia.put.poznan.pl

BRIGHT CAREER PROSPECTS

The Training and Career Centre for Students and Graduates works to promote PUT university undergraduates and graduates. The Centre helps students in planning their future careers which gives them a good opportunity to successfully enter the European and world job markets. Students considering starting their own business will have the chance to realise their dreams with the help of the Academic Incubator of Business Skills and Technology Transfer.

www.cpk.put.poznan.pl
www.aip.put.poznan.pl



Graduates are a measure of the value of any university and are its pride and joy. PUT is extremely proud of its graduates as they are well-educated staff, whose successes are the university's success. Many graduates maintain contacts with the Alma Mater long after finishing their education here. It was they, in fact, who founded the PUT Alumni Association and who are in permanent contact with the university, as well as contributing to its development and promotion. A social network of contacts helps students perform the honourable role as PUT ambassadors in Poland and all the world over.

TECHNOLOGY

IN A POSITIVE CLIMATE

EXTRAORDINARY ATMOSPHERE

Apart from lectures and tutorials, undergraduates can choose between many activities provided by more than 30 student research groups. The events they organize are very popular countrywide. A Job Fair organised by the Engineers' Promotion Centre attracts crowds of Poznań students. At the same time, the popular Sumo Robot Contest coordinated by the Control Engineering and Robotics Research Group attracts teams of enthusiasts from all over Poland.

www.sumo.put.poznan.pl

Students can also fulfil their ambitions in many student organisations. The pride of PUT is the "Poligrodzianie" Folk Dance Group, founded more than 30 years ago. The group presents the authentic folklore of the Wielkopolska region on the world stage. The "Cantamus" Male Choir is also widely acclaimed. Among its accomplishments are several hundred concerts, radio and television recordings, as well as many successes in national and international contests. The "Afera" broadcasting station opened and maintained by the students of PUT is also popular with Poznanians.

www.organizacje.put.poznan.pl

www.afera.put.poznan.pl



A young man with dark hair, wearing a blue and red sports shirt, is in a ready position on a blue table tennis table. He is holding a table tennis racket. In the background, another person in a striped shirt is visible, and the scene is set against a bright blue wall.

PUT cares about the physical health of its students. In the University Club of its Academic Sports Union, the largest student organisation, there are more than 30 sports on offer and where almost a thousand students practise sports regularly. Such an attitude has brought many successes at the most important academic sporting events.

www.kulturasport.put.poznan.pl



PUT is open to the world and international cooperation plays an important role in its activities. There are almost 100 bilateral agreements which ensure this cooperation at a teaching, as well as research level with leading European universities.

POLAND EUROPE WORLD

PUT's teaching is enhanced and enriched through lectures and seminars given by some of the most distinguished foreign guest professors in the world, a number of whom are Nobel Prizewinners. PUT is careful in maintaining this balance in international cooperation by inviting scientists and specialists from all over the world. English courses at PUT excite great interest in candidates, not only in Poland, but also abroad. The global character of PUT is also enhanced through organizing international conferences which not only attract Polish participants,

but also many foreign participants.

PUT also extensively takes part in students exchange programmes. For example, the Lifelong Learning Programme/ Erasmus ensures the mobility of PUT's students. Every year the programme provides several hundred people with the opportunity of traveling to any of the countries of the European Union. Through the programme students importantly get to know new people, other cultures and languages, as well as obtaining professional experience in sandwich courses.

- University of Technology, Sydney, Australia
- University of Liege, Belgium
- Belarussian Akademy of Sciences, Belarus
- Federal University of Pernambuco, Brazil
- Chinese Mechanical Engineering Society, Beijing, China
- Charles University, Prague, Czech Republic
- Aalborg University Esbjerg, Denmark
- Centrale Nantes, France
- University of Partas, Greece
- University of Murcia, Spain
- Avans Hogeschool, Breda, Netherlands
- Indian Institute of Technology, Mumbai, India
- University of Waterloo, Canada
- Korea Advanced Institute of Science and Technology, South Korea
- Vilnius Technical University, Lithuania
- University of Hannover, Germany
- University of Porto, Portugal
- Don State Technical University, Russia
- University of Belgrade, Serbia
- Slovak University of Technology, Bratislava, Slovakia
- Kharkiv State Politechnical University, Ukraine
- Pace University, New York, USA
- Technical University of Budapest, Hungary
- Darlington College of Technology, Great Britain
- Institute of Systems Analysis and Computer Science, Roma, Italy



Poznań University of Technology conducts scientifically-didactic exchange with universities and research units worldwide. Here, are some of our partners:

OUR

PARTNERS



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FACULTY OF

Architecture

26

FACULTY OF

Technical Physics

18

FACULTY OF

Civil and
Environmental
Engineering

22

FACULTY OF

Electronics and
Telecommunications

30

FACULTY OF

Machines and
Transportation

28

FACULTY OF

Computing Science
and Management

24

FACULTY OF

Electrical
Engineering

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FACULTY OF

Chemical
Technology

20

FACULTY OF

Mechanical
Engineering and
Management

Architecture

Designing the future, cherishing tradition

Engineer-Artist

A solid engineering knowledge along with an aesthetic sensibility are qualities required from architects. Talent and artistic sensitivity, creativity, a thorough knowledge of the history of art, as well as an awareness of historical and cultural factors seem to be as important as a knowledge of construction techniques and technologies, architectural fittings or the economic and legal problems of the building process. This is why the education provided by PUT's Faculty of Architecture combines different areas of technical knowledge with the humanities and arts.

