





European dimension of Polish higher education

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Rector of Lodz University of Technology



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Structure of the presentation

- 1. A few words about myself
- 2. Higher education sector in Poland
- 3. Erasmus Mundus Programme
- 4. A few facts about Lodz
- 5. TUL overview





About myself:

Academic functions:



- Rector of Lodz University of Technology- 2008 until now,
- Vice-Rector for Science and Development of Technical University of Lodz,
- -Dean of the Faculty of Food Chemistry and Biotechnology,
- -Member of the Senate of Technical University of Lodz,
- -Director of the Institute of Technical Biochemistry,
- -Vice-Dean for science of the Faculty of Food Chemistry and Biotechnology,
- -Vice-director for scientific research of the Institute of Technical Biochemistry

Academic interests:

- biopolymers of the yeast cell,
- application of the microbial lytic enzymes for depolymerization of the cell wall of different live microorganisms,
- biocatalysis, industrial biotechnology, molecular engineering of biocatalysts,
- biocatalysis in noncoventional environments, enzymatic synthesis of oligosaccharides and biopolymers with emphasis on microbial cellulose





Higher education sector in Poland

It is one of the most quickly developing sectors in our country. In the last 20 years it underwent rapid qualitative and institutional changes.

Polish higher education in numbers:

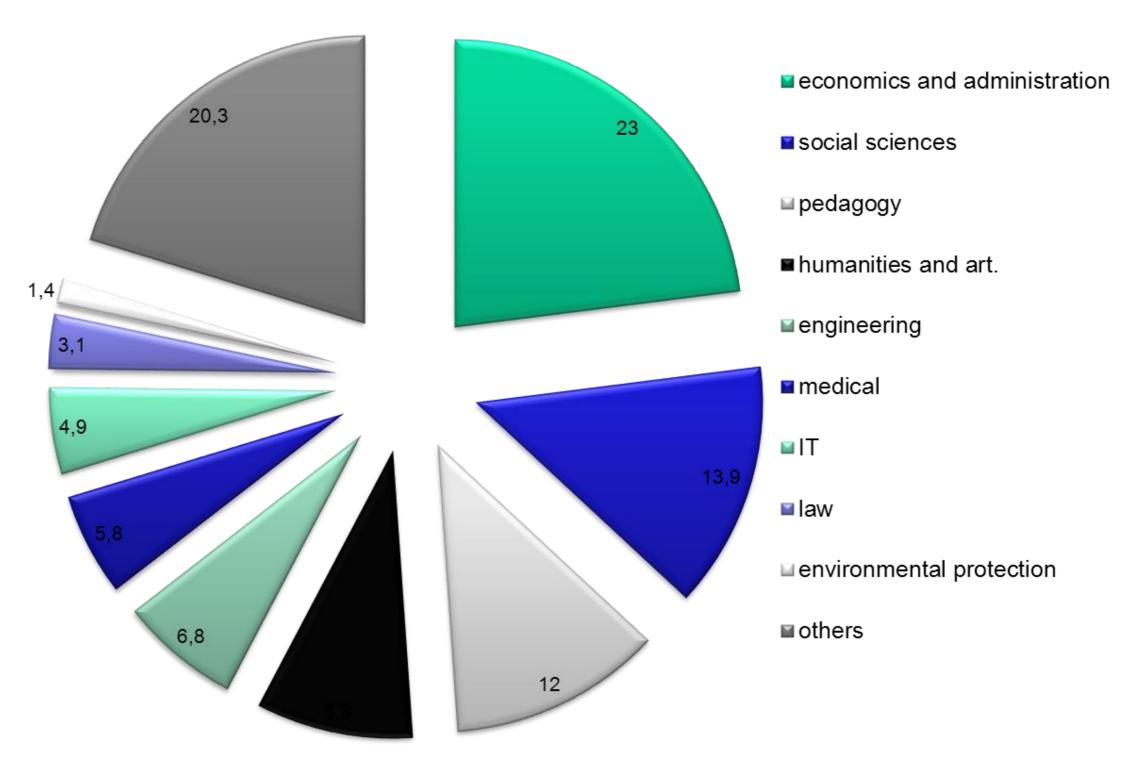
- Academic year 1992/1993- the number of Higher Education Institutions (HEIs): 124 (106 public and 18 private), number of students: 495 729
- Academic year 2010/2011- the number of HEIs- 470 (132 public and 338 private), number of students: 1 841 251

Academic offer includes more than 200 fields of studies, including the unique ones and macro faculties.



