

# INNOVATIONS COME FROM POMERANIA

PART I

POMERANIAN UNIVERSITIES  
AND THE EDUCATIONAL  
AND RESEARCH POTENTIAL  
OF POMERANIA

INVEST IN POMERANIA  
REPORT  
2022



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## Introduction

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# INTRODUCTION

Ladies and Gentlemen,

In order to start an active discussion about the future of Pomeranian universities and their cooperation with businesses in our region, we present the first part of the report entitled “Innovations come from Pomerania.” We invited leading Pomeranian universities to co-author this study with us.

In this part of the report, you will find basic information that will bring you closer to the education ecosystem in Pomerania and the role of academic student education and research centres. Here, you will also find information about what distinguishes Pomeranian universities from other higher education institutions in Poland and what constitutes their potential.

In the field of education, Pomeranian universities play a key role in the training of specialists. We see an annual increase in the number of highly qualified graduates ready to work in various sectors of the Pomeranian economy. In turn, in the field of scientific research, Pomeranian scientists are increasingly willing to engage in prestigious international applied research projects, the results of which find real applications. Universities have been equipped with modern research infrastructure, and further investments are planned, that will allow further dynamic development of science and higher education in the region. We can already see that year on year, Pomeranian universities rank higher and higher in national and international rankings.

Educational institutions, however, were not spared from the effects of the Covid-19 pandemic. One of its effects was the necessity of remote education, which brought negative social consequences, although many universities declare that the hybrid teaching model will permanently enter the system. On top of that, there have been concerns about future enrollments or the financial stability of universities. According to a research conducted by Banco Santander and the International Association of University Presidents (IAUP) among 700 university presidents from 90 countries around the world, as many as 56% of the educational institutions surveyed expect partnerships between universities and businesses to deteriorate. Thus, collaboration between business and academia during the post-pandemic will be significant to rebuild these relationships.

We would like to show you the wider potential of the Pomeranian region in creating and implementing innovations, so this report is only an introduction to a series of reports. We are preparing the next part of the report on cooperation between science and business in key sectors of the Pomeranian economy, where we will take a closer look at the most interesting and advanced scientific research projects. We will give you examples of effective cooperation between representatives of universities and businesses, as well as describe the innovative approach of the university towards the training of future professional personnel. We already invite you to follow the results of our work, and we invite universities to share their initiatives and accomplishments with us.

Despite numerous successes, the Pomeranian Voivodeship still faces many challenges in the field of higher education. In order for our region to fully realise its potential and become a prestigious academic centre recognised not only in the country but also internationally, we need not only declarations but also concrete, systemic actions. In order to be able to carry out innovative, prestigious research projects and to educate students at the highest level, cooperation between the scientific community and its environment is needed. In order for our region to continue to develop dynamically in this area, it is necessary to involve not only representatives of universities, but also local government, local employers and institutions supporting the economic development of the region.

We hope that the publication of our series of reports, "Innovations come from Pomerania" will give rise to a joint, active discussion on the future of Pomeranian universities. We believe that by working together, we are ready to set a new direction for the development of Pomeranian universities and persistently follow it in order to build an innovation-friendly brand of the region.

We wish you an interesting read,  
Pomeranian Development Agency & The Invest in Pomerania Team



## METHODOLOGY

*To work on the first part of the report in the series "Innovations come from Pomerania," we invited universities from the Pomeranian Voivodeship with the largest number of students. We've foreseen the possibility of cooperation with other, smaller universities and involving them in our study by informing them about the plan for the preparation of the report via our website.*

*In the report, we have mostly used data and information provided by individual universities that decided to participate in the project. We also used data provided by GUS (Central Statistical Office) and other widely available sources.*

*If your university would like to be part of the next reports "Innovations come from Pomerania", you are invited to contact the Project Manager, Anna Jagodzińska-Warzych via her email: [anna.jagodzinska-warzych@investinpomerania.pl](mailto:anna.jagodzinska-warzych@investinpomerania.pl)*

The report was created in cooperation with our Partners:



OFFICE OF THE MARSHAL  
OF THE POMORSKIE VOIVODESHIP



ACADEMY  
OF FINE ARTS  
IN GDAŃSK



Wyższa Szkoła Bankowa  
w Gdańsku

This report would not be possible without the participation of our Partners. We sincerely thank the university representatives for all the information you provided and for their substantive contributions to the preparation of this publication.

We hope for continued fruitful cooperation on future projects.



“

*Technological progress is one of the most important measures of the quality of life and regional competitiveness. Innovation has a key impact on the pace of economic advancements occurring in a given area. This is why the policy of the Pomeranian Voivodeship is to promote technologically advanced sectors and build support instruments around them.*



*Collaboration between business and science is also key to achieving success. New technologies must be built on the know-how, research, and experience of both parties to make their foundation sustainable and allow projects to continue to evolve over the years. In Pomerania, companies have been cooperating with educational centres for many years, and the region makes efforts to provide the right climate for such cooperation. It is through the involvement of these two worlds that specialised and well-educated candidates enter the labour market. As a region, we implement many projects aimed at attracting new talent to Pomerania, because we know that innovation is driven by people. Thanks to the high quality of life, good demand on the job market and a multicultural community, many students from Poland and abroad choose to study here.*

*Pomerania is one of the 25 fastest growing regions in Europe. For many years, our region has been on a path of continuous and dynamic growth, and we intend to carry on.*

*Mieczysław Struk  
Marshal of the Pomeranian Voivodeship*

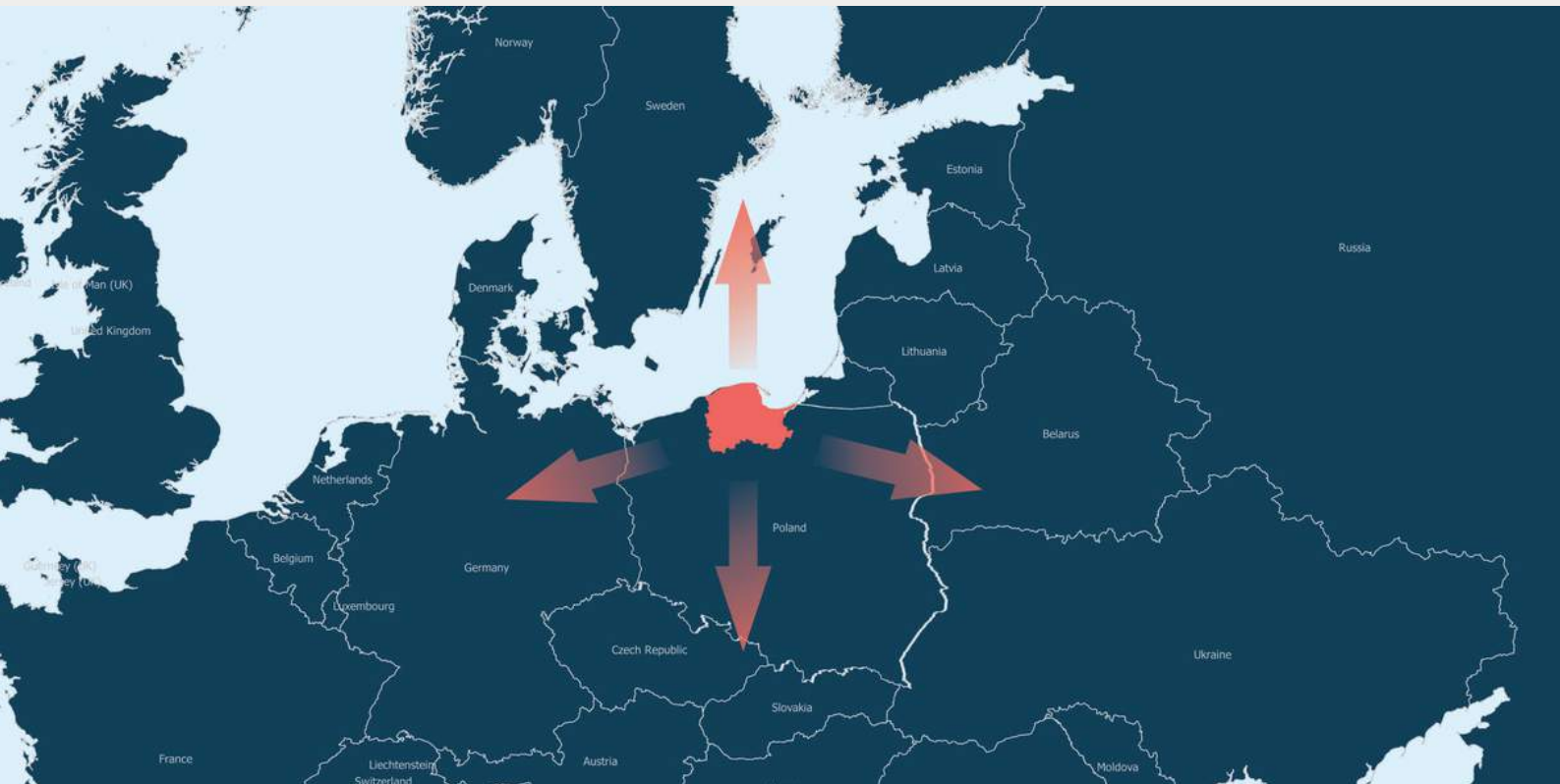
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# 1 THE POMERANIAN VOIVODESHIP

*Pomerania is one of the fastest-growing regions in Central and Eastern Europe. As a major business and academic centre, Tricity attracts new investors, employees and students every year. The Voivodeship is among the top locations in prestigious rankings. In the first chapter of the publication, we present the main economic sectors of the Voivodeship, its rankings and GDP growth dynamics.*

# GENERAL INFORMATION ABOUT THE REGION



Pomerania is located in the northern part of Poland on the Baltic Sea coast. The two largest cities in the region, Gdańsk and Gdynia, have seaports that actively support the development of the industrial sector not only in Poland but also in the whole of Central and Eastern Europe. Pomerania's excellent location at the crossroads of international transport routes, dynamically developing seaports and airport, increasingly better transport accessibility of the region and growing logistics facilities enable the development of international exchange and attract foreign investors.





**4TH PLACE FOR THE TRICITY  
AMONG TOP 25 TECH CITIES OF THE FUTURE**  
2020/21 IN THE FDI STRATEGY CATEGORY  
(FINANCIAL TIMES FDI INTELLIGENCE TECH CITIES OF  
THE FUTURE)



GDP  
OF THE POMERANIAN  
VOIVODESHIP IN 2019  
AMOUNTED TO  
**PLN 136.1 BN**



TRICITY  
(GDAŃSK, GDYNIA, SOPOT)  
IS THE LARGEST AGGLOMERATION IN  
NORTHERN POLAND. THE METROPOLITAN  
AREA HAS  
**1.6 MILLION INHABITANTS**



## KEY FACTS

**4TH RANK**  
ON THE LIST OF EUROPE'S  
MOST PROSPEROUS REGIONS  
(2012-2016, MILKEN INSTITUTE)



OVER  
**300 000**  
SMALL AND MEDIUM-  
SIZED COMPANIES

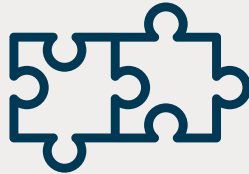


**ONE-THIRD OF THE AREA**  
OF THE VOIVODESHIP  
**IS COVERED BY GREEN AREAS,**  
INCLUDING TWO NATIONAL PARKS,  
NINE LANDSCAPE PARKS AND 127  
NATURE RESERVES



# KEY ECONOMIC SECTORS OF THE POMERANIAN VOIVODESHIP

## INDUSTRY



## SERVICES



SHIPBUILDING



OFFSHORE



BUSINESS SERVICES SECTOR (BSS)



PETROCHEMICAL



ELECTROTECHNICAL



ICT



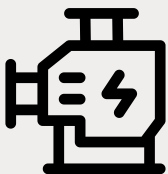
BIOTECHNOLOGY



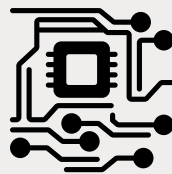
FOOD PROCESSING



LOGISTICS



AUTOMOTIVE



ELECTRONICS



CHEMICAL



WOOD & PAPER

In terms of GDP dynamics, Pomerania is one of the fastest growing regions in Poland and in Europe. In 2019, a GDP growth rate of 8.6 percent was recorded, which is one of the highest compared to other Polish regions. Almost half of the regional GDP is generated in the Tricity (Gdańsk, Gdynia, Sopot), which also has the highest GDP per capita. It is also where most of the foreign investments are located.