Broad scope of architectural education

There are more than 100 specialists, who teach and are involved in architectural and urban planning. Master's and Doctoral theses are supervised by leading Polish and foreign architects as well as urban planners. The students' abilities are enhanced through studying and training abroad, outdoor activities, design workshops and symposia attended by foreign students too. The infrastructure of the Faculty is also important – high-tech lecture



Thanks to state-of-the art lecture halls, architectural studios and computer laboratories, as well as teaching at the highest level of excellence, it is possible for the synthesis of technology and aesthetics to come to fruition at the Faculty of Architecture.

halls and architectural studios, as well as computer laboratories.

As a result graduates of the Faculty enjoy the reputation of being excellent specialists, outside Europe.





International Approach

Due to the fact that the contemporary architect is "a citizen of the world" the Faculty is concerned with a creative, international atmosphere, cooperating with numerous academic centres all over Europe. Young architects share their studies and training in prestigious universities, among others, in Germany, Denmark, Belgium, France or Italy. Each year several dozen students graduate with a double diploma from both PUT and BTU Cottbus in Germany, Avans Hogeshool in Holland or Politechnico di Milano in Italy.



Cooperation with institutions

In Poznań there are many buildings that have been designed either by our alumni or university staff members from the Faculty of Architecture. The flagship constructions include: the University Conference Hall, Lawica Airport and the Province Administration Court.

Owing to the cooperation with local government and private investors, undergraduates are provided with the opportunity to participate in many urban architectural and inventory projects, as well as specialist training in design.



Extensive range of career opportunities

Social needs are reflected in a solid education and modern methods of studying. Faculty graduates will have the ability to work in architectural design, supervision and management of the building process, spatial planning, as well as different related popular professions, such as landscape architecture and planting design, interior and industrial design, as well as in designing exhibitions.

www.put.poznan.pl/wa



Civil and Environmental Engineering

Construction life and care for environmental protection

To be a successful civil engineer specialist know-how is necessary. Creativity and knowledge are also indispensable for specialists in environmental engineering, heating design, ventilation, air-conditioning, water supply and sewage systems, all of which have a great significance for protecting nature and, as a consequence, standards of living.

Many possibilities of choice

Civil and environmental engineering constitute an extremely broad spectrum of issues, ranging from building materials, construction mechanics and computer-aided design, geodesy and geotechnics, organization of civil engineering, bridge building, motorways, roads and airports, water and sewage discharge and purification, heat engineering, heating, down



The structures designed and constructed by civil engineers – buildings, roads and bridges should serve for tens and even hundreds of years. This is why they must be designed with special care, attention and imagination.

to air-conditioning and building ventilation.

Undergraduates can choose one of many attractive specializations, whose programmes, based on selected courses, are designed to be flexible and responsive to the needs of young engineers. Also, a practical application of this knowledge plays an ever increasing role in teaching – specialist scientific and teaching laboratories serve this purpose. A unique experimental building, with complete installation and measuring equipment, as well as a pilot sewage-treatment plant are also of great importance in teaching.



Experts in unusual tasks

Cooperation with industry consists, first of all, in solving unusual and difficult engineering problems in the process of designing, diagnostics and structural repair, communication infrastructure and technical fittings of buildings. The organization units of the Faculty cooperate on daily basis with research centres, state and self-governed administration offices and companies offering services in many branches of industry. This cooperation relies, first of all, on carrying out specialist tests using

the Faculty Laboratory as a base analyzing elaborating evaluations and opinions. The general conviction concerning the outstanding competence of the Faculty's academic staff attract the cooperation of the biggest state-owned and private enterprises countrywide.

We are competitive in all conditions

The basis of the development of each country constitutes comprehensive and modern education in all key areas of infrastructure: building houses, motorways, roads, streets, airports

and bridges, modernization of railways, water and heat supply, air, soil and water protection, technical fittings of buildings and modern water-supply and sewage systems, as well as heating and ventilation-air conditioning systems. As a result of this contemporary knowledge, as well as competence in such key areas passed to the graduates of the Faculty they are able to secure attractive employment, both domestically and abroad.

www.put.poznan.pl/wbiis

Mechanical Engineering and Management

Vision of the Future and Engineering Professionalism



Specialists with practical education

The professional education of engineers requires a large number of practicals. Therefore, education at the Faculty of Mechanical Engineering and Management is based to a large extent on laboratory classes. Up – to – date equipment and regularly modernized laboratories with easily available computer facilities, software for modeling and simulation of technological processes, supplement the theoretical knowledge of students with modern and practical know-how. Given this, undergraduates are able to

solve different construction, technological and metrological problems independently, and this constitutes their strong competitiveness on the labour market.