The most popular fields of study

Lodz University of Technology







Higher education sector in Poland

Gross enrolment ration increased from 12.9% in the academic year 1990/1991 to 53.8 % in the academic year 2010/2011.

Public HEIs offer mainly full times studies (67.5% students), private HEIs mainly part time studies (83.1%). Numerous public universities offer only first-cycle studies.

The number of foreign students in Polish higher schools is increasing. In the 2010/2011 academic year their number amounted to 21.5 thousand, i.e. 1.2% of all students.

The most numerous were students from Europe – 15.6 thousand persons in total, majority of whom came from Ukraine, Belarus, Norway and Sweden.

In 2010 there were 807.5 thousand students learning modern foreign languages in obligatory courses (i.e. 44.4% of all students – excluding foreigners).



Map of investements in science and higher education



City	Number of construction projects	Projects (in PLN)
Wrocław	68	1 950 429 463.26
Warszawa	137	1 581 276 620.54
Kraków	72	1 234 965 287.06
Łódź	29	1 005 686 544.54
Gdańsk	27	707 935 772.47
Bydgoszcz	16	129 647 349.97

Source: http://www.nauka.gov.pl/ministerstwo/inwestycje-w-obszarze-nauki-i-szkolnictwa-wyzszego/



Examples on internationalization

 Erasmus Mundus is a cooperation and mobility programme in the field of higher education financed by the European Union (European Comission)

General aims

- It contributes to:
- the development of human resources, including non-European students
- -the strengthening of cooperation between Europe and other countries.



How to benefit?



Conclusion- a perfect possibility for the best students

Erasmus Mundus studies (action 1)

- Offered by a consortium of European
- your University can be a partner
- at master or doctoral level,

Erasmus Mundus exchanges (action2)

- periods of mobility in partner institutions, and non-European Universities

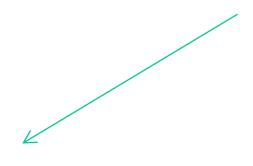
Very prestigious, Mobility is obligatory, A graduate gets at least two degrees.

NO NEED TO WORRY ABOUT MONEY IF AWARDED A GRANT!





The Erasmus Mundus programme provides support to:



higher education institutions that wish to implement joint programmes at postgraduate level (Action 1) or to set-up interinstitutional cooperation partnerships between universities from Europe and targeted Third-Countries (Action 2);

individual students, researchers and university staff who wish to spend a study / research / teaching period in joint programmes or cooperation partnerships (Action 1 and Action 2).

* Since the academic year 2012/2013 TUL is a partner in two Erasmus Mundus projects (action 2). We will welcome students and researchers from the countries of South America and North Africa.



Autonomy of HEIs

Polish HEIs fully implement the Bologna strategy.

Law on Higher Education provides HEIs with a possibility to define their study programmes on their own, in accordance with the National Qualifications Framework and in cooperation with business representatives, which helps to increase students' employability.

- -Every study programme in a Polish HEI must be described in terms of learning outcomes, each course unit must also include learning outcomes.
- -ECTS is widely used, all credits are fully recognized,
- -HEIs can issue their own diplomas which do not belong any longer to the state.

All the the above-mentioned factors facilitate mobility and cooperation.









- Poland is in EU since 2004
- Population of the country equals38 million people.
- TUL is located in Lodz, one of the biggest cities





WARSAW

LODZ

Lodz University of Technolog

A few facts about Lodz



Lodz has 742thousand citizens

Lodz in Numpers

The city was established in 1423

Lodz developed as a town of textile industry Lodz is a Polish Academic Centre with 6 public Universities

How can I spend my free time in Lodz?

Lodz is the city of festivals (Design, Film, Fashion)

Lodz Airport has connections with main European cities (e.g. London, Edinburgh or Milan)



Why is Lodz special?