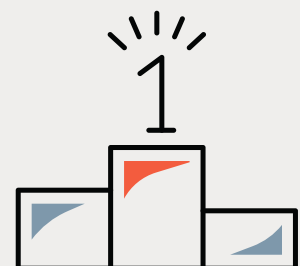
**8.6%**

**POMERANIA GDP GROWTH  
IN 2019**

The main industry sectors in Pomerania include shipbuilding, wood and paper, petrochemical industry, electrical engineering, as well as the chemical industry and traditionally the food industry. At the same time, Pomerania is an important centre of service sector development. The industries with the greatest growth potential in the region include ICT (Information and Communication Technology), BSS (Business Services Sector), logistics, biotechnology, electronics and automotive in terms of component manufacturing and implementation of new technologies.

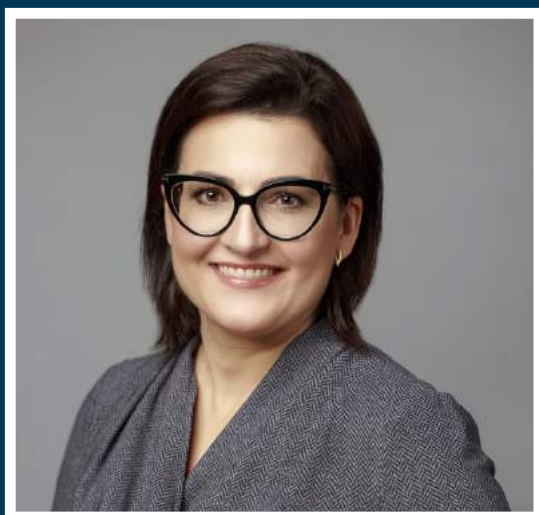
Pomerania is also one of the most friendly places to live and work on the map of Poland and Europe. It offers a high quality of life and a conducive environment for personal growth that is encouraging an increasing number of talented professionals to settle in the region.

In connection with the constantly growing number of investments, and thus a dynamic increase in jobs, Pomerania has one of the highest balances of internal and foreign migration for permanent residence in Poland.



**IN 2020, GDAŃSK WAS  
RANKED FIRST BY FORBES  
POLAND MAGAZINE IN THE  
PEOPLE FRIENDLY CITIES  
CATEGORY**

# SMART SPECIALISATIONS IN POMERANIA



*Smart Specialisations of Pomerania (SSP) set the directions for innovative and economic development of the region. They leverage the region's unique R&D resources, bringing together diverse industries and technologies. They create active platforms for cooperation between different partners and stakeholders, in particular by linking science and business. This determines the unique role of SSP, the focus on the implementation of R&D projects and obtaining additional sources of funding.*

*The regional government recognises its role as a leader and coordinator in building the competitiveness of the region and initiating innovative projects. To strengthen the potential of Pomeranian entities, including start-ups and entrepreneurs to undertake and implement innovative projects, the local government launched the "Smart Progress" project, financed the funds of the Regional Operational Programme for the Pomeranian Voivodeship. This project provides access to know-how and expert support. Based on the research on the functioning of companies operating in SSP areas, conducted as part of the project, it can be stated that these companies are able to use the unique resources available in their area to create a competitive advantage. Entities from SSP areas clearly undertake R&D activities more often, these companies are also more innovative, so they should be seen as a kind of engine for growth of competitiveness and innovativeness of the Pomeranian economy.*

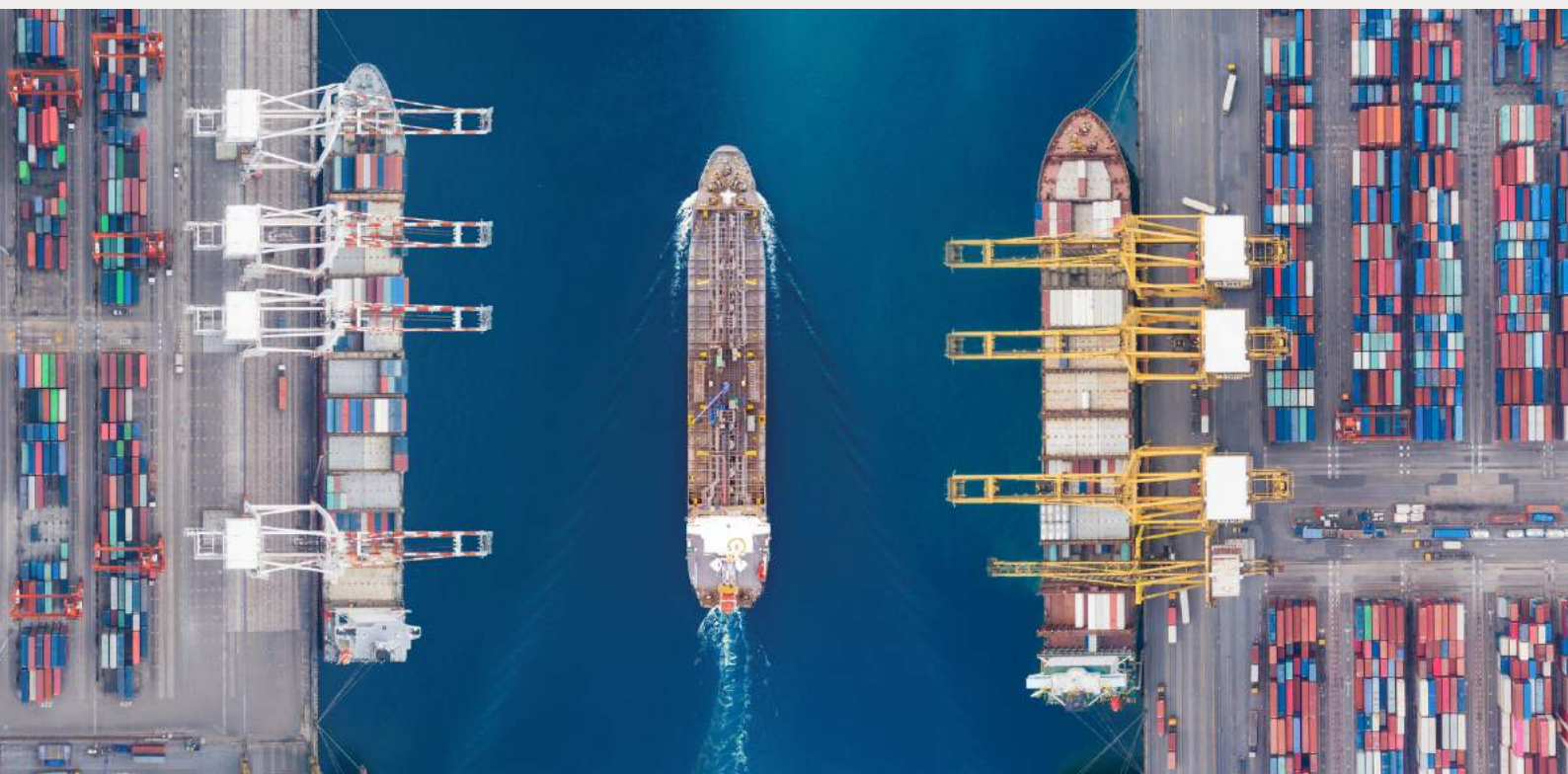
*Dr Karolina Lipińska  
Deputy Director of the Department for Business Development and Innovation  
Department of Economic Development*



According to the recommendations of the European Commission, each region should have a strategy for the development of areas of economic, life or science, called smart specialisations. Having such a strategy in place is a prerequisite for mobilising funds for research, development and innovation.

The Smart Specialisations of Pomerania were selected in a competition announced by the regional authorities. These are the areas of the economy with high potential for development and innovation, which are important to develop the competitiveness of the region. They are built on unique regional resources and their innovative combinations. Smart specialisations are supported through the use of public funds in the EU specifically dedicated to launching and using the potential of the selected areas of the economy.

Support as part of the development of smart specialisations will be primarily directed to the implementation of innovative projects and R&D, strengthening the potential of the selected specialisations. The objective of the support is to strengthen the international competitiveness and accelerate the growth rate of enterprises in selected sectors.



**SSP 1**

**OFFSHORE AND PORT/LOGISTICS TECHNOLOGIES**



*Objective: Significant strengthening of international competitiveness and acceleration of the growth rate of enterprises in the maritime sector in Pomerania through implementation of R&D and creation, on its basis, of innovative products, services and technologies in the area of exploration and sustainable use of marine resources .*

**SCOPE:**

- universal structures and technologies for sustainable marine resource exploitation;
- vehicles and vessels used in marine and coastal environments;
- equipment, techniques and systems for monitoring and cleaning of the marine environment and its hinterland;
- innovative ways and technologies to use the unique, natural compounds produced by marine organisms;
- technologies, equipment and processes to improve the safety and efficiency of transport and logistics services in ports and their hinterland and foreland.

**SSP 2**

**INTERACTIVE TECHNOLOGIES IN AN INFORMATION-SATURATED ENVIRONMENT**



*Objective: Building and strengthening international competitiveness and accelerating the rate of growth of enterprises in the ICT sector in the Pomeranian Voivodeship through implementation of R&D and building intellectual potential for creating innovative products and services in the field of interactive technologies in an information-saturated environment.*

**SCOPE:**

- multimodal human-machine interfaces;
- embedded systems for smart spaces, Internet of Things (IoT);
- data transfer, databases, data security, Big Data processing;
- space and satellite engineering.

### SSP 3

#### ECO-EFFICIENT TECHNOLOGIES IN PRODUCTION, TRANSMISSION, DISTRIBUTION AND CONSUMPTION OF ENERGY AND FUELS AND IN CONSTRUCTION



*Objective: Building and strengthening the competitiveness of business entities focusing on the creation of new products and services based on the results of R&D, and taking into account the increase in the efficiency of distribution, production, processing and energy consumption, extraction of raw materials, processing of fuels and reducing the negative impact on the environment.*

#### SCOPE:

- improving energy efficiency in construction and industry;
- renewable energy sources (RES), distributed generation and prosumer energy;
- “smart grid” technology in energy distribution;
- energy storage;
- alternatively powered modes of transportation;
- exploration, extraction and processing of energy resources.

### SSP 4

#### MEDICAL TECHNOLOGIES IN THE FIELD OF CIVILIZATION DISEASES AND AGING



*Objective: Establishing a centre of competence in Pomerania in the field of health with international significance. Strengthening the competitiveness and attractiveness of companies by investing in R&D, competence building, and development of innovative products and technologies.*

#### SCOPE:

- modern solutions in prevention of civilization diseases and aging;
- modern solutions in the diagnosis of civilization diseases and aging;
- modern solutions in the treatment of civilization diseases and aging;
- support systems for people with disabilities.



## 2

## SYSTEM OF HIGHER EDUCATION IN POLAND

*Here, we present basic information about the cycle of studies, legal regulations and methods of evaluating higher education institutions in Poland. We also present the development of the universities in terms of international recognition.*



## HIGHER EDUCATION IN POLAND

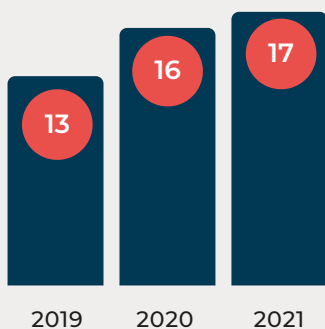
Poland's cultural heritage has a long-standing tradition in the higher education sector. The first university was founded here as early as the 14th century. Today, Poland is a very popular study destination not only for Polish citizens but also for foreign students.



According to the Central Statistical Office, there are currently 1,215,300 students enrolled in Polish universities. According to the Supreme Audit Office, in the 2019/2020 academic year, more than 77,000 students were from abroad, which is an increase of over 27% as compared to 2016. As we can see, Polish higher education institutions are gaining more international recognition.



NUMBER OF POLISH UNIVERSITIES IN QS WORLD UNIVERSITY RANKINGS®



17 Polish universities were included in the QS World University Rankings® 2021, which is one more university than in the previous year and three more than in 2019. QS World University Rankings® considers the reputation of a university, access to qualified staff, and research activities. Polish universities being included in the ranking show that the quality of Polish universities is growing every year.

# HIGHER EDUCATION SYSTEM IN POLAND

Higher education institutions in Poland are run both by public entities, where full-time studies are free of charge, and non-public universities. Studies are available in two forms:

- full-time courses, where at least half of the curriculum is implemented through classes requiring direct participation of academic staff and students
- extramural courses

The Polish education system consists of a three-tier division:

## FIRST DEGREE STUDIES

Candidates who hold a high school diploma are admitted to a bachelor's degree programme. They graduate with a bachelor's degree, which typically takes 3 years, or lead to an engineering degree, (at technical universities) which takes 3.5 years.

## UNIFORM MASTER'S DEGREE STUDIES

This is a master's degree that takes 4.5 to 6 years.

## SECOND DEGREE STUDIES

The master's studies can be pursued only by those with a minimum of a bachelor's/engineer's degree. They graduate with a master's degree that takes 1.5 to 2 years.