Many attractive specializations in particular fields of studies and a free choice of educational pathways enable undergraduates to achieve their academic potential and develop their interests. Extremely well prepared academic staff, as well as a modern approach to education result in attractive job opportunities, both domestically and abroad.

Managers with a technical education are extremely valuable employees of companies in many branches of industry. To maintain an appropriate level of competitiveness in such fields as materials engineering, different simulation methods, production methods, construction and automation of machines, mechatronics and quality management, dynamic, broad-minded people with specialist qualifications, business knowledge and managerial competence are essential. Undergraduates of the Faculty of Mechanical Engineering and Management are taught directly for this.



Close relationship with Wielkopolska

Cooperation with such prestigious companies, such as Volkswagen, Pratt & Whitney, MAHLE or FAMOT brings considerable advantages to the Faculty and its partners.

As a result of the Diploma, training offered by these firms, the Faculty is very popular with candidates and managers from different partner enterprises who participate in postgraduate studies organized by different institutes. The Faculty cooperates closely with self-governing institutions and scientific associations.



www.put.poznan.pl/wbmiz

International cooperation

Full cooperation with prestigious institutions, e.g. Ecole Centrale de Paris, Russian and Belarusian Academies of Science and numerous universities from Germany, Slovakia, Lithuania, Finland, Romania and Ukraine bear fruits through mutual research projects and intensive scientific exchange programmes. Annually, several dozen undergraduates from the Faculty go to study abroad and visitors from all over the continent, students as well as scientists, reciprocate by coming to Poznań.



Wanted on the labour market

The graduates of the Faculty – skilled, well-educated machine designers, specialists in technology, production systems, welding technology, programming of CNC machines, mechatronics, as well as specialists in production management have no problems in finding employment. These young specialists are employed not only by industrial companies, but also in Research and Development Centres, as well as institutes specializing in different branches of industry.

Electronics and Telecommunications

Fast Flow of Information, Multimedia Transfer

Highest academic standards

The academic curricula of the Faculty of Electronics and Telecommunications meet the standards of the best technical universities in the world. Contemporary fields of study, such as telecommunications systems, information transport networks, digital signal processing, integration of information techniques, computer networks and radio communication systems, are very attractive to undergraduates. Tutorials in English have also

proved to be a great success and the number of hours (both lectures and tutorials) has been increasing steadily. The faculty is involved in international cooperation and constantly broadens its offer of international exchange programmes. Those undergraduates of the faculty who want to study abroad for a specified period can choose between a great number of universities in 11 European countries. Moreover the best students take part in different research projects.

In an age of globalisation and knowledge-based economies, electronics and telecommunications are among the few extremely important scientific fields. The fast flow of information plays a leading role in the activities of modern companies. For this reason, computer networks and the integration of computing techniques are vital for many firms and research institutions. Multimedia techniques have also become very important. Experts in these fields are in great demand, and are employed by all types of modern firms and companies working in telecommunications, electronics and computer science worldwide.





World class scientific research – international project

The Faculty of Electronics and Telecommunications cooperates intensively with research institutions. Such cooperation helps complete numerous European and world projects. Together with the best European universities and representatives of all major telecommunications companies (Siemens, Nokia, Ericsson, Lucent Technologies, Motorola, Samsung, Qualcomm, Philips), faculty staff participate in developing the universal radio communication system of the fourth generation

(WINNER). They also play an active role in many projects, such as creating a network of perfection (NEWCOME), a transmitting-receiving component of the URANUS universal radio system and many other research and development activities. Telecommunications synchronisation system devices are widely acclaimed. For instance, our cooperation with the telecommunications industry develops multimedia projects with the ADB group, as well as the Polish state TV company "Telewizja Polska". Faculty academic staff take part in creating international

multimedia standards and their introduction in Poland (e.g. MPEG and JVT).

International cooperation

Numerous contacts with research institutions and major companies worldwide, as well as the esteem for the Faculty of Electronics and Telecommunications, both in Poland and abroad, encourages the faculty to organise national and international conferences, workshops and prestigious academic symposia.

www.put.poznan.pl/weit



FACULTY OF

Electrical Engineering

Novelty in Every Inch



Precise specialisation and wide application range

Undergraduates of the Faculty of Electrical Engineering have a marvellous opportunity to study the design, construction and utilization of both the huge equipment used in electric power engineering and small devices used in microelectronics. All types of these devices are widely used in all sectors of the economy: automatic control, robotics, mechanics, information technology, multimedia, image technology, electrical engineering, car electronics, lighting devices and electric power engineering. The flexible curriculum of studies is enhanced by lectures on marketing, management and

economics. The faculty cooperates with academic institutions in many different countries the world over (e.g. Great Britain, Belgium, France, Finland, Ireland, Canada, Germany, Sweden and USA). As a result, our students have the opportunity to do part of their university course in partner universities abroad, and students from many European countries come to study in Poznań.