- Cost of a dormitory is around 90 euro per month
- The price of a beer in a pub is 2 euro
- Overall cost of living in Lodz equals around 300 euro





TUL is the University where

Lodz University of Technology

the East meets the West!

"Innovative technological research centre with strong international position"





Lodz University of Technology (TUL) is the leading centre of education and research in Poland which has become one of the most recognized landmarks of the Lodz region and even the whole country.



Lodz University of Technology is the only state university in the region providing high level technical education and professional technology transfer.



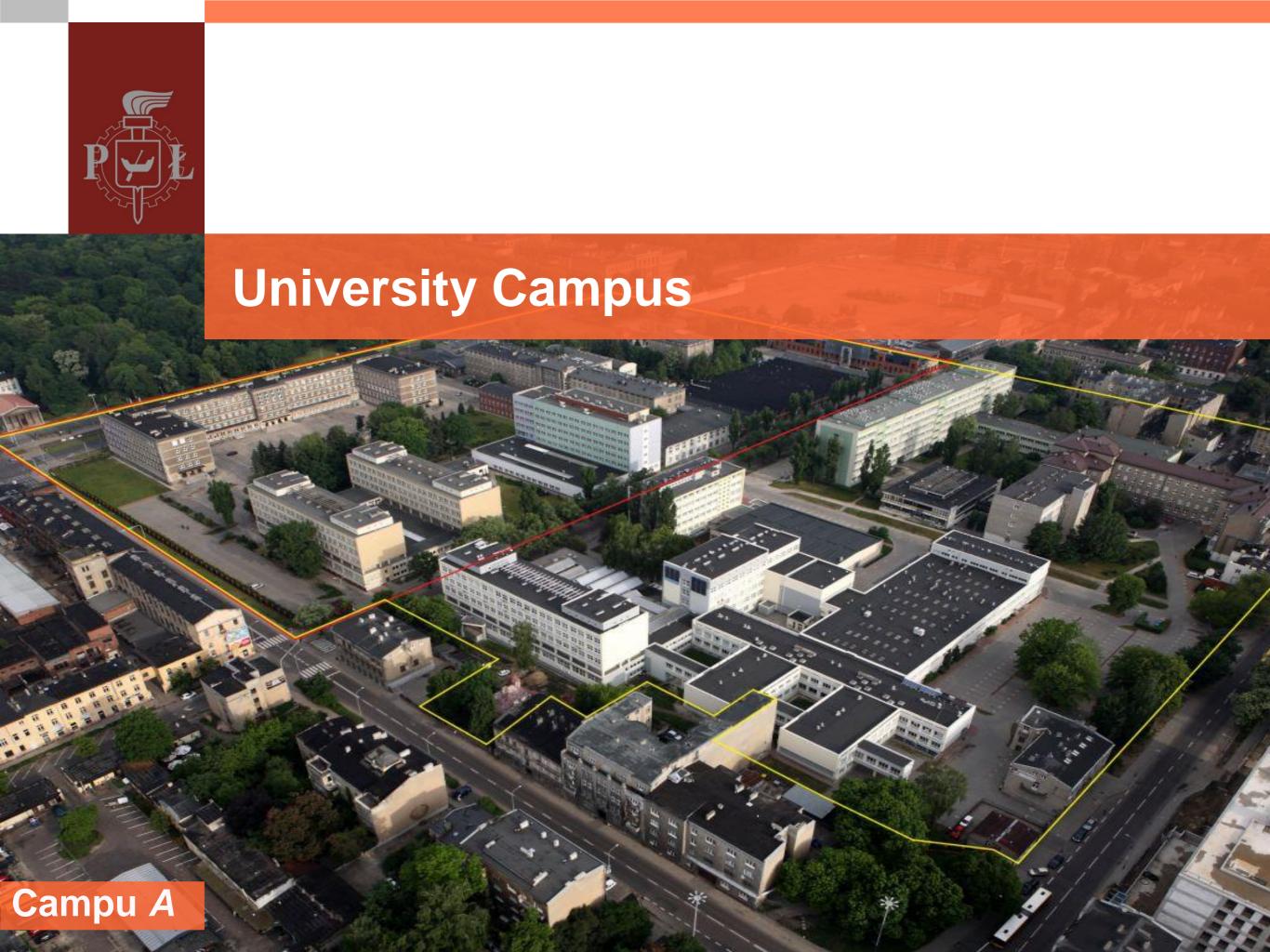


■ 67 years ago...

