FACTS AND FIGURES

GDAŃSK UNIVERSITY OF TECHNOLOGY
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OKŁADKA 2
FACTS AND FIGURES
Modern university with imagination and prospects
LOCATION OF THE UNIVERSITY

- Gdańsk – is one of the largest business, economic, cultural and scientific centers. The capital of urban agglomeration of over one million citizens, and of the Pomeranian region inhabited by more than 2.2 million people.

- The most popular symbols of the city are: Neptune Fountain, the gothic St Mary's Basilica, called the crown of Gdańsk, and the medieval port crane on the Motława River. The following great citizens of Gdańsk: Johannes Hevelius, Daniel G. Fahrenheit, Arthur Schopenhauer, Günter Grass and Lech Wałęsa are recognizable around the world.

- Gdańsk captivates not only with the huge number of monuments, both sacral and port, but above all, with its unique atmosphere. It is here that turbulent past blends with modernity.

- August 1980, Strike in the Gdańsk Shipyard, led by Lech Wałęsa, and the rise of Solidarity are some of the events that captured the hearts of millions of people and changed the course of history. Gdańsk is a city of freedom.

- The Tri-City houses 21 universities (13 in Gdańsk). Nearly 95 thousand people are taught here, of which one-third are GUT students.

- Gdańsk University of Technology is located in the center of old Wrzeszcz, a district which has good communication with every part of the Tri-City. A charming lime avenue leads to the university. The whole campus is located on Narutowicza street, and is surely among the most beautiful ones in Poland.
GDAŃSK UNIVERSITY OF TECHNOLOGY CAMPUS

- Within the campus historic architecture coexists with modern buildings full of well-equipped teaching rooms and highly specialized laboratories.

- The symbol of the university is the monumental Main Building, built in the early twentieth century, and designed in Neo-Renaissance style by the renowned Dutch architect, Albert Carsten, later professor of the university. During World War II, 60 percent of the cubic volume and 70 per cent of roofing of the building were burnt down. Only the steel construction remained of the bell tower crowning the building. The buildings were quickly reconstructed, yet the decision to reconstruct the tower was repeatedly delayed in time. Only after 67 years - exactly on 13 May 2012 – the reconstructed tower was placed on the main building.

- Gdañsk University of Technology campus is constantly evolving. In 2013, GUT opened its modern Nanotechnology Centre A. Among equally impressive investments are: Laboratory for Innovative Power Technologies and Renewable Energy Sources Integration LINTE * 2, a complex consisting of Nanotechnology Centre B and the Centre for Mathematics and Distance Education, as well as Immersed Spatial Visualization Laboratory, which is absolutely unique on a global scale.

- Gdañsk University of Technology has a modern student housing estate which has more than 2,660 places in 12 halls of residence located in three attractive parts of the city. The dormitories are located on the outskirts of the Tricity Landscape Park, in the center of Wrzeszcz and near the sea. Students and staff have access to high-class sports facilities at the GUT Center for Academic Sport.
UNIVERSITY PATRONS

- JOHANNES HEVELIUS (28.01.1611-28.01.1687 Gdańsk)

  the most prominent astronomer in Poland, after Nicolaus Copernicus. Constructor of astronomical instruments, the inventor of the pendulum clock, periscope and micrometer, the creator of the world’s first big astronomical observatory equipped with a telescope.

  Hevelius spent most of his life in Gdańsk. On the roofs of his houses he built an observatory, which he developed over the years and equipped with instruments made by himself or according to his instructions. The largest telescope had a length of 39 meters and was set outside the city. Hevelius studied the stars, planets and comets, analyzed the phenomenon of libration of the Moon. He identified 9 new constellations and was first to discover four comets. He successfully measured the height of lunar mountains, and discovered age changes in magnetic declination. He was the author of many works on astronomy. As the first scholar in Poland he was awarded the membership of the Royal Society in London. He received financial support among others from Jan III Sobieski (in honor of whom one of the constellations was called the Shield of Sobieski), and Louis XIV.

  The tomb and epitaph of the great astronomer can be found in St. Catherine’s church in Gdańsk. Hevelius monument was erected in 2006 on the square in front of the Old Town Hall in Gdańsk.

- DANIEL GABRIEL FAHRENHEIT (Gdańsk 05.24.1686-16.09.1736 The Hague)

  physicist and engineer, inventor and creator of a mercury thermometer and his own temperature scale.