Optimum conditions for studies

Well-equipped laboratories and computer labs allow students to complete difficult tasks and create their own applications. Up-to-date electronic measuring and checking apparatus, oscilloscopes, video cameras and optical systems,



Electricity is invariably associated with civilisation and modernity. It would be almost impossible to imagine a present day firm, a household or a school functioning without electricity and automatic appliances. The design, production and supervision of automatic devices and machines, electrical and computer systems are extremely important in all spheres of everyday life. Transistors, computers, mobile phones, electric motors, high-voltage networks and power plants – all of these constitute the teaching and research interests at the Faculty of Electrical Engineering.



photometers, ultrasound sensor systems, robots, automatic alarms, spectrum analysers, machinery diagnostic systems – these pieces of equipment (to name only a few) used in the class with the assistance of distinguished academic staff provide students with the optimum means of learning.

Full cooperation with business and industry

Many years of experience and world-class scientific research conducted by the Faculty have facilitated our cooperation with many companies, such as: Siemens AG (Munich), Elektrolit Ltd. (Oulu), Motorola S.A.S. (Paris), OTIS Elevator Company Farmington (USA), Philips Lighting Poland S.A.,

Volkswagen AG Gorzów, Polskie Sieci Elektroenergetyczne S.A., and the ENEA Electric Energy Group. Cooperation agreements help the Faculty find a part of the financial resources needed to acquire new equipment and provide undergraduates with attractive placement opportunities. As a result, Faculty graduates are considered experts who can adapt quickly to changing conditions without difficulty. They are in great demand and are employed by small businesses, large industrial companies, project and design firms, laboratories and research institutions, where all types of modern electrical equipment, electronic and computer systems are used.

Technical Physics

Futuristic visions in reality



Comprehensive knowledge of the world

The starting point for studying physics is an interest in seeking the reasons for the observed phenomena in nature, independently of the scale. Whether it be astronomic objects or the manipulation of single atoms or ions, undergraduates at the Faculty of Technical Physics can fulfill their desire to know the principles governing and underlying the world.

Attractive specializations and modern educational lecture halls equipped with the best audio-visual facilities mean a high level of education. The foundations of the Faculty's success are superbly equipped research laboratories for scientists, as well as for students, equal to those in the best

High-tech could not exist without advanced physics. The term Nanotechnologies – nano-robots, quantum computers, molecular bioelectronics – did not exist some years ago, but only existed in the literature of science-fiction. Nowadays, thanks to the physicists, fiction is becoming reality. Moreover, their knowledge and analytical skills are appreciated in many very different fields, such as risk management in banks, forecasting of share price indices, as well as medicine.

European research centres.

Gaining the underlying knowledge of the world at the Technical Physics Faculty not only means scientific research. Undergraduates also visit those German universities taking part in the Socrates – Erasmus programme. Moreover, outstanding students can be offered a semester training abroad at these universities or in the research centres which cooperate with the Faculty.

Analysis + synthesis = employment

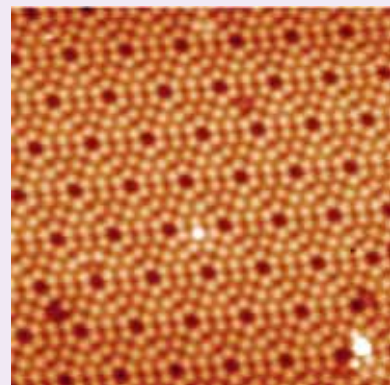
Education gives the graduates of the Faculty the opportunity to gain employment connected with the use of new materials or high tech, especially, in microelectronics, optoelectronics, quantum engineering and metrology, biotechnology,





as well as nanotechnology. Graduates are wanted by those companies working in software and computer development, environmental preservation, modern techniques in medical diagnoses, as well as the design and use of research apparatus. The knowledge of physics and mathematics, accompanied by the ability to create computer programs, as well as simulation programs, is extremely valuable

in many specialist companies and research laboratories, where there is a need to be active, as well as logical in thinking. High analytical competence and the ability to synthesize events arising from many circumstances, mean that graduates may be employed in banks or insurance companies, as well as in IT systems connected with the forecasting of technological and economic processes.



Knowledge transfer – physics for everybody

Within the Faculty, a four-semester Teacher Training Course is also provided. It comprises, among others, teaching methods, psychological, teaching and voice emission issues, which not only “enrich the brains” of the Faculty students, but also prepares them for the teaching profession which results in greater opportunities of finding a job.

www.put.poznan.pl/wft

Computer Science and Management

High-technology, Engineering, Business

Currently, the progress of civilization and industrial societies is largely based on the future development of computer science. At the same time, due to the growing importance of the service sector in the economy, a knowledge of economic law, as well as solid preparation for working in the business environment, particularly in combination with engineering in a broad sense, are acquiring significance. At the Faculty of Computer Science and Management these two fields of studies have been combined into an interdisciplinary unit which prepares students to successfully deal with the challenges of a knowledge – based society.