## DOCTORAL SCHOOLS

It is a cycle of training after graduation from a master's degree programme (second degree or uniform) that takes 3 to 4 years. The right to confer the doctoral degree in a given discipline is vested in universities, research institutes or international research institutes.

## POSTGRADUATE STUDIES

This is an additional cycle of training after graduating with a bachelor's degree. It takes approximately 1 to 2 years and allows you to further develop your skills in your chosen field.

# EVALUATION OF HIGHER EDUCATION INSTITUTIONS IN POLAND

For years, the activities of Polish universities have been subject to evaluation in order to determine further directions of their development and to verify the quality of education. The Constitution for Science introduced a new evaluation system for universities. Starting in 2022, academic centres are evaluated based on three criteria (the evaluation covers the years 2017-2021):

**The scientific level of the activities carried out**

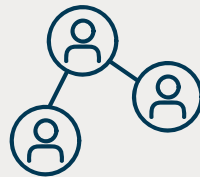


**EVALUATION  
CRITERIA  
FOR ACADEMIC  
CENTRES**

**Financial effect of scientific research and development**



**The impact of scientific activity on the functioning of the society and economy**



The impact of scientific activity on the functioning of the society and economy is a new criterion that aims to emphasise the importance and appreciation of the application of scientific knowledge in both the local and global socio-economic environment. A new component of scientific evaluation, which is the assessment of the impact of scientific activity on the functioning of society and the economy, will recognise those employees who place a high value on interacting with the public and implementing the results of their activities.



# 3

## EDUCATIONAL OFFER OF POMERANIAN UNIVERSITIES

*In this chapter, we present data related to the educational offer of Pomeranian universities, including the number of educational institutions and students, the level of internationalisation and characteristics distinguishing the Pomeranian universities from other universities in the country.*



# MAP OF POMERANIAN UNIVERSITIES

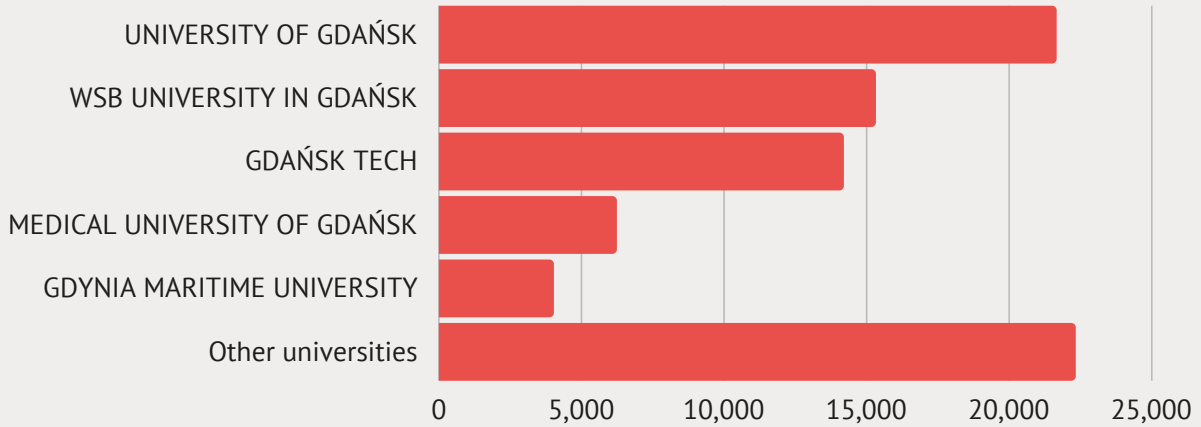
Pomerania is the largest academic centre in northern Poland. The higher education system includes 24 universities, of which 9 are public universities and 15 are non-public universities. They are mainly located around Tricity and Słupsk, but there are also universities in smaller towns of the region – Starogard Gdański, Chojnice and Kwidzyn. Additionally, prestigious non-public universities have their branches in Pomerania, such as the SWPS University in Sopot, the Polish-Japanese Academy of Information Technology (PJAiT) and The University of Security in Gdańsk.

Map 1. Pomeranian universities (public and non-public)



# POMERANIAN HIGHER EDUCATION

NUMBER OF STUDENTS AT THE LARGEST POMERANIAN UNIVERSITIES\*



\*Data for the 2020/2021 academic year. Data includes public and non-public universities.

A total of 83.6 thousand students study in the Pomeranian region. We are the 6th largest education centre in the country, and Tricity ranks 5th among Polish cities. Last year alone, all colleges and universities in the region delivered a total of 19.8 thousand graduates to the job market.

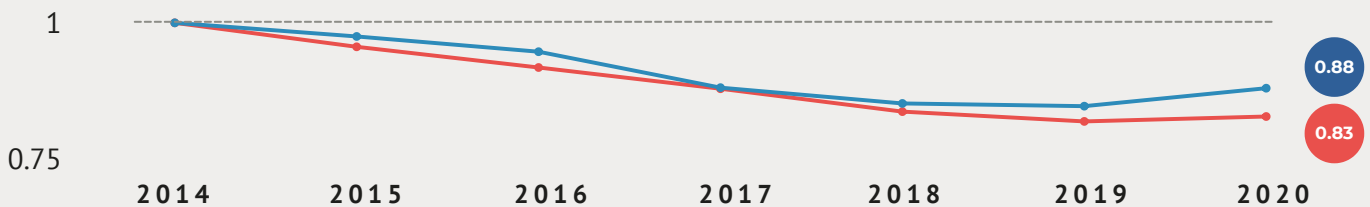
**83.6K**

**STUDENTS**

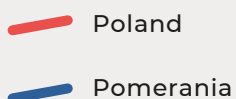
**19.8K**

**GRADUATES**

Due to the changing demographics, the number of students is declining across the country, increasing the competition to attract new students and talent to the regions. The analysis of the dynamics of these changes over the past 6 years shows that the decline in the number of students in the Pomeranian Voivodeship is less rapid than in other regions. At the same time, the more dynamic declines recorded in neighbouring regions suggest that Pomeranian universities are becoming more successful in attracting students to our region.



The rate of decline in the number of students in the country and in the region from 2014 to 2020, where 1=2014.



The potential decisions of students are certainly influenced by the attractiveness of studying and living in Tricity and its surroundings, because of a variety of reasons. The most significant of these include:

- The coastal location of the region with access to the Baltic sea and Kaszuby with its natural beauty.
- highly rated quality of life and,
- dynamic economic development of the region providing stable jobs.

Gdańsk and Gdynia have been at the top of Polish and international quality of life rankings for years. For example, Gdańsk in 2020 received one of the best scores in a survey of European cities conducted by the European Commission, evaluating many various aspects of the quality of life. The city was at the top of the ranking along with Copenhagen, Stockholm, Zurich and Oslo. As many as 97% of residents said they were satisfied with life in the city and the top-rated areas included safety, public transportation and access to cultural facilities.

HIGHEST SATISFACTION WITH LIFE IN A SURVEY OF EUROPEAN CITIES.



Studying and working in Pomerania is also encouraged by many activities carried out under the project Live more. Pomerania.



Live more. Pomerania (LmP) powered by Invest in Pomerania showcases Pomerania as a desirable place to live, work and study. LmP aims to encourage prospective students and employees from across the world to study and subsequently work in the region.

Various promotional activities carried out by the initiative build a coherent image of the region, emphasise its unique features and the offered opportunities for development. Live more. Pomerania shows the best of Pomerania to the people of Poland, Europe and the world. Thanks to the campaign, the most outstanding students and talents from all over the world choose Pomerania.



# SPECIFICS OF POMERANIAN EDUCATION

- AQUACULTURE - BUSINESS AND TECHNOLOGY
- MARINE HYDROGRAPHY
- BUSINESS AND GREEN TECHNOLOGY
- GREEN TECHNOLOGIES AND MONITORING
- MARINE AND COASTAL ENGINEERING
- NUCLEAR SAFETY AND RADIOLOGICAL SECURITY
- SPACE AND SATELLITE TECHNOLOGIES
- ENVIRONMENTAL HEALTH

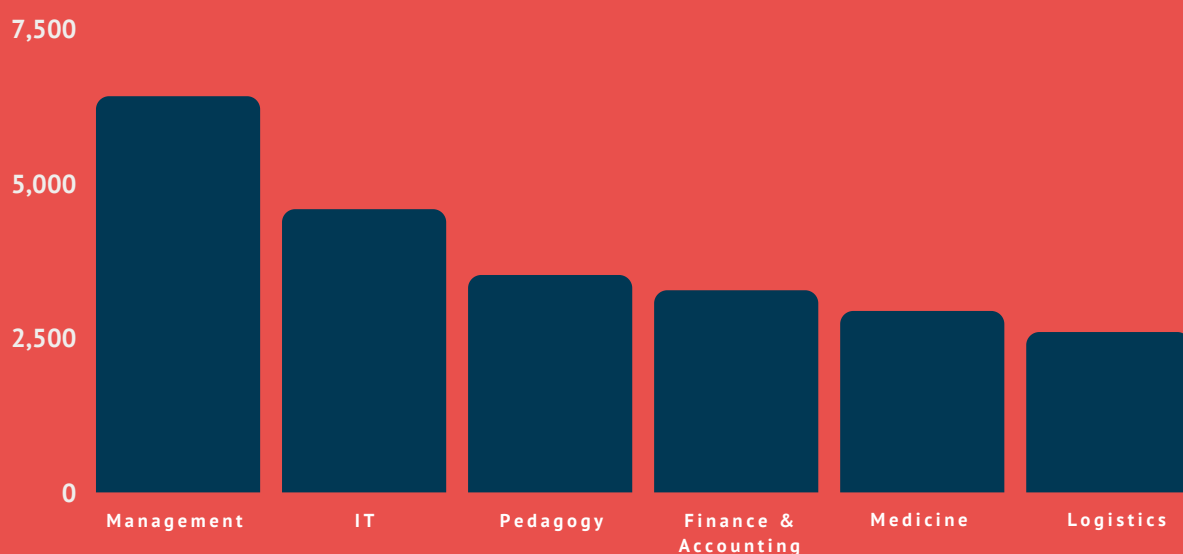
## UNIQUE POMERANIAN FIELDS OF STUDY\*

\*FIELDS OF STUDY FOUND ONLY IN THE OFFER OF POMERANIAN UNIVERSITIES. DATA FOR THE ACADEMIC YEAR 2020/2021

Pomeranian universities offer a total of 166 fields of study.

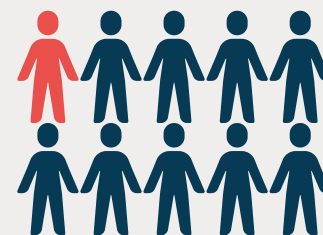
The proximity to the sea and the associated business environment generates a unique educational offer for potential students. Among the fields of study that are only offered by Pomeranian universities are those related to the sea. The additional specialisations of the region are fields of study related to the broadly understood area of ecology and energy. Pomerania also offers a unique, intercollegiate course of Space and Satellite Technologies.

### NUMBER OF STUDENTS IN THE MOST STUDIED FIELDS OF STUDY IN POMERANIA\*



\*DATA FOR THE ACADEMIC YEAR 2020/2021

Currently, one in ten students in Pomerania are pursuing an individual interdisciplinary programmes (10.2%; 8,500 students), which is the highest percentage in the country. An interdisciplinary programme incorporates a variety of academic areas to better meet the challenges of the job market. The largest offer of such fields of study is offered by Gdańsk Tech, and they include: computer science, nanotechnology, ocean engineering or mechanical and medical engineering (conducted together with MUG).



**1 IN 10  
STUDENTS IN  
POMERANIA STUDY IN  
INDIVIDUAL  
INTERDISCIPLINARY  
PROGRAMMES**

Pomerania also has one of the highest percentages of students entering fields of study in natural science, mathematics, and statistics (5.3%, compared to 3.6% nationwide).

## INTERNATIONALISATION OF POMERANIAN UNIVERSITIES

Nearly 5% of students in the region are foreign nationals, placing the voivodeship below the national average in this regard (6.8%; data for 2020). In the last 7 years, the level of internationalisation of Pomeranian universities more than doubled (dynamics above the national average).



More than 4,000 foreigners from 44 countries currently study in Pomerania, with almost one-fourth of them studying medicine, pharmacy and nursing at the Medical University of Gdańsk (Report: Study in Poland. Foreign Students in Poland 2020). The level of internationalisation of MUG is among the highest in the country, among medical universities. Almost 17% of the overall number of students of this university are foreigners. Scandinavian students dominate among foreigners at the Medical University of Gdańsk, while Ukrainians and Belarusians - follow the national trends - are the most frequent foreigners in the whole region.