  He studied in Gdańsk. After the death of his parents he moved to Amsterdam, where he studied physics, conducted experiments with instruments that measure temperature and pressure, worked as a teacher of chemistry. In the years 1710 and 1712 he was back in Gdańsk, running experiments on the construction of temperature and pressure gauges. He was the first scientist in the world who used mercury in thermometers. He described the phenomenon of supercooling of water, proved the dependence of the boiling point of water on pressure, described the properties of platinum, and, dealing with optics, improved Newton’s telescope.

  He published his study on the new design of the thermometer, barometer and liquid density meter (hydrometer) in the journal of the Royal Society in London. In 1725 he developed a thermometer scale, named after him (32°F = 0°C). Currently, the Fahrenheit scale is used in English-speaking countries.

  Fahrenheit meteorological column was erected in 2008 in Gdańsk, on the Long Market Street, commemorating the eminent physicist. A glass display case contains a 1.2 meters high thermometer with two scales. Fahrenheit and Celsius’, and a barometer to measure air pressure.
On 22 September 2010, following the resolution of the Senate of Gdańsk University of Technology, The South Courtyard (where there is a Foucault pendulum) was named after Johannes Hevelius and the North Courtyard – after Daniel G. Fahrenheit. Reliefs are placed in the courtyards commemorating the illustrious citizens of Gdańsk.
**HISTORY OF GDAŃSK UNIVERSITY OF TECHNOLOGY**

1904
October 6 - the first academic year at the Polytechnic was inaugurated, the Royal-Prussian Technical College in those days

1921
under the Treaty of Versailles Polytechnic was passed to the authorities of the Free City of Gdańsk

1941–1945
The university was subordinated to the authorities of the Reich in Berlin

1945
May 24 the Polytechnic transformed into the Polish state university

1989
obtaining autonomy, 90th anniversary of the university

2004
100th anniversary of the university

2014
110th jubilee anniversary of Gdańsk University of Technology

2020
according to the development mission Gdańsk University of Technology embodies the idea of SMART University

**DID YOU KNOW ...**

Wildlife Society (Lat. Societas Physicae Experimentalis) contributed to the creation of the Polytechnic. It was one of the first scientific societies in Poland. The aim of the Society was to conduct and popularize research in the field of the sciences related to the world of nature. The library of the Society was equipped with priceless works from the collections of well-known families of Gdańsk. In 1923, as a result of an agreement between the Board of the Wildlife Society and the Senate of the Free City of Gdańsk, the 30 thousand volume library was entrusted as a deposit to the university. In 1945, the library, like other collections of the university, was taken to Germany. In 1946 part of the 853 titles were transferred to the State Library - now belonging to the university - in Bremen. In 1993, during an official visit of Gdańsk delegation in Bremen, two books from the same collection were donated to Gdańsk University of Technology. The official transfer of the remaining books took place in June 2000 in the Artus Court in the Gdańsk Old Town.
THEORICA SEQUITVR INSTRV
ex quo hac motum lunae
rietas perspici potest.

LVNAE.

EXPOSITIO INSTRV.

melti & ubi.
UNIVERSITY MISSION

► Ensuring quality education for the dynamic development of economy and society, based on knowledge.

► Conducting research at the highest international level in the conditions of the globalizing world, and the implementation of innovative projects for the benefit of society, ensuring active participation in the transformation of civilization, and science and technology in particular.

► Implementation of the knowledge triangle, which consists of three main integral university activities: research, education, innovation.
UNIVERSITY VISION
2020 – SMART UNIVERSITY

**STRATEGICALLY CONDITIONED**
raising funds for the implementation of strategic tasks, in line with the priorities and projects of the EU, Poland and the region

**MAXIMALLY INNOVATIVE**
implementation of new mechanisms and utilization of new technologies to stimulate the development of innovative solutions both for GUT and for the region

**ATTRACTIVE FOR ALL**
preparation and implementation of LLL education, the use of team design, and e-learning curricula, modernization of teaching and research laboratories and research oriented practice

**DEVELOPING PERSONALITY**
providing conditions for the development of all students, graduate students and staff, especially the best ones, setting them challenging tasks and rewarding the outstanding results

**CREATED WITH PASSION**
gradual elimination of barriers and administrative burdens, the preference of best practice, fostering a culture of work, and the climate for innovation
EDUCATION