Broad Scope of Research

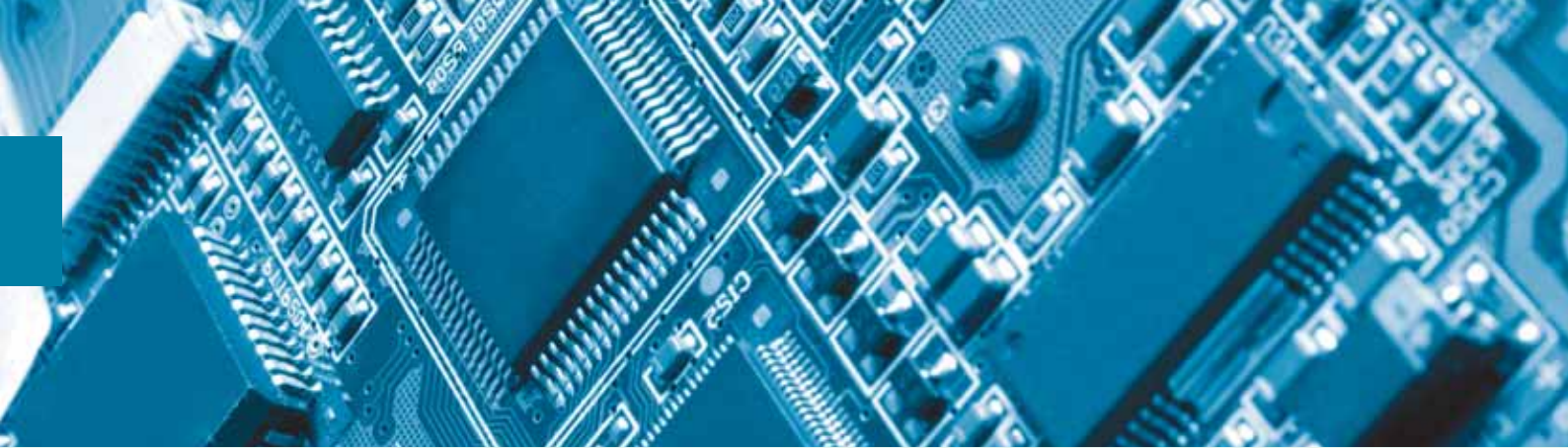
Many scientific and business partner institutions of the Faculty focus their interest on research and teaching activities. They include, among others, such academic disciplines as: operational research and artificial intelligence, decision support systems, algorithm theories, control programming systems and robotics, electronic and signal processing systems, microcomputer control systems,



computer system design, production organization, logistics, management and production engineering, ergonomics and pro – quality systems, as well as information system management. Knowledge acquired in state-of-the art facilities and in more than 20 student laboratories, results in excellent prospects of employment for computer science graduates. They apply their studies by working in the IT industry e.g., constructing and programming robots, designing information networks for international corporations, or dealing with the introduction of quality management systems, logistics, as well as the ergonomic fundamentals of work organization.

The Best

PUT's Faculty of Computer Science and Management is extremely successful, both in Poland and abroad. Its teaching and research staff have been given many of the highest Polish and international awards: two Polish Nobel Prizes awarded by the Polish Science Foundation, seven honorary doctorates from other European universities, awards from the Polish Academy of Science, and such prestigious associations as EURO and IEA, as



well as many different honorary mentions, demonstrate the highest quality research carried out at the Faculty making it a world – class faculty. Undergraduates win awards as frequently as the academic staff; each year they are the winners of the “IMAGINE CUP” – the largest international student competition in technology organized by “Microsoft” in Washington, as well as the design contest called “CSIDC” or Paneuropean “GRID CONTEST”

– to mention just a few. This demonstrates the highest level of competence of the Computer Science Faculty students.

Student – business person – professional

Because of the outstanding achievements, as well as the emphasis placed on the practical use of the knowledge acquired during studies, Faculty graduates are in great

demand by employers. Most undergraduates make direct use of their professional know-how in their own companies and the best are offered employment in multinational corporations. In fact, PUT graduates are in the definite majority among Polish employees of the Microsoft head office in Redmond (research campus in the USA).

www.put.poznan.pl/wiiz



Machines and Transportation

Practice, Effectiveness and Optimization



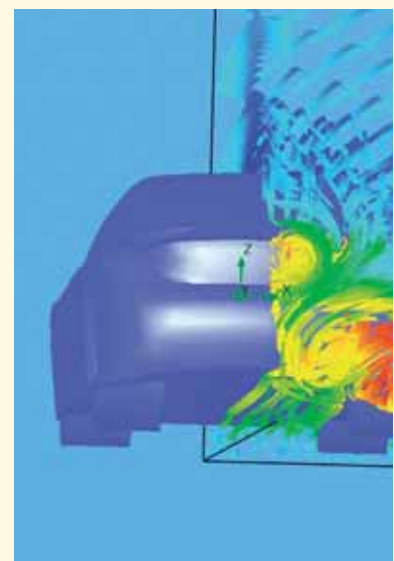
Modern means of transport and optimally planned logistics are as important for company effectiveness as the latest equipment. Studies at the Faculty of Working Machines and Transportation provide students with knowledge in both fields. For this reason, after graduating, they become experts in demand and are therefore employed by many different firms.