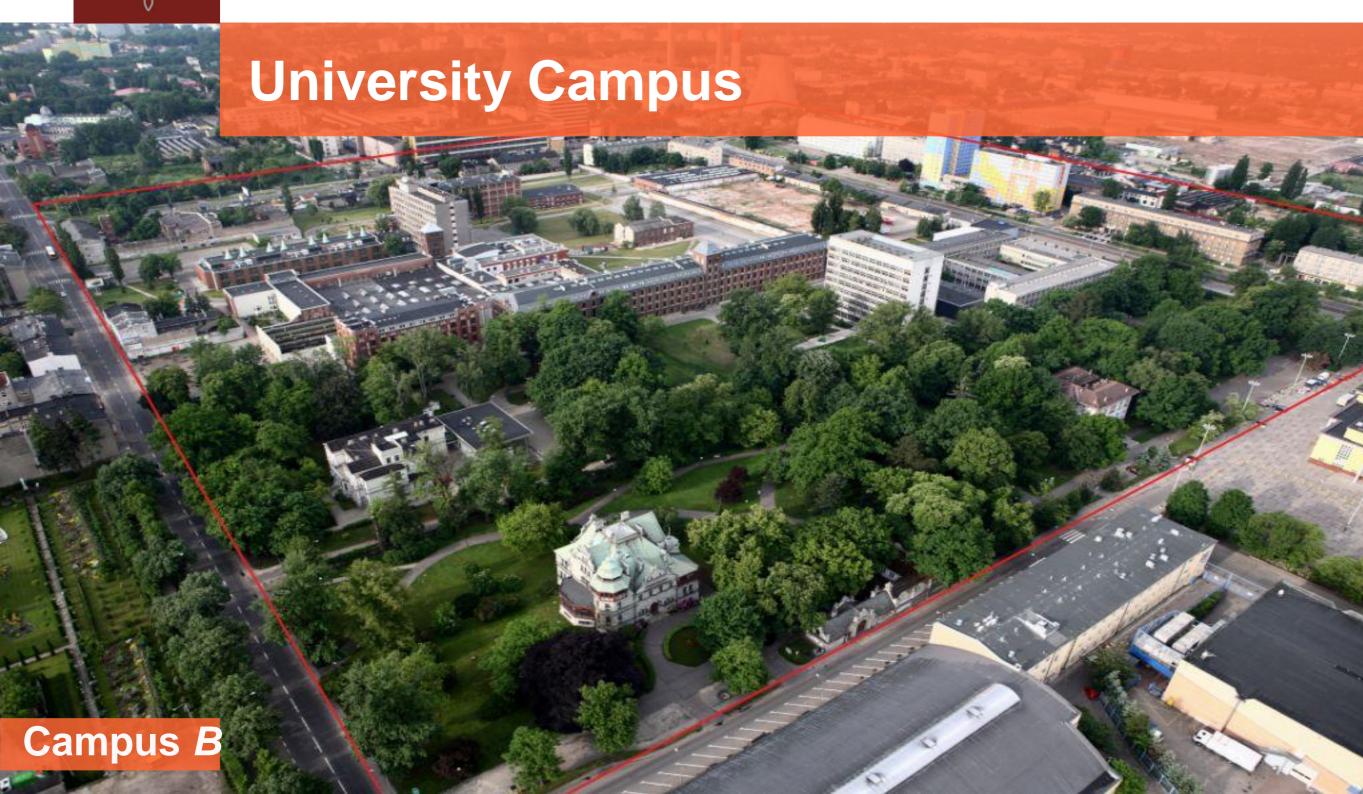
- 525 students
- 3 faculties
- 33 departments