- 9 departments:
  - Faculty of Architecture
  - Faculty of Chemistry
  - Faculty of Electronics, Telecommunications and Informatics
  - Faculty of Electrical and Control Engineering
  - Faculty of Applied Physics and Mathematics
  - Faculty of Civil and Environmental Engineering
  - Faculty of Mechanical Engineering
  - Faculty of Ocean Engineering and Ship Technology
  - Faculty of Management and Economics

- 35 fields of undergraduate studies
  and 30 of graduate studies, including:
  - 4 Interdepartmental
  - 2 intercollegiate, unique in the country:
    - mechanical-medical engineering, and construction chemistry
  - 10 in English

- 7 types of post graduate (doctoral) studies
- more than 50 postgraduate studies
- 2 MBA tracks

- 1200 academics
- almost 27 thousand students

More information at:

www.pg.edu.pl/rekrutacja
NUMBER OF STUDENTS IN THE YEARS 1904-2013

STRUCTURE OF STUDIES AND NUMBER OF STUDENTS *

- 01 | Full-time studies 21,581
- 02 | Part-time studies 3,200
- 03 | Postgraduate and MBA 1,306
- 04 | Doctoral studies 675

*2013
NEW MODEL OF EDUCATION - ENGINEER OF THE FUTURE

The university carries out an important project, whose goal is “to create modern technical infrastructure for the implementation of the educational program of Engineer of the Future at Gdańsk University of Technology.” The project, for which the university received a grant of over 67 million zł at the end of 2012, includes not only the modernization of didactic infrastructure and construction of laboratories, but first of all the implementation of a new model of education-oriented development of engineering skills: planning, design, construction, and inference based on performed experiments. Owing to the project 921 research posts will be created. Within the project a 3D Laboratory has already been created, where students of the Faculty of Architecture may, for example, prepare models and spatial forms.
INTERNATIONAL LEVEL OF EDUCATION

Gdańsk University of Technology has an international certificate of quality of education ECTS label, which indicates that the program of education in all fields of study is focused on strengthening the student’s practical competence and the shaping of attitudes that will help him enter the labor market. Gdańsk University of Technology was the second university in the country to receive the ECTS Label. So far, the document has been received by only four universities in Poland.

GUT gains valuable experience by participating in the work of an international consortium CDIO, whose members promote the education of engineers. Basing on the algorithm: ‘Conceive - Design - Implement – Operate’, the project Engineer of the Future, implemented at GUT is consistent with this initiative.
As results from the XI edition of the National Compensation Research, GUT graduates in 2013 got the third-highest salary among graduates of higher education institutions in Poland.
Between 1904 and 2014 over 110 thousands well-educated young people graduated from our university. Among GUT alumni are CEOs of large companies, persons holding high public offices, entrepreneurs, creators of well-known brands, renowned architects. Many of them appreciate education and practical skills gained at the university.

FOR THE REPORT OF STUDIES ON THE CAREER OF GUT GRADUATES *

Are you satisfied that you graduated from Gdańsk University of Technology?

- Yes, rather yes 94%
- No, not really 3%

Has studying at your faculty given you the basic knowledge necessary in your job?

- Yes, rather yes 76%
- No, not really 15%

Do you have a job at present?

- Yes 82%
- No 18%

Is the work undertaken broadly in line with the direction of your education at GUT?

- Yes 81%
- No 19%

*Data from 2011
INTERNATIONAL COOPERATION

Gdańsk University of Technology participates in many international educational programs and develops cooperation with partner institutions. The university currently has more than 420 bilateral agreements under the Erasmus program and nearly 80 cooperation agreements of a general nature. There are also agreements about double diploma programs with Danish, French, German, Swedish and Italian universities.

Participation in the work of national and international networks, such as EUA, CDIO, IROs Forum or BSRUN, helps to exchange experiences in the field of internationalization of universities, international promotion, creation of joint degree programs, intercultural communication, etc.

The university seeks to enhance the professional competence of the academic staff and students through participation in educational projects, such as Erasmus Plus, LLP Erasmus Intensive Programme LLP, Erasmus Mundus, Jean Monnet, CEEPUS, Tempus and Leonardo da Vinci.

BUDGET OF ERASMUS PROGRAMME, SCHOLARSHIP AND TRAINING FUND (EEA/NORWAY GRANTS)
PROGRAMS AND PROJECTS

Between 2004-2013 Gdańsk University of Technology signed 883 contracts for projects in the following categories:
- National research programs - 706 projects
- Structural Funds - 99 projects
- International research projects and framework programs - 78 projects

Only in 2013, the university received funding for 84 projects from the European Union structural funds and national and international research programs for a total amount exceeding 115 million zł.

