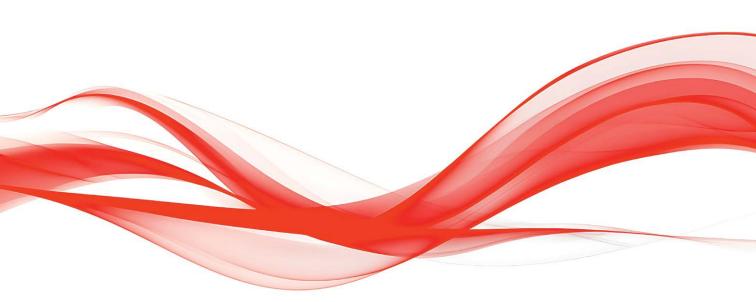






Welcome to Poland

AGH University of Krakow



AGH University Welcomes You! 2.0

Development of AGH University's potential for comprehensive service to foreign visitors and effective international promotion





Editors: Mentari Mukti, Aleksandra George, Zuzanna Margas,

Marcin Bielowicz

Graphic Design: Mirosław Dryla, Mentari Mukti

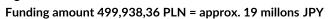
Photographers: Filip Boratyn

This publication includes photos from the following sources: AGH University Krakow Student Photo Agency (KSAF AGH University), AGH University archives, ESN archives, Polish Investment and Trade Agency

The Project has been co-financed by the Polish National Agency for Academic Exchange under the Welcome to Poland Programme.



Project Name: AGH University Welcomes You! 2.0 Agreement no. BNP/WTP/2023/1/00147/U/00001







DNAL AGENCY











Welcome to Poland 2.0

Table	of	Contents:
IUDIC	٠.	Contcines.

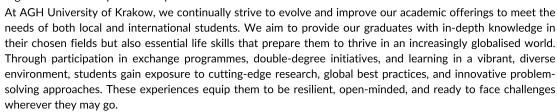
Message from our Rector4	
Welcome to the AGH University of Krakow!5	i
NAWA Welcome to Poland Programme6)
Reasons to Study and Research in Poland8	;
Krakow - The Cultural Capital of Poland9	1
About the AGH University of Krakow)
Our Faculties	
Our Focus	
Initiatives Supporting Research and Mobility	;
AGH University's Research Projects	
Student Research Clubs	į
Student Organisations)
Erasmus+ at AGH University	,
NAWA Educational Support Programmes	;
Other Scholarship Programmes	1
Our Campus)
Achievements and Recognition21	
International Cooperation at AGH University	
Cooperation with Japan	;
Key Milestone of the Cooperation Between AGH University and Japan25	į
AGH University's Main Partners in Japan	,
Scientific Collaboration with Japan	
Key Collaborative Initiatives with SIT	;
AGH University Alumni Association in Tokyo	į
AGH University at Expo 2025 Osaka, Kansai	,
Path to Professional Success	;
Alumni Profiles and Testimonies	,

Message from our Rector

Dear Readers.

It is with great pleasure that I present to you the second edition of the "AGH University Welcome to Poland" brochure. International cooperation is a cornerstone of higher education institutions worldwide. Leading universities recognize the crucial role internationalisation plays in today's dynamic and interconnected digital world. It enhances knowledge exchange, drives innovation and accelerates groundbreaking research. At AGH University of Krakow, we embrace these global trends and are committed to staying connected with the ever-evolving international landscape.

Since 1919, AGH University of Krakow has been at the forefront of educating professionals for both Polish and international industries. Our alumni have built successful careers in various countries and continents, where they are highly regarded for their expertise and professionalism.



Our collaborative projects significantly enhance the quality of both education and research, contributing to the advancement of knowledge and innovation. These initiatives play a crucial role in tackling global challenges, including climate change, rapid technological advancements, and the development of space technologies. It is worth highlighting that AGH University is the first institution in Poland—and one of the few in Europe—to have a dedicated Faculty of Space Technologies and a Department of Space Technologies. By working together, we are better equipped to face complex global issues that demand creative and forward-thinking solutions. In line with our commitment to deepening international cooperation, we are actively expanding our network of partner institutions and seeking opportunities for joint research projects, student exchanges, and participation in international conferences.