... and today

- over 21 500 students
- 667 PhD students
- over 1 500 academic staff
- 9 faculties
- 37 fields of study/ 13 fields of studies in English and French
- Children University of Lodz/ Secondary School/ University of the Silver Age





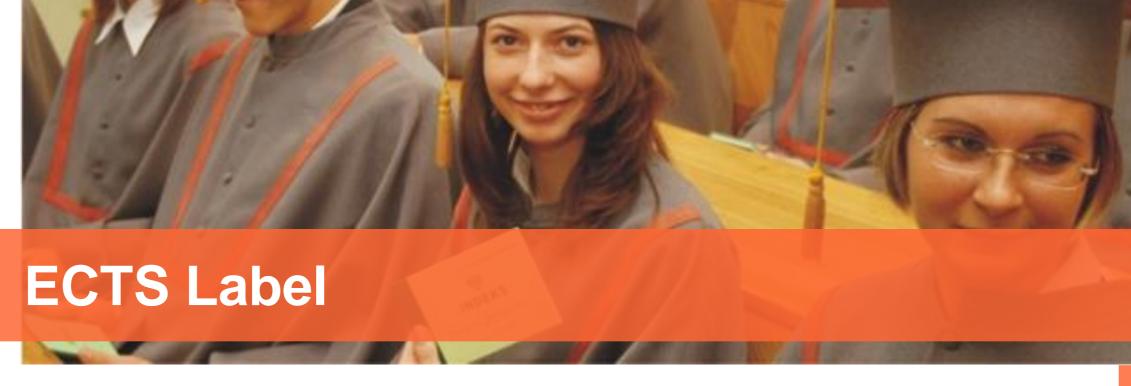




Rector's office is situated in the villa intially belonged to Reinhold Richter, a factory owner of middling wealth.







TUL has been awarded the **ECTS Label** by the European Commission. TUL was the first heigher education institution in Poland and one of 22 in the whole Europe which received this prestigious certificate. ECTS Label acknowledges introduction of the standards that ensure good quality of studies and international exchange.



ECTS Label

Awarded by the European Commission
the European Credit Transfer and Accumulation System
To

POLITECHNIKA LODZKA

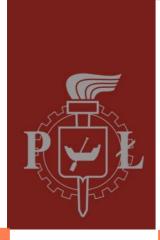
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This year we applied to the European Comission for the Diploma Supplement Label.



Awards/Rankings



- PROStudent University 2011
 awarded by the Student Parliament of Republic of Poland
- Mobility Friendly University
 awarded by the Polish Erasmus National Agency in 2008 for 6 Polish
 Universities
 - Ranked-top

Ranked 4 out of 23 universities of technology in Poland and

8 out of 88 Polish academic institutions (Perspektywy University Ranking 2012)

Innovative

2nd University in Poland regarding the number of approved patents per University staff

The only Polish University member in the **European Consortium of Innovative Universities**



TUL activities on the region and country level - examples-

TUL is one of the organizers of the Lodz Scientific and Technological Park (*Technopark Lodz*) and strongly supports the Regional Technology and Industry Park in Belchatow contributing know-how in the form of innovative technologies.

TECHNOPARK LODZ

TUL together with BKPPT and in cooperation with the branch-Research and Development Center of TP SA work on projects concerning high-tech solutions for people with disabilities.

Regional Technology and Industry Park in Belchatow

TUL together with BKPPT implements project for business activity.



- √ 1000 students/ 300 Erasmus students (France, Spain, Portugal, Turkey, Ukraine, Russia and many others)
- ✓ International teams
- ✓ Combines engineering with management
- ✓ Individual attitude towards every student
- ✓ Window semester
- ✓ Problem Based Learning and European Project Semester classes





International Faculty of Engineering (IFE)

The main objective of the faculty is to educate professional engineers and managers, fluent in foreign languages and able to demonstrate their knowledge in science, engineering, technology and business. Achieving this goal has been confirmed by the employment rate of the IFE graduates, which is one of the highest among the graduates of technical universities in Poland. At present there are over 1000 students at the faculty.