FUNDING GUT RESEARCH ACTIVITIES
RESEARCH

MATHEMATICS

PHYSICS

CHEMISTRY

BIO-NANO-TECHNOLOGIES

MEDICINE

ELECTRONICS

IT

CONSTRUCTION

ENERGY
COMMERCIALIZATION OF RESEARCH

EXCENTO Company
Commercialization of knowledge is the university's priority. Gdańsk University of Technology is the first university in Poland that has formed a special purpose vehicle EXCENTO, which will allow researchers to smoothly implement research results. Several subsidiaries have already been established with the help of EXCENTO, using technology developed at the university.

Nova PUR Ltd.co
manufacturer of green polyurethane foams

ChillD Ltd. Co
Labels indicating food validity

Argevide
Implementation and selling services within NOR-STA project

Cyber-Eye
System for diagnosing and treatment of patients in coma

CLUSTERS
Our university is a formal partner of six business clusters. Two of them were created on the initiative of the university staff, three others are supposed to be the key ones for the development of the Pomerania region.
Interizon Pomeranian ICT Cluster is the largest and fastest growing ICT cluster in Poland. It currently assembles almost 160 entities from various industries. Detailed analysis of 47 Polish clusters carried out by an international consulting agency - Deloitte Business Consulting SA - showed that Interizon is the most advanced one in Poland in terms of development of clusters. The research was commissioned by Polish Agency for Enterprise Development under the project "Benchmarking of clusters in Poland - 2010". Moreover, the cluster has been awarded the prestigious Bronze Label in the Cluster Management Excellence, and according to the Ministry of Economy is one of the key Polish clusters - the main recipients of support from the EU funds. Cluster The administrator of the cluster is the Faculty of Electronics, Telecommunications and Informatics at GUT.
Gdańsk University of Technology hosts a number of centers in which advanced scientific research is conducted, for the development of smart specialization.

- **Centre of Excellence for Scientific Infrastructure for Manufacturing Applications** – services in the area of technological competence on modern applications manufacturing platform (parallel, distributed, and mobile). The center offers its customers advanced IT infrastructure, platforms, applications, and a catalog of consulting services.

- **Centre of Excellence WiComm** – one of the strongest research and development centers in Poland, specializing in the field of technology of very high frequencies and microwaves used in the most intelligent and embedded systems.

- **Eco-Innovation Center** – the first center in Poland pursuing the idea of ecological cities.

- **IT Center of Academic Computer Network** – acts as the administrator of the Pomerania academic network, and the Center for High Performance Computing. TASK stores computing resources, programs and applications and makes them available to researchers.
- **Centre for Marine Military Technology** – carries out tasks related to issues of national defense and security. In addition to the research, development and implementation the center also deals with repairs and expertise for the Navy.

- **Nanotechnology Centre** – 36 modern teaching and research laboratories, providing unique equipment for studies at the atomic level.

- **Mathematics Teaching and Distance Learning Centre** – the university unit providing education using modern methods and tools of mathematical modeling and visualization of data based on ICT technologies.

- **Centre for Knowledge and Technology Transfer** – carries out tasks related to technology transfer, developing co-operation with the economy, and supports innovation and academic entrepreneurship.

- **Centre for Advanced Technologies 'Pomerania'** – a joint initiative of Gdańsk University of Technology and Gdańsk University. The aim of the center is to support the development of the following domains: information technology and telecommunications, functional materials and nanotechnology, environmental protection, biotechnology, food chemistry, medicinal chemistry. Within the ATC 'Pomerania' there are 10 specialized laboratories, min. Civitronics Center and the Laboratory of Biomaterials.

- **LINTE ^ 2 Laboratory** – center for research into innovative electrical power technologies and for integration of renewable energy sources.

- **Submerged Spatial Visualization Laboratory** – a globally unique laboratory where it will be possible to walk around in the virtual world.