**17%**

**OF STUDENTS OF  
MEDICAL  
UNIVERSITY OF  
GDAŃSK ARE  
FOREIGNERS**



## JOINT FIELDS OF STUDY:

Pomeranian universities intensely cooperate to improve the quality of teaching. One of the measurable effects of these activities is the implementation of intercollegiate courses, which allow students to gain knowledge from experts in various fields:

### INTERCOLLEGIATE MECHANICAL AND MEDICAL ENGINEERING



Studies are conducted in cooperation with the Faculty of Mechanical Engineering of the Gdańsk Tech and the Medical Faculty of the Medical University of Gdańsk. The agreement to conduct joint education was signed in 2007. Graduates of this course have knowledge of design using modern computational tools, manufacturing, construction and operation of machinery, with particular emphasis on medical engineering.

### INTERCOLLEGIATE SPACE AND SATELLITE TECHNOLOGIES



Established in 2016, the Space and Satellite Technologies studies are the result of cooperation between four pomeranian universities: Gdańsk Tech (Faculty of Mechanical Engineering and Faculty of Electronics, Telecommunications and Informatics), University of Gdańsk, Gdynia Maritime University (Faculty of Electrical Engineering) and the Naval Academy in Gdynia (Faculty of Command and Maritime Operations). Each college offers courses in a variety of specialties. The universities have specialised equipment base, systems, laboratories and satellite stations, ensuring a high level of education on this unique course.

### INTERCOLLEGIATE MEDICAL PHYSICS



The Medical Physics studies are offered in cooperation between the University of Gdańsk (Faculty of Mathematics, Physics and Informatics) and the Medical University of Gdańsk (Faculty of Medicine). This interdisciplinary major combines scientific fields such as mathematics, physics and medicine. Thanks to advanced scientific and didactic laboratories equipped with the latest equipment, which are run by specialised scientific staff of both the universities, this course prepares graduates for work as medical physicists in health care institutions, including laboratories of radiology, radiotherapy and nuclear medicine.

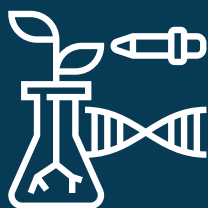
### INTERCOLLEGIATE SPEECH THERAPY



The course is co-run by the Institute of Speech Therapy at the faculty of Philology of the University of Gdańsk and the Faculty of Medicine of the Medical University of Gdańsk, as well as by staff from other units of the University of Gdańsk: Institute of Polish Philology, Institute of Pedagogy and Institute of Psychology. The advantage of this course is the interdisciplinary approach to teaching by specialists in many fields, modern study conditions, such as an orthophonic/logorhythmic training room, speech therapy rooms, including one with a Venetian mirror, and a computer room.

**It is also worth mentioning that the cooperation between the University of Gdańsk and the Medical University of Gdańsk resulted in the creation of a joint faculty:**

### INTERCOLLEGIATE FACULTY OF BIOTECHNOLOGY



This is a one-of-its-kind in Poland intercollegiate scientific and didactic unit created by the University of Gdańsk and Medical University of Gdańsk. The department has been operating for 28 years and has been successful in attracting many students. The research conducted there is interdisciplinary, while the teaching combines biomedical and biomolecular knowledge and its applications in biotechnology for health and improvement of quality of life.





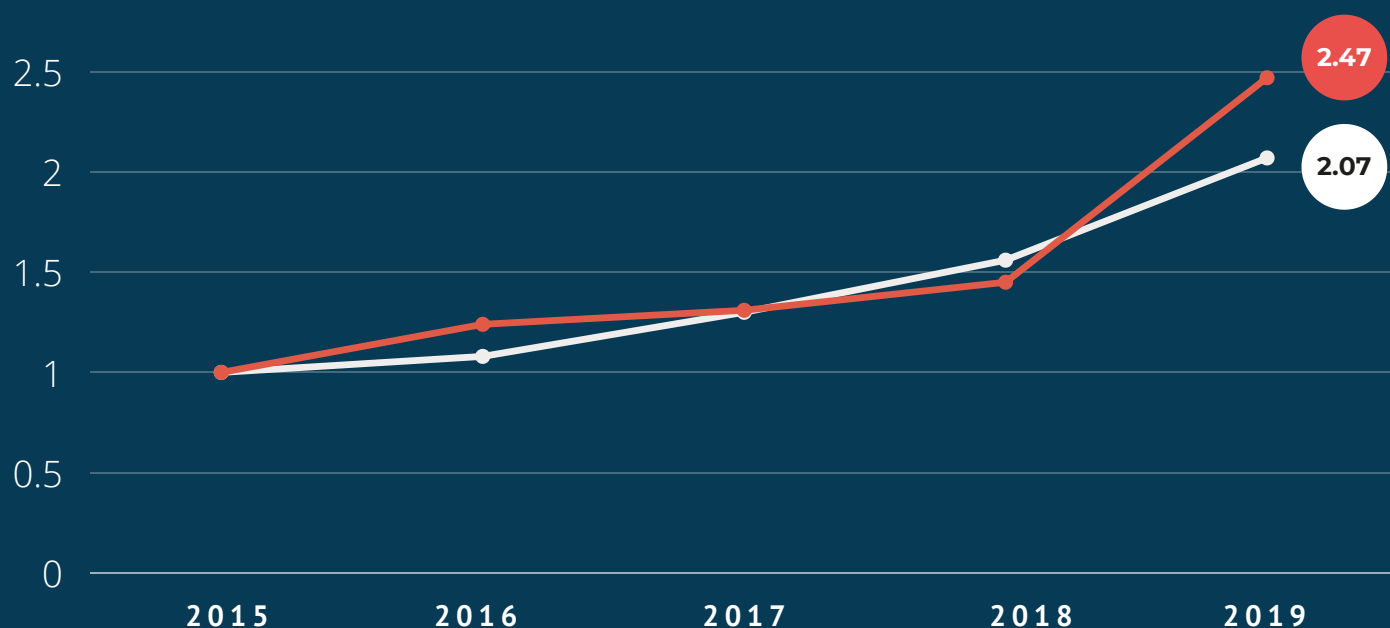
# 4

## SCIENTIFIC AND RESEARCH ACTIVITIES IN POMERANIAN UNIVERSITIES

*Here, we present data on the expenditure on scientific and research activities in Pomerania, the number of projects carried out by local universities and international research agencies in the region.*

## R&D EXPENDITURE

Pomeranian universities are characterised by the highest growth dynamics in terms of R&D expenditure in the country. In 2015-2019, the value of capital expenditure in the region increased almost 2.5 times, while the rest of the country saw only a 2-fold increase. In 2019, Pomeranian universities invested PLN 676 million in R&D.



Comparison of the dynamics of internal R&D expenditure in Pomeranian voivodeship and the country, where 1 = 2015

— Poland  
— Pomerania

## MODERN RESEARCH INFRASTRUCTURE

Conducting advanced scientific research is not possible without access to modern research infrastructure and comprehensively equipped laboratories. Hence, Pomerania has been investing in the construction of new, innovative science and research centres for many years. The most recent investments of this type in our voivodeship include:



## Innovative STOS Competence Center Gdańsk Tech



CK STOS (Smart and Transdisciplinary KnOWledge Services) is a modern, multidisciplinary IT centre, now being constructed on the Gdańsk Tech campus. It will be one of the most innovative IT centres, not only in Poland but also in this part of Europe. This investment will be a data collection and processing centre - in line with modern international standards. The capacity of CK STOS will be also used for research in the field of physics, chemistry, astronomy, biotechnology, and medicine, as well as implementation research for the commercialisation of science. The opening of the unit is planned for the second quarter of 2022. More information on the investment will be available in the next part of our report, dedicated to the IT sector in Pomerania.



## Ecoinnovation Centre Gdańsk Tech

The Gdańsk Tech Ecoinnovation Centre will be one of the most important scientific units in Poland dealing with the development of pro-ecological solutions and environmental technologies. The construction of the Centre will enable, e.g. implementing innovative solutions in line with the idea of building eco-cities and ecological spaces. The Centre will be a modern building with a teaching, laboratory and research function. The completion of the construction is scheduled for autumn 2022. More information about the undertaking can be found in the next section of the report, devoted to e.g. smart cities technologies in Pomerania.





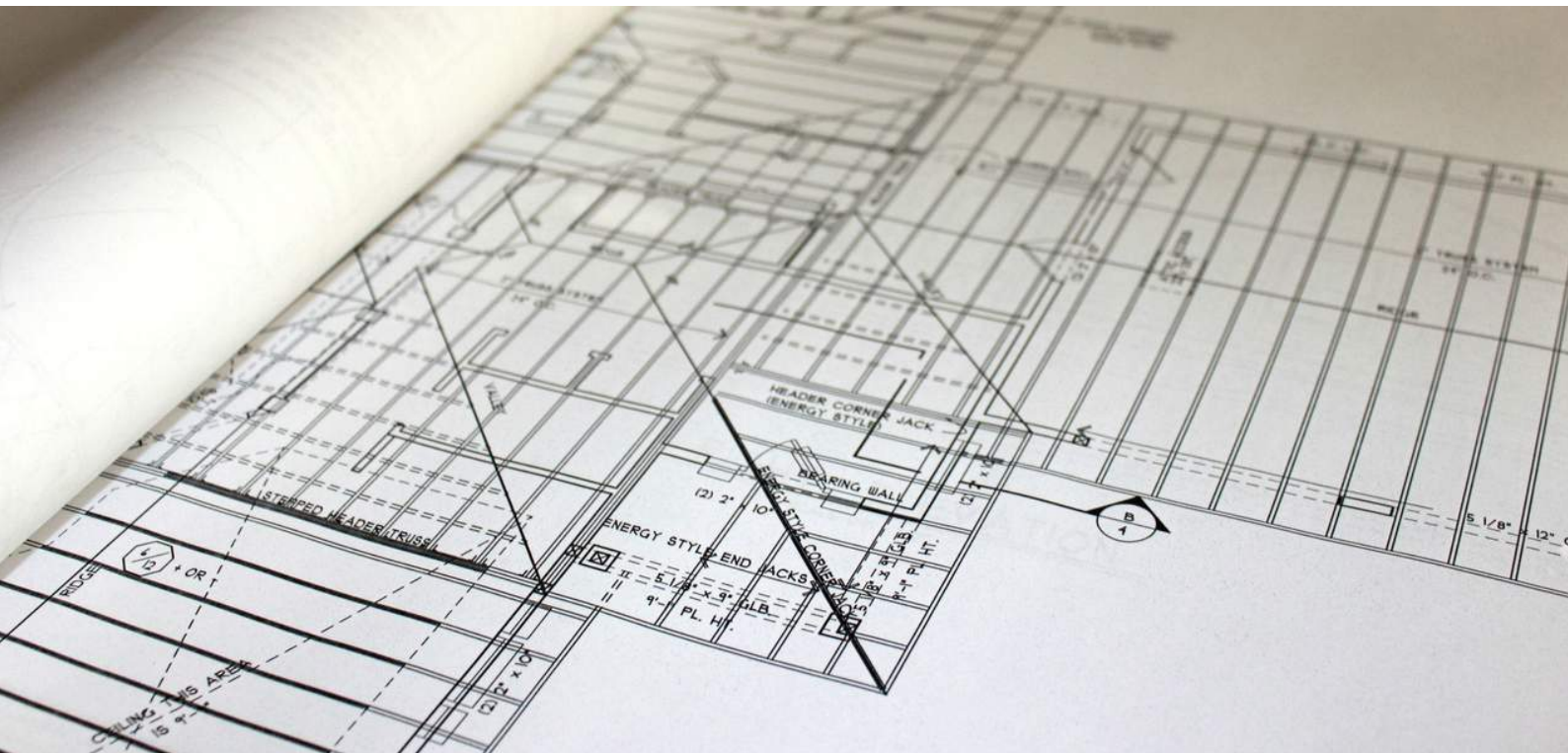
## Innovative centre of integrated marine environment research laboratories for the offshore industry

Gdynia Maritime University

The purpose of the construction of the GMU Offshore Centre in Gdańsk is to create the necessary research and educational facilities for the domestic offshore wind energy sector. The Centre may become the nucleus of a larger organism - the "Polish Offshore Valley".



The key advantage of the investment is its location - direct access to the Wisłoujście Quay, which will enable the stay and service of research, training and service vessels, both for the University and its contractors. The GMU Offshore Centre will be the seat of certified laboratories of the Maritime Institute of GMU, the operation of which is part of the process of preparation and implementation of investments in offshore wind energy. The construction of the Centre will enable comprehensive, specialised research and development works for the needs of the innovative maritime industry. Currently, apart from GMU, none of the research and development units in the country performs such works. More information about the investment in the next section of the report, dedicated to e.g. the maritime sector in Pomerania



# FNP INTERNATIONAL RESEARCH AGENCIES PROGRAMME

Pomerania is home to three international research centres conducting world-class research that can contribute to innovative solutions in cancer diagnostics and therapies and the development of quantum technologies. These centres belong to the group of fourteen Polish elite scientific institutions that have been established thanks to the support provided by the Foundation for Polish Science (FNP) as part of the International Research Agendas (MAB) programme from the resources of the Intelligent Development Operational Programme (POIR).