Programmes taught in English and French:

- Architecture Engineering (Bsc)
- Biomedical Engineering (Bsc)
- Biotechnology (Bsc, Msc)
- Business and Technology (Bsc)
- Computer Science (Bsc)
- Information Technology (Bsc, Msc)
- Management (Msc)
- Mechanical Engineering and Applied Computer Science (Bsc)
- Mechatronics (Msc)
- Telecommunications and Computer Science (Bsc)
- Teleinformatics (Msc)
- Science and Technology (Bsc)
- Gestion et Technologie (Bsc in French)





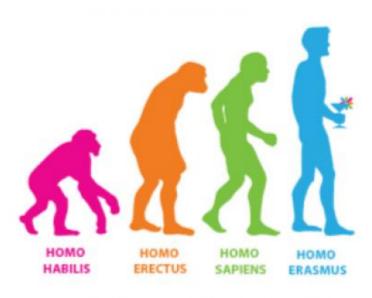


Exchange – Erasmus and Campus Europae

- Balanced mobility (almost equal number of outgoing and incoming students)
- Mobility Week promoting Erasmus
- More than 300 bilateral agreements all over Europe
- Erasmus Promoters at Faculties- making Erasmus more accessible
- Student Assistance Office (SAO)- helps both outgoing and incoming students
- ➤ ESN-EYE got the award-Super Star 2009 in Europe
- The only Polish technical University in the Campus Europae Programme
- All TUL students (regardless of their nationality) can benefit from Erasmus exchanges!

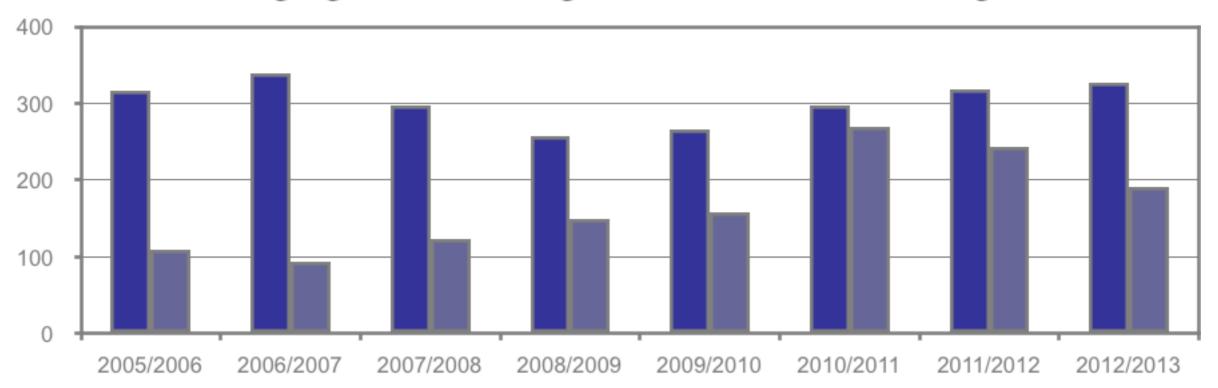






(ex)change your life!

Outging and incoming mobilites Erasmus Program





Technology

Lodz
University
of

□ 华沙大学
□ 亚当·米茨凯维奇大学
□ 弗罗茨瓦夫大学
□ 弗罗茨瓦夫大学
□ 塔但斯克大学
□ 格但斯克大学
□ 西里西亚大学
□ 华沙斯特凡·维辛斯基红衣主教大学
□ 奥尔什丁瓦尔米亚-玛祖尔大学
□ 卢布林玛丽亚•居里夫人大学
□ 奥尔李大学

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罗兹工业大学

罗兹工业大学建于1945年,现有9个学院、79个研究部系、120个专业方向的30个学位课程。罗兹工业大学是波兰最大最好的国立大学之一。大学有2万学生。大学培养从机械工程到管理、从计算机科学到欧洲研究等所有现代工程技术领域需要的工程师。它还提供波兰独有的专业课程,例如生物工艺、纺织工程,造纸及印刷技术等。大学下设一个完全用英语和法语授课的学院,而它对于外国学生而言是再合适不过了。这所学院的主要目的是培养能流