- **Innovative Technologies Node** – integrates activities related to research and development of innovative technologies. Five centers work within the node: Photooptic Technologies, Oil and Gas, Advanced Materials, Energy Technology, and the Center for Advanced IBM Studies.
In the last decade, GUT acquired more than 250 patents
- 200 R & D projects with national and international funds are being implemented
- Within three years the university has entered into 700 contracts with entrepreneurs

PERCENTAGE STRUCTURE OF THE PROJECTS

- INNOTECH: 10%
- Applied Research Programme: 20%
- POIG: 3.3%
- 7 PR: 20%
- ERA NET: 3.3%
- Polish-Norwegian Research Programme: 6.7%
- EUREKA: 6.7%
- Blue Gas Polish Shale Gas: 13.3%
- GRAFTECH: 3.3%
- Research programme "security and defense": 13.3%
The university is a co-creator of Polish Platform for National Security, is working closely with business incubators, as well as with the Pomeranian Science and Technology Park in Gdynia and Gdańsk Park of Science and Technology. Among the University partners are companies well recognized both in Poland and internationally:

- Det Norske Veritas AS
- ENERGA SA
- Grupa LOTOS SA
- Intel Technology Poland sp. z o.o.
- Lafarge Aggregates and Concrete sp. z o. o.
- Leonidas Capital SA
- Lotos Petrobaltic SA
- Orlen Upstream sp. z o.o.
- PERN SA
- PGNiG SA
- POLLYTAG SA
- Samsung Electronics Polska sp. z o.o.
- TRICOMED SA
- Betting Fatty Kruszwica SA
- Vistal Ocynkownia sp. z o. o.
SCIENTISTS WITH PASSION AND IMAGINATION – SELECTED ACHIEVEMENTS

GUT researchers lead valuable studies and implement interesting projects. They are people with passion and imagination. Their achievements and scientific activity are reflected in a large number of prizes and awards granted both by the Ministry of Science and Higher Education, as well as a number of national and international institutions associated with scientific research. Here are some of them:

- "Polish invention of the year 2013" was CyberEye, developed under the guidance of prof. Andrzej Czyżewski, which is used for diagnosis and treatment of persons in a coma. The authors of the interface also received Prime Minister’s Award for scientific and technical achievements in 2013.

- Gold medal at the XVII Moscow Exhibition of Inventions and Innovative Technologies "ARCHIMEDES 2014" was awarded to researchers from the Faculty of Electronics, Telecommunications and Informatics of GUT. The jury appreciated "The method for preparing diamond suspensions", developed by Dr. Eng. Robert Bogdanowicz and Eng. Mateusz Gardas.

- Gold Medal at Poznan International Fair 2014 for satellite pumping unit was awarded to the team under the direction of Dr. Paweł Sliwiński from the Faculty of Mechanical Engineering.

- At the fair BRUSSELS INNOVA 2013 GUT scientists won four medals. Gold medals were awarded for inventions developed at the Faculty of Electronics, Telecommunications and Informatics: Talking Maps - GIS system supporting the movement of the blind, CyberEye, a movie player with the function of improving the intelligibility of dialogues. Silver medal was awarded to an intelligent inspection camera controlled by RFID signals.

- Silver medal at the International Fair of Inventions and Innovation IENA 2013 in Nuremberg was awarded for biopolymer material for medical and cosmetic applications to Grzegorz Gorczyca and his team from the Faculty of Chemistry.

- Gold medal at the fair Technicon-Innovation 2013, together with a special award for the product best suited for implementation, which was developed at the Faculty of Chemistry, was obtained by Chill-ID – a thaw indicator. The solution was created under the guidance of prof. Wojciech Chrzanowski.
SELECTED STUDENT SUCCESSES

- I place at the European Championship Robot Challenge in 2014 was won by robotics enthusiasts, students of the Faculty of Electronics, Telecommunications and Informatics.

- Students of the Faculty of Architecture won prizes in three international competitions for the design of firefighters’ building in San Francisco (2013), the concept for the development of the hills of Camelot (2013), and the design of the tower-school for architects in Dubai (2014).

- Second place in the world final of the largest technology competition for students Imagine Cup 2013 in St Petersburg was won by the students of the Faculty of Electronics, Telecommunications and Informatics. The jury appreciated the smartphone app detecting the presence of drugs in human body.

- I place in the international solar boat regatta in the Netherlands - DONG Energy Solar Boats Challenge 2014 – was awarded to the students of the Faculty of Ocean Engineering and Ship Technology.

- The Students of Physics Scientific Circle was chosen the best scientific circle in Poland in 2013.

- GUT students are winners of the prestigious Diamond Grants awarded by the Ministry of Science and Higher Education. This means they conduct their own research.
Qualified teaching and scientific staff, modern laboratories equipped with sophisticated equipment, ambitious R & D projects, extensive cooperation with industry and high quality of education make Gdańsk University of Technology one of the leading Polish technical universities.