## International Centre for Cancer Vaccine Studies (ICCVS)

### University of Gdańsk

The Centre implements a project at the University of Gdańsk titled "International Centre for Cancer Vaccine Science". Its work focuses on research into personalised cancer immunotherapies. The work could lead to the creation of personalised anti-cancer therapeutic vaccines, followed by their commercialisation and introduction into clinical practice.

The people behind the establishment of the centre are internationally renowned researchers: American Professor Theodore Hupp, also associated with the UK's Centre for Experimental Cancer Research at the University of Edinburgh, and Swedish Professor Robin Fahraeus, working with the National Institute for Health and Medical Research (INSERM) in Paris. The two researchers received a grant of over PLN 41 m from the International Research Agendas (IRA) programme implemented by the Foundation for Polish Science with funds from the Intelligent Development Operational Programme to establish the facility in Gdańsk. Currently, the project manager is Prof. Natalia Marek-Trzonkowska, PhD.



2

**3P Medicine Laboratory  
(Preventive, Personalised, Precision)**

**Medical University of Gdańsk**



The Centre carries out a project at the Medical University of Gdańsk titled: "Mutations acquired during a lifetime, that lead to increased risk for human disease, with focus on cancer". Scientists in the 3P Medicine Laboratory are primarily involved in research on the development of breast cancer in women, prostate cancer in men, and colon and bladder cancer in both genders, as well as Alzheimer's disease in men due to the loss of the Y chromosome in leukocytes. The findings may lead to new biomarkers of cancer risk and provide a better understanding of the early stages of Alzheimer's disease. The centre is headed by distinguished scholars: Prof. Dr, Jan Dumanski, a professor of molecular medical genetics, also affiliated with Uppsala University in Sweden, and Prof. Dr. hab. Arkadiusz Piotrowski, currently also affiliated with the University of Alabama at Birmingham, USA. For the establishment of the centre and research works they received over PLN 39 m from the International Research Agendas (IRA) programme implemented by the Foundation for Polish Science with funds from the Intelligent Development Operational Programme.

3

**International Centre for Theory of Quantum  
Technologies (ICTQT )**

**University of Gdańsk**



The centre implements a project at the University of Gdańsk titled: "International Centre for Theory of Quantum Technologies". ICTQT's activities focus on research on quantum technologies of the future, in particular quantum communication and information, and quantum theory itself. From the point of view of practical applications, the research focuses on reliable systems for absolute data cyber security (e.g., quantum self-testing cryptography), quantum communication protocols, and conceptual work on algorithms for quantum computers.



5

## WHAT DISTINGUISHES POMERANIAN UNIVERSITIES

*Here we present the position of Pomeranian universities in the rankings and the criteria for evaluating major research centres in the region. In this chapter, we also discuss the forms of cooperation between universities in the region.*

# HIGH POSITION IN POLISH RANKINGS

Ranking of Academic Schools, prepared by "Perspektywy" Educational Foundation, is one of the best known rankings of universities in Poland. The universities are evaluated on the basis of 27 indicators grouped into criteria such as prestige, graduates on the job market, scientific potential, scientific effectiveness, innovation and internationalisation.

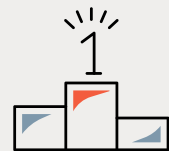
**GDAŃSK TECH IS THE SECOND MOST FREQUENTLY CHOSEN TECHNICAL UNIVERSITY IN POLAND BY CANDIDATES**

Last year's edition of the "Perspektywy" ranking saw Gdańsk Tech classified as the 6th best university in Poland, moving up 9 positions over the last 5 years. Among technical universities, Gdańsk Tech ranked 3rd. Medical University Gdańsk is also among the top ten universities ranking, ranked high at the 8th position – the highest among medical universities. The growing importance of universities in Pomerania is also evidenced by the appearance of the Gdańsk Tech in the prestigious Academic Ranking of World Universities 2020.

- 1 JAGIELLONIAN UNIVERSITY
- 2 WARSAW UNIVERSITY
- 3 WARSAW UNIVERSITY OF TECHNOLOGY
- 4 ADAM MICKIEWICZ UNIVERSITY
- 5 AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY
- 6 **GDAŃSK TECH**
- 7 WROCŁAW UNIVERSITY OF TECHNOLOGY
- 8 **MEDICAL UNIVERSITY OF GDAŃSK**
- 9 ŁÓDŹ UNIVERSITY OF TECHNOLOGY
- 10 WARSAW MEDICAL UNIVERSITY



MEDICAL  
UNIVERSITIES



MEDICAL UNIVERSITY OF  
GDAŃSK



TECHNICAL  
UNIVERSITIES



GDAŃSK UNIVERSITY  
OF TECHNOLOGY





## TWO RESEARCH UNIVERSITIES



"The Excellence Initiative – Research University" programme was introduced as a result of the new Law on Higher Education and Science. It's one of the key elements of the reform of higher education. The priority of the programme is to identify and support universities that will strive to achieve the status of a research university and be able to compete effectively with the best academic centres in Europe and the world.

Gdańsk is one of the three academic centres, along with Warsaw and Kraków, where, in the first edition of the competition, as many as two universities received the status of research universities. Gdańsk Tech took first place among technical universities and second place in the country (only behind Warsaw University), and the Gdańsk Medical University is the first medical university in the country to be awarded this title.

By obtaining the status of a research university, both universities will receive a 10% increase in subsidies from the central budget in 2020-2026, which will translate into a total amount of over PLN 200 million for the Gdańsk Tech and PLN 85 million for the Medical University of Gdańsk.

# LEADING RESEARCH CENTRES IN POLAND

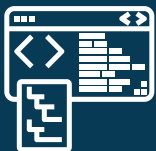
In 2017, within the framework of parameterisation regulated by the previous law on higher education, a comprehensive assessment of the quality of scientific and R&D activities of scientific units was conducted. The universities were evaluated by the Committee for Evaluation of Scientific Units (KEJN) in four categories:

- 1 scientific and creative achievements
- 2 scientific potential
- 3 practical effects of the scientific and artistic activities
- 4 other effects of the scientific and artistic activities

Universities whose faculties received high marks in the evaluation conducted by the KEJN receive more funds from the central budget, they also have easier access to funds from other sources.



Of the departments in the Pomeranian universities, four received an A+ grade, which indicates the department's leading level nationwide:



DEPARTMENT OF  
ELECTRONICS,  
TELECOMMUNICATIONS  
AND INFORMATION  
TECHNOLOGY AT THE  
GDAŃSK TECH



DEPARTMENT  
OF CHEMISTRY  
AT THE GDAŃSK  
TECH



DEPARTMENT OF  
PHARMACY AT  
THE MEDICAL  
UNIVERSITY OF  
GDAŃSK



INTERCOLLEGIATE  
DEPARTMENT OF  
BIOTECHNOLOGY AT  
THE UNIVERSITY OF  
GDAŃSK AND MEDICAL  
UNIVERSITY OF GDAŃSK

# CLOSE COOPERATION OF UNIVERSITIES IN THE REGION

## COUNCIL OF RECTORS OF THE POMERANIAN VOIVODESHIP



The Council of Rectors brings together 14 rectors of universities from the Pomorian Voivodeship. Its aim is to integrate the scientific community as well as create strong ties with local authorities, which increases the effectiveness of higher education and science and helps to solve common problems. As part of the Council of Rectors of the Pomorian Voivodeship, universities exchange information, agree positions and undertake joint activities.

Main goals of the Council of Rectors for the 2020-2024 term:



### INTEGRATION:

Unifying the research community and creating a strong relationship with local authorities



### COMMON GROUND:

Development of a common position, among others about new versions of projects of Acts on Higher Education and Science



### DEVELOPMENT:

Activities for the development of higher education and the entire academic community of the region

Universities whose rectors are members of the Council:



AKADEMIA  
SZTUK  
PIĘKNYCH  
W GDAŃSKU



GDAŃSKI  
UNIwersytet  
MEDYCZNY



aMuz Akademia Muzyczna  
im. Stanisława Moniuszki  
w Gdańsku



Akademia  
Pomorska  
w Słupsku



AIENEUM  
SZKOŁA WYŻSZA  
W GDAŃSKU

Gdańskie  
Seminarium  
Duchowne

GDAŃSKIE  
ARCHIDIECEZJALNE  
KOLEGIUM  
TEOLOGICZNE

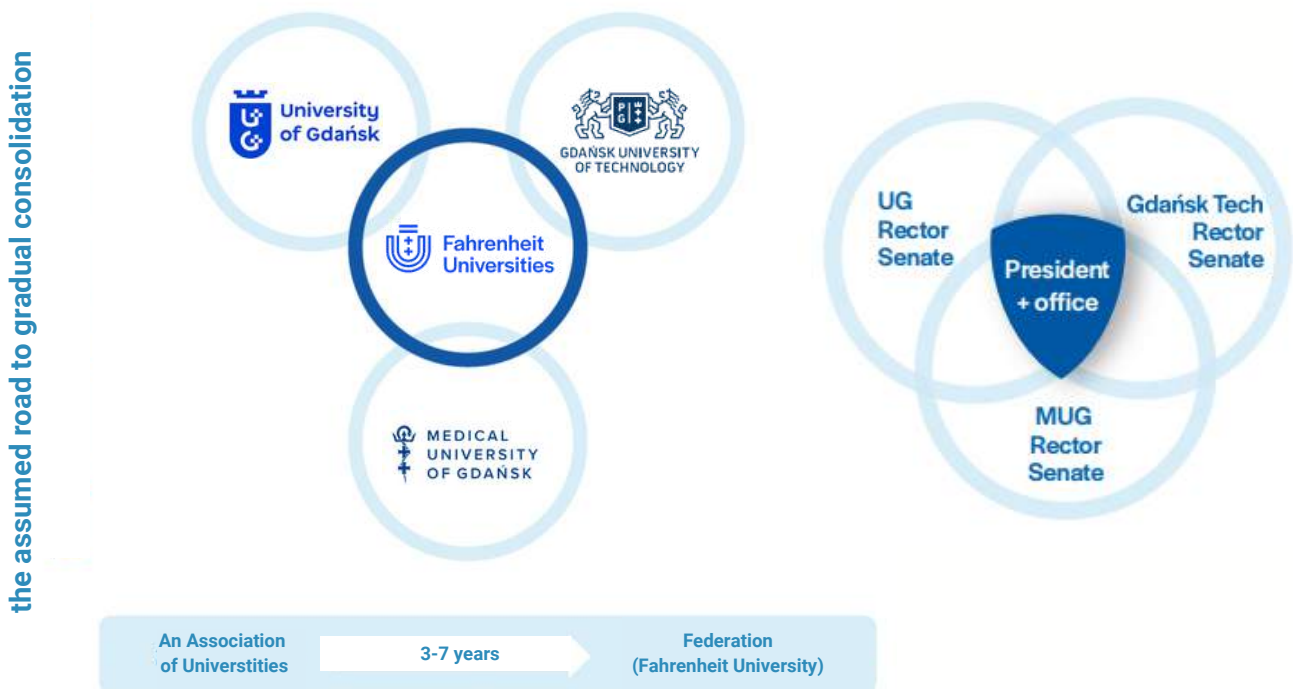
WYŻSZE SEMINARIUM DUCHOWE  
DIECEZJI PEŁPLIŃSKIEJ

PAN  
PAŃSTWA

# CLOSE COOPERATION OF UNIVERSITIES IN THE REGION

## DANIEL FAHRENHEIT UNIVERSITIES OF GDAŃSK

Medical University of Gdańsk , Gdańsk Tech and University of Gdańsk have been implementing joint initiatives in many areas for many years. In order to deepen the existing cooperation and strengthen the position of the Gdańsk universities on the national and international arena, a decision was made to establish Daniel Fahrenheit Universities of Gdańsk. The union is expected to lay the groundwork for the future federalisation of the university, which is planned for the next 3-7 years.



The Gdańsk University Association is based on the strong, highly specialised competencies of its members. The academic staff is comprised of some of the world's top researchers – more than 60 of them were ranked among the top 2 percent of the most influential researchers in the world by Stanford University.

In 2019-2020, GUMed, GT and UG have jointly implemented 21 grants funded, among others, by the Foundation for Polish Science, the National Centre for Research and Development, the National Science Centre, as well as the Ministry of Education and Science and the Medical Research Agency.