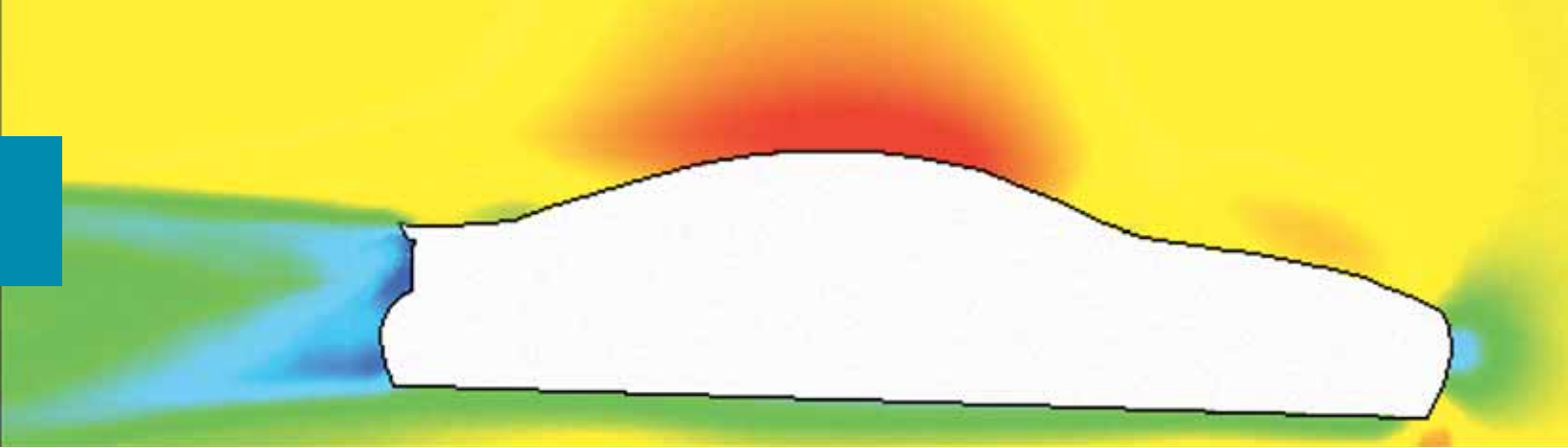
Unlimited knowledge of Machines and Transportation

The Faculty of Working Machines and Transportation provides students with the choice of two fields of study: mechanical engineering and transportation. The first deals with professional plans, design and functional

Appropriate infrastructure and up-to-date machinery make up one of two elements necessary for any contemporary day industrial and technological company to achieve success. The second element is the speed with which produced goods can be delivered to consumers.

analysis of all types of machines with the help of modelling and simulation research. Faculty academic staff not only take an interest in motor vehicles, tractors and trains, but also in machines and apparatus used in agricultural production and food processing. At the same time, education and research focusses on machines and devices used to produce thermal energy and convert it into other types of energy. As one could guess from the name, the educational process of the second field of study focuses on transportation logistics, road and food transportation.





Practical education

Education at the Faculty of Working Machines and Transportation is very effective, thanks to modern laboratories, fully equipped with specialist apparatus, tools and programs developed by leading firms in the field. A professional car service station, which is situated in the campus, is available for students to combine theory with practical knowledge. The Faculty of Working Machines and Transportation is well known for its practical approach to solving all types of technical problems in mechanics, materials engineering and transportation. This is demonstrated during a popular International Summer School which provides teams of students from Poznań and international schools with an opportunity to work together solving concrete

engineering problems typical for the everyday work of firms in the Wielkopolska region. Virtual Engineering Workshops, which demonstrate the huge potential of this modern hi-tech field of knowledge, are also popular with students.

Open to the world

International cooperation and training in research institutions abroad (e.g. in the Netherlands and Sweden) allowed the faculty staff to take part in the 6th European Union Framework Research Programme. Concurrently, students are glad to have the opportunity to do part of their university course in partner universities in Portugal, Italy, Germany, Denmark and Finland.



Chemical Technology

Improvement of the Quality of Life, Technology of the Newest Generation

Nowadays it is hard to imagine a comfortable life without the achievements of chemical technology. Clothes, automotive vehicles, home appliances and furniture, food, medicine – these are only some of the numerous examples of the accomplishments of modern chemistry which have become an absolute necessity for the everyday life of millions of people worldwide. Graduates of the Faculty of Chemical Technology are experts in their field, highly educated and prepared for work in today's industry.

Research of the newest generation

The process of education and research at the Faculty of Chemical Technology covers a wide range of issues. Besides traditional fields of chemistry, such as organic and inorganic chemistry, physical and analytical chemistry, the scientific interests of the academic staff focus on problems essential to contemporary industry. Their involvement in research into biodegradation new polymer composites, biomaterial technology, nano-materials, and new solutions for electrochemical technology reveals a modern approach to research.