As we continue this exciting journey toward greater global engagement, we warmly invite you to join us. Together, we can make a lasting impact and create a more connected and innovative future.

Enjoy the read, Prof. Dr hab. Eng. Jerzy Lis Rector of the AGH University of Krakow



This brochure has compiled the most valuable and relevant information to make your stay at Krakow and our university as enjoyable as possible. Additionally, we offer personalized advice and specialized assistance through our Welcome Point. The AGH University Welcome Point staff offers specialist assistance and advice on:

- Immigration and visa applications
- Accommodation
- Mealth insurance
- Practical tips on life and culture in Poland & many more!

We will assist you in obtaining the necessary contacts and preparing for your arrival at AGH University, making your stay with us successful and enjoyable.

Where to find us?



30 Mickiewicza Ave., 30-059 Krakow C-1 Building, 1st floor, room 108.



wtp@agh.edu.pl



Monday-Friday, 08:00 to 15:00



+48 12 617 57 42 +48 12 617 57 29

Visit our website:



Our International students visiting Welcome Point at AGH University

















d tolerance

vironmen

NAWA Welcome to Poland Programme

The Centre for International Affairs has twice been a beneficiary of the NAWA Welcome to Poland project entitled 'Developing the potential of AGH University in terms of comprehensive services for foreign guests and effective international promotion'.

The aim of the project is to further enhance AGH University's capacity to accommodate and support students, doctoral students, and research and teaching staff from abroad. The project also envisages intensifying activities to promote the university's educational offer internationally, with a particular focus on cooperation with foreign graduates of AGH University.

NO FIGURE 101 O2 WK Kr

Launch of Welcome Point at AGH University

International guests at AGH University can easily find resources to start their careers and settle into life in Poland

Website and Promotional Materials

Which help internationals guest navigates their stay in Krakow, Poland

International Conferences & Various Training

'The Impact of Internationalization on the Openness and Tolerance of the University Environment'



International Mental Health Week

Which included a stress management workshop for international guests and psychological consultations

Website Rebranding, Brochure & Spot

Created an information brochure and recorded a spot promoting AGH University and our Japanese Alumni

Various Workshops and Trainings

Conducted a training course entitled 'Cultural Orientation in Poland', upcoming events will be 'My 2 Minutes' and 'How to Create My First Start-up in Poland'





AGH University will have the opportunity to promote its educational offer and Polish Science at EXPO 2025 in Osaka, Kansai, together with representatives of AGH University's student research clubs and Shibaura Institute of Technology's representatives.













Conference: "The Impact of Internationalization on the Openness and Tolerance of the University Environment" and **Opening Ceremony of Welcome Point** at AGH University, led by Vice-Rector for Cooperation Prof. R. Wiśniowski and Dr. Piotr Kępski (NAWA) on April 19, 2023. Funded by the first edition of the Welcome to Poland programme.





Reasons to Study and Research in Poland

Poland is an attractive destination for students from all over the world, offering high-quality education in a vibrant, international environment. The country is home to over 380 universities, many of which provide a wide range of study programmes in English.

A large portion of the younger generation in Poland speaks fluent English, and in major cities, there are numerous international career opportunities for individuals from diverse backgrounds.

Moreover, the cost of living in Poland is significantly lower than in most of Western Europe, allowing students to enjoy an urban lifestyle while studying.

Poland's central geographical location in Europe facilitates easy travel to most European destinations within a 1-2 hour flight. Most larger cities have airports, with several low-cost airlines offering flights to various destinations in Europe and beyond.