<u>* 管理与技术专业理学学士</u>

- <u> 在机工性气速度子子工</u>
- 信息技术专业理学学士
- · 科字技不专业程字字士
-) 计算机科学专业理学学士
- → 生物医学工程专业商学学·1
-) 直务与技术专业理学学士
- · 电信与计算机科学专业理学学士
- ><u>机械工程与应用计算机科学专业</u> 理学学士



International cooperation

- §Cooperation with **Ukraine**: double diploma agreement between TUL and Karazin Kharkiv National University (BA in Management)
- §11 agreements with Ukrainian Universities
- §Cooperation with **China**: double diploma agreement with Minzu University in Bejing
- § Double diploma agreements with numerous European Universities
- § 26 study tuition-free places for the best foreign students
- §TUL's website in Chinese, Russian, Ukrainian for foreign candidates





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) 管理与技术专业理学学

- · 基班上在专业程字字士
- 信息技术专业理学学士
- 件子依不专业程子子工
-) 计算机科学专业理学学士
-) 牛物医学工程专业理学学士
-) 商务与技术专业理学学士
- 中电信与计算机科学专业理学学士
- 〉<u>机械工程与应用计算机科学专业</u> 理学学士



Internationalization at home

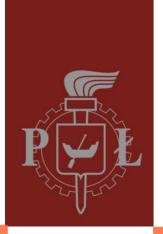
- ✓ Courses in English obligatory for second cycle students (both parttime and full-time) - 60 hours
- ✓ Teachers from abroad- visiting professors and employed at TUL
- ✓ Our teachers teach abroad regularly
- ✓ Lectures are often given by professionals, very often foreigners

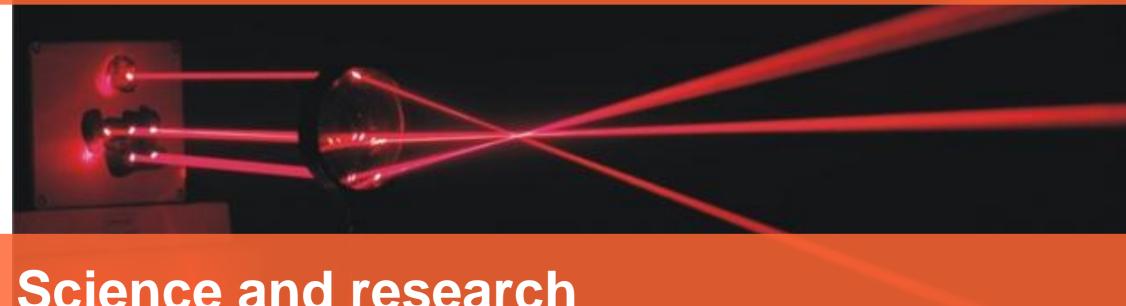




- Students' Government
- International students' organizations
- Students' radio station "Żak"
- Academic Choir and Orchestra
- Students' theatre
- Galleries
- Halls of residence- the same for Polish and foreign students
- Post office, travel agency, bank
- Canteens, pubs and cafes

All foreign students are fully integrated!





Science and research

- TUL collaborates with the largest establishments and concerns from Poland and abroad such as Philips, Dell or Gilette, but It is also willing to cooperate with small and medium firms.
- Our university takes part in the research activities of six Advanced Technologies Centres and it coordinates two of them: CZT BioTechMed and ProHumanoTex.
- The University is proud on many know-hows and licenses sold due to the activity in the area of patents and commercialisation of the research results done by TUL Technology Transfer Unit. TUL as the only Polish representative takes part in pilot project on "Technology Transfer from University to industry" carried by European Patent Office and Polish Patent Office.





- TUL plays a vital role in technological clusters in Lodz.
- We have also **five Centres of Excellence** associated with the faculties of Biotechnology and Food Sciences, Material Technologies and Textile Design, Chemistry, Electrical, Electronic, Computer and Control Engineering.
- TUL runs many international research projects. It also realizes projects within the European Community Framework Programmes, which are the largest European research fund. TUL takes fourth place among Polish technical universities in the 6th and 7th Framework Programme, wihich places it in the lead of Polish scientific research institutions.



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