Modern education

Our students acquire practical engineering skills and learn to solve technological problems creatively thanks to a flexible educational pathway. The studies available to students, are: chemical technology, environmental protection and chemical process engineering. Our students acquire knowledge on subjects essential for the contemporary economy, such as chemical process engineering, environmental protection technology and monitoring. Well-equipped lecture halls and laboratories increase the Faculty's attractiveness to potential

students. The high quality of lectures and tuition, as well as a practical approach to the results of research make our graduates genuine experts in demand. The Faculty graduates' high education in technological research, modernisation and their creation of concepts of technological processes (such as nature-friendly technology, industrial safety and pollution control) opens up many career opportunities: they can set up their own business or be employed by chemical industry companies, firms developing and producing modern materials and other chemistry related enterprises.





Chemistry demands team work

Today chemists cooperate with experts in many fields of science. The Faculty of Chemical Technology organises world class conferences and congresses which attract outstanding scientists, as well as major Polish companies working in all areas of the chemical industry. Among the faculty business partners are GlaxoSmithKline, Zakłady Chemiczne Lubon, Vitrosilicon Ciech and many other enterprises. As a result of cooperation agreements, our students have attractive placement opportunities and the companies can use the results of research conducted by the Faculty.

International chemistry

The Faculty of Chemical Technology takes an active part in international academic life. Academic staff regularly publish papers in Polish and foreign journals and travel as visiting professors around the world. A large number of our undergraduates take part in the Socrates-Erasmus international exchange programme and go abroad to do part of their university course in other countries in Europe.



An aerial photograph of the Poznań University of Technology campus. The image shows a large green field with a winding river (Odra) flowing through it. A bridge crosses the river in the foreground. In the background, there are various university buildings, including a large modern building with a curved facade. The city of Poznań is visible in the distance under a clear blue sky.

POZNAŃ

UNIVERSITY OF TECHNOLOGY

EVERY DAY HIGHER AND HIGHER



Information about Faculties and Interfaculty units

Faculty of Architecture

Institute of Architecture and Physical Planning
Chair of Drawing, Painting, Sculpture and Visual Arts
Chair of Public Architecture and Housing

60-965 Poznań, ul. Nieszawska 13C
tel. +48 61 665 32 55; fax + 48 61 665 33 00

www.put.poznan.pl/wa

Faculty of Civil and Environmental Engineering

Institute of Structural Engineering
Institute of Civil Engineering
Institute of Environmental Engineering

60-965 Poznań, ul. Piotrowo 5
tel. +48 61 665 24 13; fax +48 61 665 24 44

www.put.poznan.pl/wbiis

Faculty of Mechanical Engineering and Management

Institute of Applied Mechanics
Institute of Mechanical Technology
Institute of Materials Science and Engineering
Institute of Materials Technology

60-965 Poznań, ul. Piotrowo 3
tel. +48 61 665 23 60; fax +48 61 665 23 63

www.put.poznan.pl/wbmiz

Faculty of Electrical Engineering

Institute of Electric Power Engineering
Institute of Electrical Engineering and Electronics
Institute of Control and Information Engineering
Institute of Mathematics

60-965 Poznań, ul. Piotrowo 3A
tel. +48 61 665 25 39; fax +48 61 665 25 48

www.put.poznan.pl/we

Faculty of Electronics and Telecommunications

Chair of Wireless Communications
Chair of Communication and Computer Networks
Chair of Telecommunication Systems and Optoelectronics
Chair of Multimedia Telecommunications and Microelectronics

60-965 Poznań, ul. Piotrowo 3A
tel. +48 61 665 22 93; fax +48 61 665 25 72

www.put.poznan.pl/weit

Faculty of Technical Physics

Institute of Physics
Chair of Quantum Engineering and Metrology
Chair of Optical Spectroscopy