Total number of students in all three universities



Total number of scientific/research and didactic employees



Total number of PhD students in all three universities



Number of scientific disciplines where researchers conduct scientific activity



*Cooperation between universities forming the Daniel Fahrenheit Universities (Gdańsk Tech, Medical University of Gdańsk and University of Gdańsk) lead to the creation of a strong academic centre in Pomerania, recognised nationally and internationally. And, as we know, the prestige of the university and its place in the rankings translates into a higher level of funding, better access to funds, better access to information, greater political influence, as well as attractiveness for staff and students.*

*Thus, it will make our region to an even more attractive place to study and work for candidates from Poland and abroad. Our ambition is to make our cooperating universities modern, developing both basic and applied research, offering students and scientists the best possible conditions for development and cooperation, as well as developing cooperation with the business environment. We can achieve this by using our potential more intensively and efficiently. We are already working on the commonality of library resources, a common system to manage research infrastructure, or joint management of student residences. At the same time, through the exchange of good practices we improve the quality of our activities in the scientific, teaching and administrative areas.*

*prof. dr hab. inż. Adriana Zaleska-Medynska  
Director of Daniel Fahrenheit Universities in Gdańsk*



**BENEFITS FOR THE REGION  
RESULTING FROM THE ESTABLISHMENT  
OF DANIEL FAHRENHEIT UNIVERSITIES IN GDAŃSK:**

- 1** Gdańsk will become one of the strongest academic centres in Poland (next to Warsaw and Kraków), capable of competing with the best academic centres in Europe.
- 2** Gdańsk universities will gain more opportunities for development with the possibility of acquiring more financial resources.
- 3** Close collaboration will make better use of current resources, but also of the potential of each university.



Developing solutions to support joint scientific R&D work



Strengthening the publishing activities of GT, UG and MUG

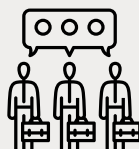


Common promotion and ranking policy

**AREAS OF COOPERATION:**

Expressing opinions and representing common interests to the state administration, local government and legislative initiatives

Joint preparation of recommendations for the consolidation or establishment of new intercollegiate doctoral schools



# A SYSTEM FOR JOINT MANAGEMENT OF RESEARCH INFRASTRUCTURE

Universities associated with Daniel Fahrenheit Universities, as part of a grant project entitled "Supporting the consolidation processes of universities", successfully catalogued the research equipment available at the Medical University of Gdańsk, the Gdańsk Tech and the University of Gdańsk.

The first stage of the project was to make an inventory of the key research infrastructure belonging to Daniel Fahrenheit University. It was carried out independently at each university. The following items were catalogued:

1

**Large research equipment** (i.e. scientific and research facilities with a value exceeding PLN 500,000)



2

Scientific and research equipment of lesser value, but having a **unique character or constituting a key element** of the equipment of a given laboratory and allowing for unique analyses

3

**Core lab type research laboratories** (understood as laboratories containing a unique set of research equipment and auxiliary infrastructure and enabling comprehensive research using a specific technology)



4

**Infrastructure of strategic importance**, i.e. shown on the strategic infrastructure map of the Ministry of Science and Education or in other national or foreign documents



The next step was to design and create software that brings the research infrastructure of all three universities closer. As a result of these activities, an English-language website was launched that allows public access to information on the key FarU apparatus.

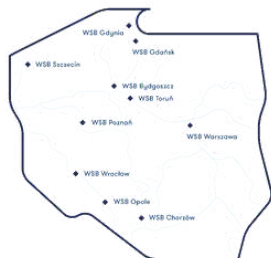
THE WEBSITE IS:

[HTTPS://RESOURCES.FARU.EDU.PL/](https://resources.faru.edu.pl/)



The information presented in the database includes, among others, a brief description of the apparatus, the location of the apparatus, contact details of the apparatus or laboratory supervisor, as well as information for what type of activity the apparatus can be used for. The rules of making the apparatus available should be agreed upon individually with the guardian or operator of a given apparatus.

## THE RESEARCH FEDERATION OF WSB & DSW UNIVERSITIES



**Federacja  
Naukowa  
WSB — DSW**

The Research Federation of WSB & DSW Universities is the first federation in Poland established under Law 2.0 from 2018. The entity brings together four non-public academic universities:

- University of Lower Silesia,
- WSB University in Gdańsk
- WSB University in Poznań and
- WSB University in Wrocław.

Additionally, two universities have the status of associates (the WSB University in Toruń and the WSB University in Warsaw). The Federation is seated in Gdańsk.

### GOALS OF THE RESEARCH FEDERATION OF WSB & DSW

The main objective of the established cooperation is the synergy of the scientific potential of the universities. The cooperation program includes:

- conducting scientific activities,
- commercialization of research results,
- publishing activities, and
- cooperation with entities from the social and economic environment.



# INTERNATIONAL COOPERATION OF UNIVERSITIES AROUND THE BALTIC SEA

The proximity of the Baltic Sea and the sea-related sectors of the economy in a special way direct Pomeranian universities to cooperate to strengthen these natural assets of the region. Below, we present selected initiatives that fit in with this goal:

## The SEA-EU initiative

The University of Gdańsk was among 5 Polish universities awarded in the first edition of the European Commission competition entitled "European Universities". As part of the competition, it creates a consortium "European University of the Seas - SEA-EU" together with other maritime universities. The partners of the University of Gdańsk include:

- University of Cadiz (Spain),
- University of West Brittany (France),
- Christian-Albrecht University of Kiel (Germany),
- University of Split (Croatia) and
- University of Malta in Valletta (Malta).



The vision of cooperation is to create an interdisciplinary European University that will strengthen scientific and didactic cooperation, as well as support innovation and knowledge transfer. SEA-EU connects not only 6 universities, but also associated partners: enterprises, research centres, non-governmental organisations and business clusters.

## Baltic Sea Region University Network

It is a project supporting the development of the Baltic Sea region by academic universities. It works to increase the attractiveness and competitiveness of the region's cities and to support innovation. Currently, the network includes 26 universities from Belarus, Estonia, Finland, Germany, Lithuania, Latvia, Poland and Russia. The Medical University of Gdańsk was among the founding members of the network in 2000.



**BALTIC SEA  
REGION  
UNIVERSITY  
NETWORK**



## ScanBalt BioRegion Cluster

ScanBalt is an organisation integrating other units and entities focused around the biological and medical sciences of the Baltic Sea region. It works for the development of life sciences and increasing the region's competitiveness in the health and environmental protection sector. The association includes universities, clinics, companies and representatives of local authorities in the Baltic Sea region. The founding members of ScanBalt are the Medical University of Gdańsk and the University of Gdańsk.



5

## DETAILS OF THE REPORT'S PARTNERS

*Here, we present our partners: seven Pomeranian universities. Basic information about the institutions' history, faculty, staff and students is available here. We also provide contact information to university units dealing with cooperation between science and business.*





## GDAŃSK TECH



8

FACULTIES

37

FIELDS OF STUDY

950

RESEARCH AND  
DIDACTIC STAFF



The history of the Gdańsk University of Technology (Gdańsk Tech) dates back to 1900, when the foundation stone was laid for the first building of the university, named Royal Technical College in Gdańsk (Königliche Technische Hochschule zu Danzig). Four years later, the university's first academic year began.

Currently, Gdańsk Tech is one of the most intensively developing academic centres in Europe. In 2020, it was ranked in the prestigious Shanghai Ranking (ARWU) in the range of 801-900 (fourth place among Polish universities ex aequo with two other universities). The Gdańsk Tech was also placed in the range of 801-1000 in the QS World University Rankings 2022 (fourth place among Polish universities together with six other universities).

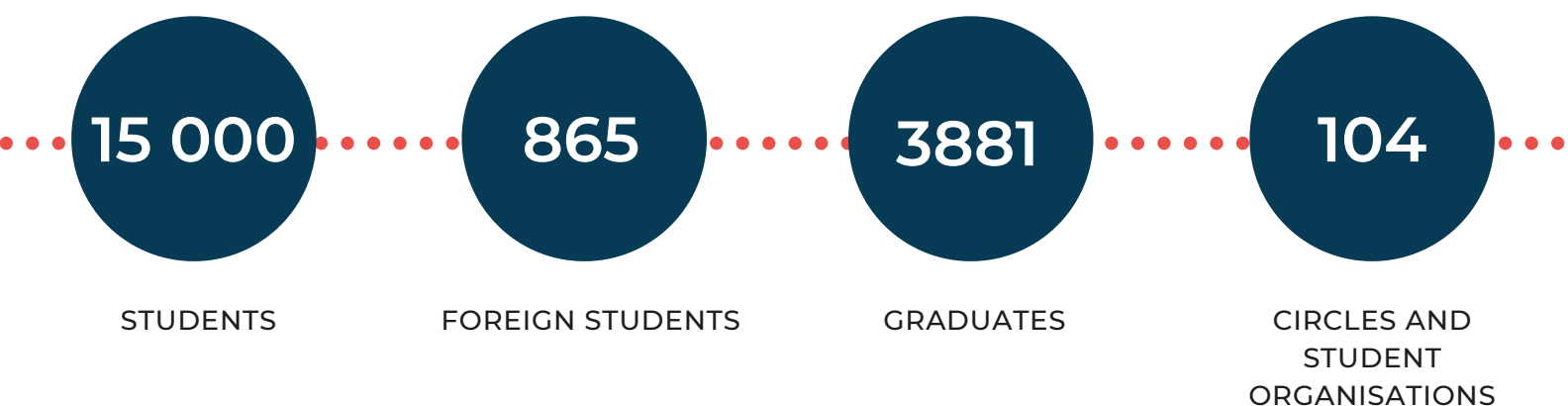
The Gdańsk Tech is one of three Polish universities belonging to the Conference of European Schools for Advanced Engineering Education and Research (CESAER), which brings together the best European technical universities. According to the latest ranking by the Ministry of Education and Science, Gdańsk Tech is the second most popular technical university in Poland among candidates for studies. In the ranking of universities conducted by the Educational Foundation "Perspektywy" in 2021, Gdańsk Tech was ranked third among technical universities in the country.

In 2017, Gdańsk Tech received approval from the European Commission to use the "Human Resources Excellence in Research" logo as an institution that creates an attractive work environment for researchers and is guided by ethical standards in both business relationships and research.

The campus of the Gdańsk Tech is one of the ten most beautiful ones in Europe according to the 2018 Times Higher Education portal's list of European universities distinguished by their stunning architecture and attractive location.



Data for the 2020/2021 academic year:



*Cooperation with the social and economic environment is one of the main missions of Gdańsk University of Technology. Every year, our academic centres provide the labour market with new specialists who contribute to the dynamic development of companies present in the Pomeranian region. They also establish numerous relationships with these entities by providing expert and research services to companies. However, there is still much work to be done in both fields – and on both sides.*

*To be able to call Pomerania an efficient scientific and business ecosystem, cooperation between the world of science and the world of industry and business should be even closer than before. We need to take full advantage of the potential it holds, and it will certainly bring unquestionable benefits to each party. I believe we will work hard together to achieve this goal.*

*prof. dr hab. inż. Krzysztof Wilde, Rector of the Gdańsk University of Technology,  
Chairman of the Rectors' Council of Pomeranian Province*

The unit responsible for cooperation between science and business:

Centre for Knowledge and Technology Transfer  
Business Service Point

 + 48 58 348 62 62

 [biznes@pg.edu.pl](mailto:biznes@pg.edu.pl)



photo: P. Sudara

# MEDICAL UNIVERSITY OF GDAŃSK



MEDICAL  
UNIVERSITY  
OF GDAŃSK

4

FACULTIES

17

+4 INTERCOLLEGIATE

FIELDS OF STUDY

1099

RESEARCH AND  
DIDACTIC STAFF



Medical University of Gdańsk (MUG) is a modern academic centre, recognised nationally and internationally. The University is characterised by high scientific and development potential, which consists in particular of experienced and renowned research teams, a growing number of prestigious international publications and grants, as well as a wide range and quality of conducted research confirmed by high categorisation of units. **It is also the only medical university among the top 10 Polish universities distinguished in the prestigious competition Initiative of Excellence – Research University.**

MUG is steadily rising in the rankings of leading universities. **It is the best medical school in Poland according to the latest ranking of academic schools by Perspektywy Educational Foundation.** The University has many projects involving international collaboration. There are currently 11 research projects in international partnership and the number of foreign partners involved is 75. MUG is one of the largest beneficiaries of ABM competitions supporting academic clinical research. Between 2019 and 2021, it received funding for 14 projects totalling more than PLN 195 m.