60-965 Poznań, ul. Nieszawska 13A,
tel. +48 61 665 32 00; fax +48 61 665 32 01

www.put.poznan.pl/wft



Faculty of Computing Science and Management

Institute of Computing Science

Institute of Management Engineering

Chair of Control and Systems Engineering

Chair of Computer Engineering

60-965 Poznań, ul. Strzelecka 11

tel. +48 61 665 34 20; fax +48 61 665 34 21

www.put.poznan.pl/wiiz

Faculty of Machines and Transportation

Institute of Machines and Motor Vehicles

Institute of Combustion Engines and Transport

Chair of Thermal Engineering

Chair of Basics of Machine Design

60-965 Poznań, ul. Piotrowo 3

tel. +48 61 665 23 55; fax +48 61 665 24 02

www.put.poznan.pl/wmrit

Faculty of Chemical Technology

Institute of Chemistry and Technical

Electrochemistry

Institute of Chemical Technology and Engineering

60-965 Poznań, ul. Piotrowo 3

tel. +48 61 665 23 52; fax +48 61 665 28 52

www.put.poznan.pl/wtch

INTER-FACULTY UNITS

Department of Foreign Languages

60-965 Poznań, ul. Piotrowo 3A

tel. +48 61 665 24 91; faks +48 61 665 27 93

www.dfl.put.poznan.pl

Department of Physical Training and Sport

60-965 Poznań, ul. Jana Pawła II 28

Dom Studencki 1

tel. + 48 61 665 25 17; fax + 48 61 665 25 17

www.swfis.put.poznan.pl

OTHER UNITS

Main Library

60-965 Poznań, pl. Marii Skłodowskiej-Curie 5

tel. + 48 61 665 35 19; fax + 48 61 665 36 15

www.ml.put.poznan.pl

Training and Career Centre for Students and Graduates

60-965 Poznań, ul. Jana Pawła II 28, DS 1

tel. + 48 61 665 20 10; fax + 48 61 665 27 70

www.cpk.put.poznan.pl

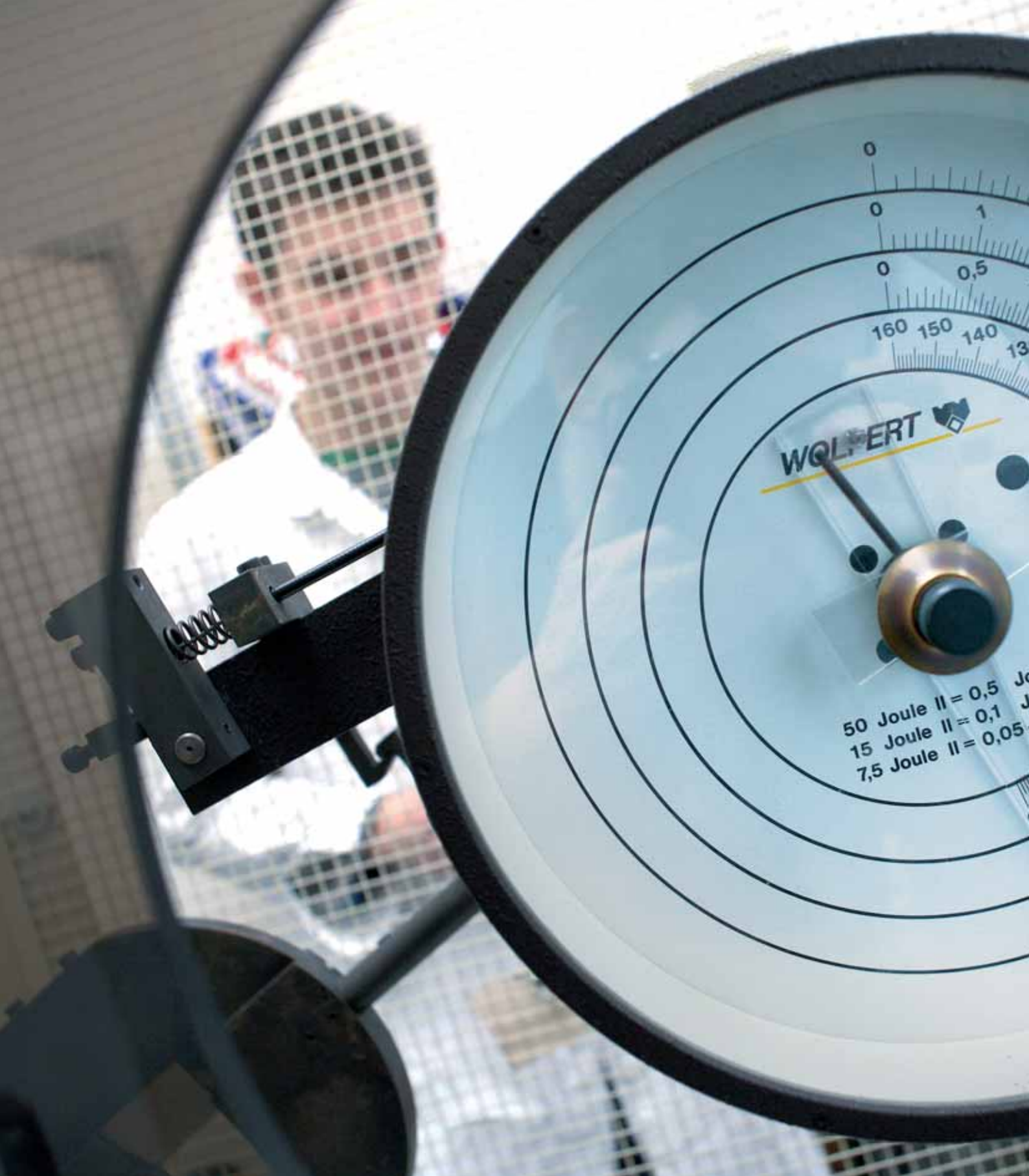
RECRUITMENT

Office of Education

60-965 Poznań, pl. Marii Skłodowskiej-Curie 5

tel. + 48 61 665 36 40; fax + 48 61 665 37 50

www.put.poznan.pl/rekrutacja



WOLPERT

50 Joule $\eta = 0,5$
15 Joule $\eta = 0,1$
7,5 Joule $\eta = 0,05$

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POZNAN UNIVERSITY OF TECHNOLOGY