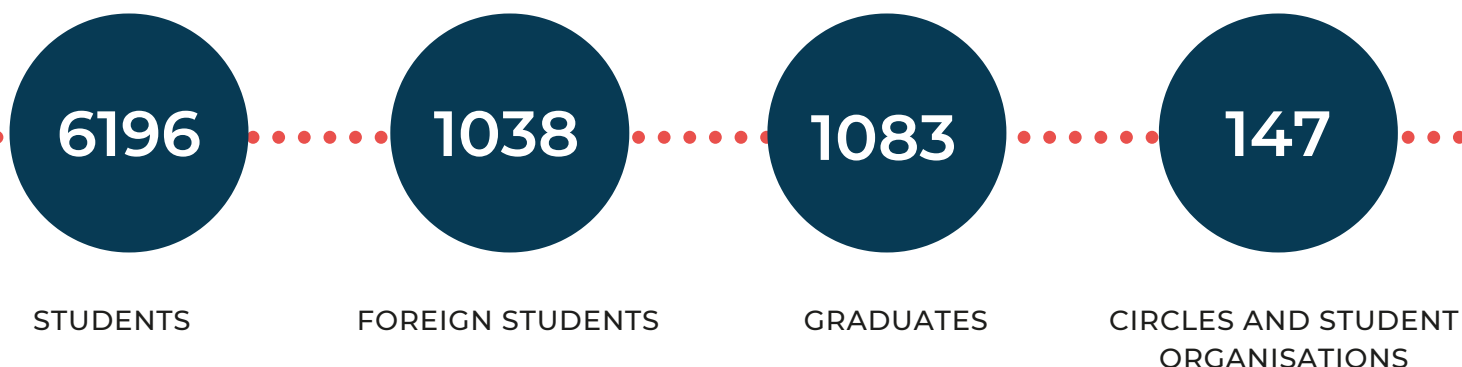
The development of teaching, research and clinical facilities included: **Medical Simulation Centre, equipped with the latest generation of phantoms, operating theatre and a virtual reality laboratory,** Sports Centre and buildings of the Centre for Invasive and Non-Invasive Medicine included in the University Clinical Centre, which constitutes a **unique medical and scientific complex on a European scale.**

The University is implementing an innovative project **Young Scientist Programme**, which aims to support students who are interested in developing personal competencies and conducting research-oriented work.





Data for the 2020/2021 academic year:



*The Medical University of Gdańsk (MUG) is one of the best medical universities in Poland, with increasingly intense interdisciplinary research and a significant share of international cooperation. The University is characterised by high scientific and developmental potential, as well as a wide range and quality of conducted research confirmed by high categorisation of units. It is also the only medical university in the country awarded the prestigious status of a research university. We have been successfully conducting a number of scientific, research, teaching and development initiatives for many years, building space for cooperation between science and business.*

*One example of such synergy is the unique dual degree programme implemented jointly with Polpharma SA and Oceanic SA, which makes it possible to combine academic knowledge with industry practice. Following global trends, we have the ambition to create a strategic innovation hub for Pomerania. Highly qualified staff and modern infrastructure undoubtedly foster the development of new business support tools and the establishment of cooperation in the implementation of innovative development research. Membership in the European Institute of Innovation and Technology in the area of health (EIT Health) or the programme "R&D Grants for enterprises" is a chance for the development of mechanisms of creating and developing innovations of national and international importance.*

*prof. dr hab. Marcin Gruchała, Rector of the Gdańsk Medical University,  
President of the Conference of Rectors of Academic Medical Universities*

**The unit responsible for cooperation between science and business:**

**Centre for Transfer of Technology**



[naukaibiznes@gumed.edu.pl](mailto:naukaibiznes@gumed.edu.pl)



tel. 58 349 10 09

**Centrum Innowacji Medycznych sp. z o.o.**



[cim@gumed.edu.pl](mailto:cim@gumed.edu.pl)



tel. 58 349 10 09



## UNIVERSITY OF GDAŃSK



11

FACULTIES

89

FIELDS OF STUDY

1810

RESEARCH AND  
DIDACTIC STAFF





photo: B. Zablotny

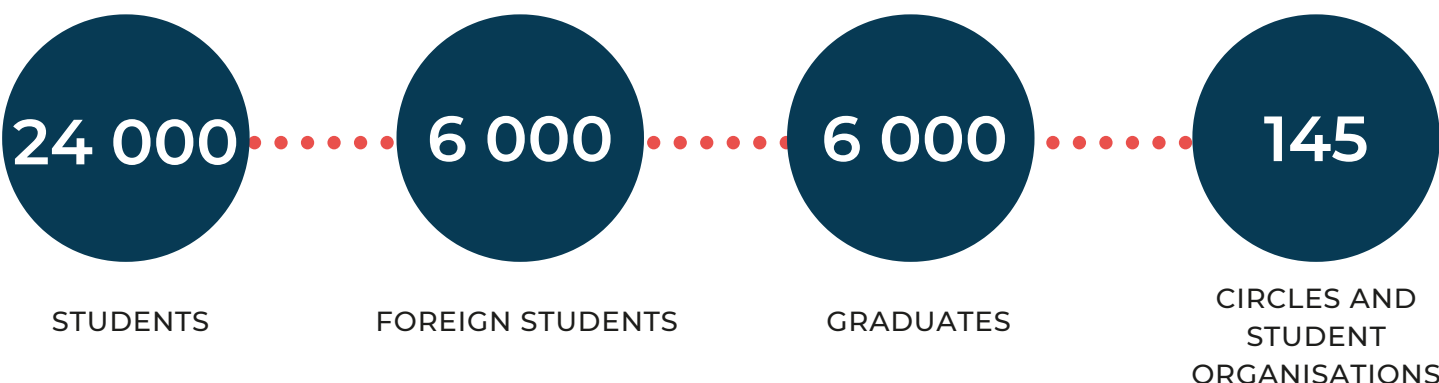
University of Gdańsk (UG) is a **university with a 50-year tradition**. It is a member of the European University of the Seas (SEA-EU) combining the research and teaching potential of six seaside universities from different parts of Europe.

The didactic and scientific infrastructure of the largest university in Pomerania consists of **three modern campuses in Gdynia, Sopot and the largest (8 faculties) in Gdańsk**, the largest scientific library in the Pomeranian region, 4 research stations in the Pomeranian region, including The Marine Station of the Institute of Oceanography in Hel with its seal aquarium, or the Bird Migration Research Station and the highly specialised scientific research vessel Oceanograf.

There are **eleven faculties within the university that educate and conduct research in the areas of science and life sciences, economics, law, social sciences and humanities**. The University is a community of 1,800 researchers and 24,000 students and doctoral students winning numerous grants at the national and international level.

The first point of contact between business and the social environment and the university is the **Office of Socio-Economic Relations**. The next one, **Centre for Analyses and Expertise**, organises the implementation of scientific research and prepares expert opinions for business entities. To meet the needs of business, the university focuses on the commercialisation of research through the **Technology Transfer Centre** and UG's special purpose vehicle **Univentum Labs**. UG's cooperation with the socio-economic environment also includes the implementation of Agenda 2030 for sustainable development, which is carried out by the Centre for Sustainable Development.

data for the 2019/2020 academic year:



*The cooperation of the University of Gdańsk with the economic environment is carried out on many levels. The university is, of course, home to students who are an extremely valuable asset to the job market. The University is also home to outstanding scientists who, thanks to the modern infrastructure, are able to carry out tasks corresponding to the demands of the business world. Also, the very location of the UG campus implies the interpenetration of science with the business and start-up environment.*

*After all, together with Olivia Business Centre and Alchemia, as well as STARTER Incubator, we constitute an academic-business "triangle". I am also glad that here, in Pomerania, we show that we can work together, also as universities, as evidenced by the Fahrenheit Universities. Its primary activity is to optimise the use of resources of the universities forming the Association. Dialogue, exchange of needs and expectations is very important for UG – only then the region will develop in a sustainable way. My overriding goal for the University that I lead, is to act as an important element of the economic development of the city of Gdańsk and the entire Pomeranian Voivodeship.*

*Prof. dr hab. Piotr Stepnowski, Rector of the University of Gdańsk*

The unit responsible for cooperation between science and business:

Office for Cooperation  
with the Socio-Economic Environment

dr Sebastian Susmarski  
Director



+48 725 999 966



[sebastian.susmarski@ug.edu.pl](mailto:sebastian.susmarski@ug.edu.pl)





## WSB UNIVERSITY IN GDAŃSK



**Wyższa Szkoła Bankowa  
w Gdańsku**

WSB Universities

5

FACULTIES

17

FIELDS OF STUDY

55

RESEARCH AND  
DIDACTIC STAFF



The WSB University in Gdańsk is the most-chosen private university in Pomerania according to the ranking of the Ministry of Education and Science. WSB in Gdańsk was established over 20 years ago, in 1998. Over the years, it has clearly marked its presence on the educational map of Pomerania. The proof is **the tens of thousands of satisfied graduates and modern campus** in the heart of Gdańsk's Strzyża district.

The university attracts candidates with its rich didactic offer, a chance to gain practical knowledge and the possibility of studying and enriching their private and professional lives.

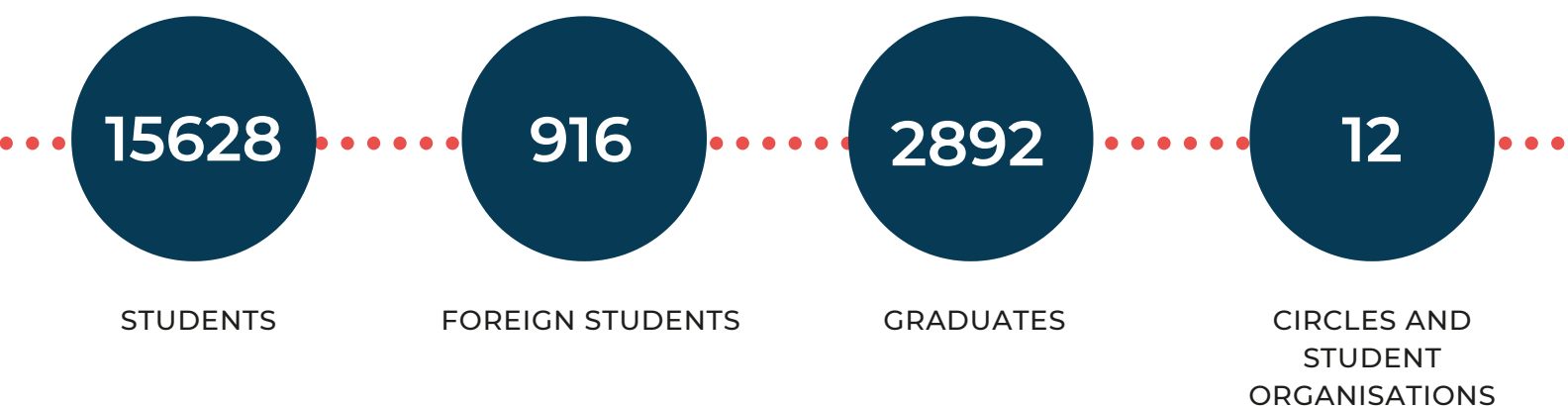
A wide didactic offer includes fields of study not only related to management, IT, but also to psychology, law, philology and health. **Students can choose from a wide range of 17 first-cycle, 8 second-cycle courses, and nearly 100 post-graduate and prestigious MBA programmes.**

**WSB combines science with business.** Cooperation with entrepreneurs allows to adjust the educational offer to the needs of the labour market. Extensive cooperation with the business environment has resulted in the offer of dual studies, patronage over majors, discounts for companies and dedicated training. It also supports companies in their recruitment needs - offering internships and apprenticeships to students and graduates.

Thanks to **the efficient acquisition of EU funds**, WSB has been successfully implementing national and international projects for many years. The result is the constantly increasing level of education and the development of teaching and research workers. The university is also expanding modern technical and teaching facilities, such as the Internet of Things Technology Research Laboratory, created in cooperation with IBM.



data for the 2020/2021 academic year:



*WSB University in Gdańsk is a university whose objective is constant development. We increase the number of students every year, including students from abroad, who attend English-speaking programmes. In 2021, we achieved 20,000 students and attendants, and we have more than one thousand students from abroad. We place great emphasis on the practicality of education, which is recognised by students and valued by employers. Each year, the offer of our majors and specialties is enriched and adapted to the needs of the labour market through consultations on the curricula with representatives of employers.*

*Cooperation with the social and economic environment is one of the key directions of our business development. We create a common space for exchanging opinions and experiences, not only in the educational field, but also in the scientific field. We take actions aimed at being present in the business environment with an offer of implementation projects and we believe that this cooperation will translate into real benefits for both parties.*

*dr hab. Jan Wiśniewski, professor at GSB  
Rector of the WSB University in Gdańsk*

**Person responsible for cooperation between  
science and business:**

**Katarzyna Moszczyńska  
Innovation Broker  
Implementation Project Manager**

 [kmoszczynska@wsb.gda.pl](mailto:kmoszczynska@wsb.gda.pl)



## GDYNIA MARITIME UNIVERSITY



4

FACULTIES

9

FIELDS OF STUDY

218

RESEARCH AND  
DIDACTIC STAFF





Gdynia Maritime University (GMU), formerly Gdynia Maritime Academy, is **the largest state maritime university in Poland and one of the largest in Europe**, educating future merchant fleet officers, engineers and managers for the maritime economy and the coastal region.

The history of the University dates **back to 1920**, when the vision of a strong maritime Poland, inextricably linked with the Baltic Sea, gave rise to the Maritime School in Tczew. Thanks to the experience, commitment and knowledge of its staff, the University takes **one of the highest places in the ranking of world maritime universities**. The University meets the global requirements for the education of merchant fleet officers in accordance with the STCW Convention, and its Quality Management System complies with the requirements of ISO 9001:2008 and covers the full scope of its activity. **Membership in the International Association of Maritime Universities** also testifies to the high profile of the University.

Gdynia Maritime University **offers full-time and extramural undergraduate and postgraduate studies**, as well as **supplementary education** for officers and specialists working within the maritime economy. The range of academic fields and specializations offered is extensive and reflects the current demands of the employment market, providing education that prepares students for both professions at sea and on land. Today, GMU is **made up of four thriving faculties**: Electrical Engineering, Marine Engineering, Navigation, and Management and Quality Sciences, as well as the Maritime Institute.

GMU conducts research aimed at the development of many areas of the national and European economies. The University's staff make up a significant part of expert teams that provide expertise for the development of the local port market, tourist traffic, inland navigation and vessel traffic forecasting.

Data for the 2020/2021 academic year:

4000

STUDENTS

76

FOREIGN STUDENTS

595

GRADUATES

19

CIRCLES AND  
STUDENT  
ORGANISATIONS



*Gdynia Maritime University is a university with over a hundred years of tradition in educating staff for the maritime economy. We are among the top maritime universities in the world. We cooperate with other universities within the International Association of Maritime Universities (IAMU) and the Erasmus Plus Programme. We have particularly close ties, spanning several decades, with Hochschule Bremerhaven and Shanghai Maritime University. Our cooperation includes student and faculty exchanges and joint research projects. We also work closely with the Pomeranian socio-economic environment.*

*Research teams from our University carry out projects with ports, shipyards and other companies in the region. They also actively participate in the work of the International Maritime Organisation (IMO). The University is also intensively active in the area of offshore wind energy and has begun the construction of an Offshore Centre in Gdańsk as well as establishing the Offshore Wind Energy Centre to support the development of this sector through education, training and consultancy. We have also concluded a number of agreements and entered into cooperation with the largest companies in the energy sector in Poland, including PGE, PKN Orlen, Polenergia, RWE, and Lotos Petrobaltic. Thanks to research teams with unique competencies and an intelligent combination of science and practice, we are confident that Gdynia Maritime University will continue to play an important role in the economic development of the Pomeranian region.*

*Prof. dr hab. inż. kpt. ż. w. Adam Weintrit,  
Rector of the Maritime University in Gdynia*

The unit responsible for cooperation between  
science and business:

Intellectual Property and  
Research Commercialisation Team



Tel. 58-5586-402



[biznes@umg.edu.pl](mailto:biznes@umg.edu.pl)





# ACADEMY OF FINE ARTS IN GDAŃSK



ACADEMY  
OF FINE ARTS  
IN GDAŃSK

4

FACULTIES

7

FIELDS OF STUDY

197

RESEARCH AND  
DIDACTIC STAFF

Academy of Fine Arts in Gdańsk is an art school whose mission is defined both by its responsibility for the individual development of the talents of young art students and by the awareness of co-creating the future of Polish culture, its material evidence, as well as the system of values forming our national identity and its connections with European and universal culture. The idea of art education should link the training of skills and the acquisition of competencies specific to individual disciplines of art and design with the liberation of the creativity of young artists and their orientation to tradition and cultural heritage – regardless of their attitudes and worldviews.

As part of the Erasmus+ programme, the Academy of Fine Arts in Gdańsk cooperates with almost 100 universities in Europe and several from outside of the European Union, including: University of Montenegro (Montenegro), Tbilisi State Academy of Arts (Georgia), Lviv National Academy of Arts (Ukraine), Holon Institute of Technology (Israel), and Shenkar. Engineering. Design. Art. (Israel).



photo: T. Kwiatkowski



Data for the 2020/2021 academic year:

791

STUDENTS

24

FOREIGN STUDENTS

250

GRADUATES

15

CIRCLES AND  
STUDENT  
ORGANISATIONS



photo: B. Zukowski

*The Academy of Fine Arts in Gdańsk has been educating artists, designers and culture animators who are successful in the field of art, science and business for over 75 years. We offer our students an individualised approach to lectures, friendly curricula, modern educational infrastructure and a wide range of extracurricular activities and trips abroad. Studying at the Academy of Fine Arts in Gdańsk is an opportunity to develop skills and acquire competences by developing talents in individual disciplines of art, both artistic and design.*

*People interested in continuing their education at the largest art university in northern Poland have the opportunity to pursue their passions and gain knowledge at the Faculties of Architecture and Design, Graphics, Painting, and Sculpture and Intermedia. In times of uncertainty, art has become a haven for investment security. It also affects young art. That is why, we are the first art university in Poland, to launch the online sale of works by our students and graduates on a commission basis. We do not compete with auction houses and professional galleries, which also host our graduates. We are guided by the mission of educating the artistic society.*

*Prof. dr hab. Krzysztof Polkowski,  
Rector of the Academy of Fine Arts in Gdańsk*

Person responsible for cooperation between  
science and business:

Prof. ASP, dr hab. Iwona Dzierżko-Buka  
Rector's representative for commercialisation

 [iwona.dzierzko-bukal@asp.gda.pl](mailto:iwona.dzierzko-bukal@asp.gda.pl)



## POMERANIAN UNIVERSITY IN SŁUPSK



10

FACULTIES

27

FIELDS OF STUDY

376

RESEARCH AND  
DIDACTIC STAFF



The Pomeranian Academy in Słupsk is a public university where tradition and modernity meet. The tradition is built on the achievements of over 50 years of scientific and didactic work, the established position of the academic centre, as well as outstanding specialists. The University was founded in 1969 as a Teacher Training College which, as a result of development and numerous transformations in the following decades, was transformed into the Higher School of Pedagogy, the Pomeranian Academy of Pedagogy, to adopt its present name of Pomeranian Academy in Słupsk in 2006.

In terms of tradition, the University's mission towards the society is co-creating and preserving cultural and national identity while respecting different cultures and traditions, acquiring, interpreting, storing and transmitting knowledge in accordance with the canon of universal knowledge, fostering a critical attitude towards the reality in the sense of responsibility for the future of an individual, Poland, Europe and the world.

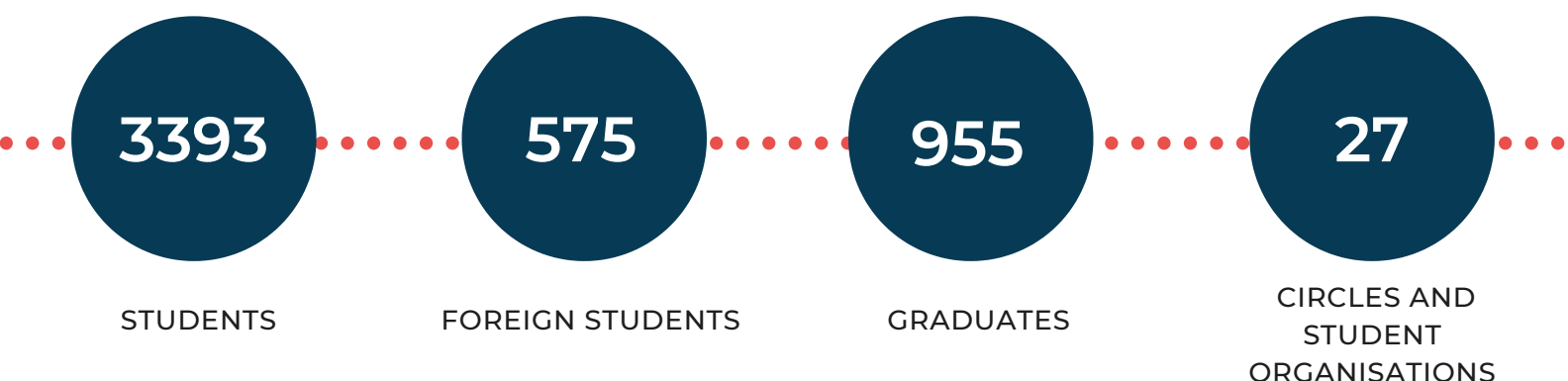
Dynamic development of the Pomeranian Academy in Słupsk means, on the one hand successive expansion of the didactic offer, where apart from traditional academic courses, modern and innovative practical specialties, adjusted to the needs of today's job market are being opened, and on the other hand training and improving its own research staff, including as part of the Doctoral School. The University fulfils its mission by conducting studies and research in the fields of humanities, social science, natural sciences, engineering and technology, medical and health science, and the arts.

Being an important point on the map of the sub-region, Pomeranian Academy in Słupsk cooperates fruitfully with the economic environment and responds to the current needs of society. The result of this cooperation are joint projects, modern forms of continuing education, and pro-social programmes implemented by the University.





data for the 2020/2021 academic year:



*The Pomeranian Academy in Slupsk is a university whose mission has been continuously connected with the region for over 50 years. At the same time, we are characterised by a high level of internationalisation. The delivery of the University's mission therefore requires constant contact and cooperation with the external environment – from partner academic centres, institutions and state and local government organisations, to the business sector - the main recipient of staff educated in accordance with the needs of the current labour market.*

*The Pomeranian Academy in Slupsk, recognising these interdependencies and the need for synergy, has been long implementing projects aimed at strengthening the position of the university as one of the pillars necessary to strengthen the potential of the local community - the city and its surroundings. We implement new directions and educational paths developed with representatives of the economy, undertake innovative research and implement projects on a national and international scale. Our task is to create and adapt to the needs of the region to such an extent that young people see their future in terms of education and then careers precisely in our sub region.*

*Dr hab. inż. Zbigniew Osadowski, Professor of PA,  
Rector of Pomeranian Academy in Slupsk*

**Person responsible for cooperation between  
science and business:**

**Sonia Hilarecka**  
Innovation Broker at the Office of Development and  
Cooperation



[sonia.hilarecka@apsl.edu.pl](mailto:sonia.hilarecka@apsl.edu.pl)



6

## INVEST IN POMERANIA



*Invest in Pomerania is a non-profit local government initiative, coordinated by the Pomerania Development Agency, which helps foreign investors implement investment projects in Pomerania. It serves as a "one-stop-shop", providing investors with support at every stage of the investment process. Over the last decade, Invest in Pomerania has successfully completed over 150 projects and created over 20,000 jobs.*

# 10 YEARS OF INVEST IN POMERANIA

1237

Investment queries processed

OVER  
150

Delivered investment projects

20595

New jobs in the region

## "WE CARE MORE"

Invest in Pomerania is a local government initiative whose main task is to promote the economy of the Pomeranian region and attract new investment projects. As part of our operations, we provide investors with comprehensive investment advisory services. Our activities have been repeatedly recognised in the rankings of the Financial Times, fDi Intelligence, Milken Institute, Polish Investment and Trade Agency, and ABSL.





# OUR SUPPORT

## INFORMATION

Full report on the region's economy, key industries, real estate, HR, regulations

## INVESTMENT OFFER

Offers of investment areas, production halls and warehouses, offices

## INCENTIVES

Information on available financial and operational incentives. Individual support offers

## STUDY VISITS

Full organisation of visits – reference meetings with companies, HR agencies, RE, property site visits

## MARKETING & PR

Promoting new projects, including organising a press conference for key investors

## INVESTMENT PROCESS SUPPORT

Support in all matters related to the construction process

## EMPLOYER BRANDING

Promoting the company in terms of building an image of an attractive employer

## TALENT ATTRACTION

Access to jobs@pomerania recruitment platform and promotional campaigns.

## BUSINESS DEVELOPMENT

Matchmaking, joint marketing activities during international fairs

## INVESTOR SPOKESPERSON

Ongoing support on all administrative issues





## CONTACT US:



### **MARCIN GRZEGORY**

**Deputy Director of Invest in Pomerania**

tel. (+48) 609 860 060

marcin.grzegory@investinpomerania.pl



### **ANNA JAGODZIŃSKA-WARZYCH**

**Investor Spokesperson, Investor Relations Project Manager**

tel. (+48) 605 604 475

anna.jagodzinska-warzych@investinpomerania.pl



### **MONIKA WÓJCIK**

**Industrial Sectors Promotion Senior Project Manager**

tel. (+48) 500 351 535

monika.wojcik@investinpomerania.pl



### **TOMASZ GRABOWSKI**

**Analyst Projekt Manager**

tel. (+48) 573 161 556

tomasz.grabowski@investinpomerania.pl



# Invest in Pomerania

**We care more**

[www.investinpomerania.pl](http://www.investinpomerania.pl)