Facts and Figures about Poland:

- population of over 38 million people
- 1.3 million students
- 107,130 international students
- 6th largest country in the EU
- High English language proficiency 13th (out of 113) in the global EF Proficiency Index 2023
- One of the safest countries in the world (according to the Global Peace Index 2024)
- 16 UNESCO Heritage Sites

Currency: 1 złoty (PLN) = approx. 38 JPY









Krakow - The Cultural Capital of Poland

Krakow is one of the most beautiful cities in Poland and Europe, known for its heritage buildings, rich history and diverse academic, economic, cultural and artistic life.









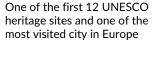


Leading academic centre in Poland since the 14th century

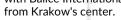
Abundance of cafes.



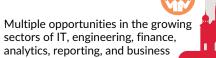
services



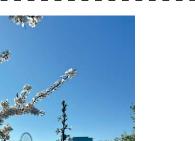
Convenient access to Europe and beyond with Balice International Airport just 11 km



















About the AGH University of Krakow

10



AGH University is a modern, globally-oriented, collaborative institution that actively participates in fostering a knowledge-based society and creating innovative technologies. AGH University provides education and carries out scientific research in line with the contemporary needs of the economy while also influencing the development of research areas and the creation of new fields of study.

AGH University focuses on the following research areas:

Space Technologies: from satellite innovation to space-based applications and biomedical breakthrough

Crossing boundaries: experimental high energy physics, extreme states of matter, interdisciplinary applications

Design, production, testing of modern materials and future technologies

> Artificial Intelligent, telecommunication, computer control and operation technologies

New technologies for the

Energy Sources & Storage

Water - Energy - Climate: interdisciplinary approach to sustainable development

Technical solutions: from fundamental research, through modelling and design, to prototypes

circular economy

Sustainable and Renewable

Materials, technologies, and processes inspired by nature

RESEARCH

AREAS



11

The university offers a wide range of specialised courses at a very high level of education. Thanks to courses taught by professionals and well-equipped laboratories, students have the opportunity not only to acquire theoretical knowledge, but also to apply it in practice.

Faculty List

- · Faculty of Computer Science, Electronics and Telecommunications
- · Faculty of Electrical Engineering, Automatics, **Computer Science and** Biomedical Engineering
- Faculty of Computer Science

- Faculty of Humanities
- Faculty of Management

E WAY

- Geophysics and **Environmental Protection**
 - · Faculty of Geo-Data Science, Geodesy, and Environmental Engineering
 - Faculty of Civil Engineering and Resource Management

Faculty of Geology,

- Faculty of Materials Science and Ceramics
- Faculty of Metals Engineering and Industrial Computer Science
- Faculty of Non-Ferrous Metals
- Faculty of Foundry Engineering
- · Academic Centre for Materials and Nanotechnology
- Faculty of Physics and **Applied Computer Science**

8

 Faculty of Applied Mathematics

- Faculty of Drilling, Oil and
- · Faculty of Energy and Fuels
- Faculty of Mechanical **Engineering and Robotics**
- Faculty of Space **Technologies**

Auxiliary Units

Academic Computer Centre CYFRONET, Main Library, Cybersecurity Centre, Center of Excellence in Artificial Intelligence, Centre of Energy, UNESCO Chair for Science, Technology, and Engineering Education at the AGH University, Department of Foreign Languages, and Department of Sport and Physical Education

Doctoral School

AGH University Doctoral School











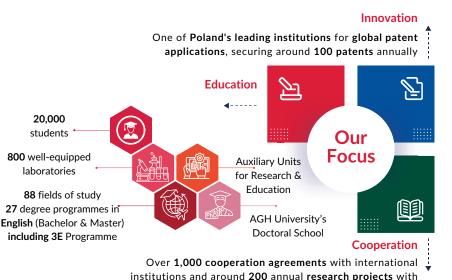


Our Focus

12

AGH University of Krakow is a renowned Polish institution specializing in research, innovation, and education. The university offers a wide range of study programmes, conducts advanced scientific research, and actively collaborates with international partners. With modern laboratories and a strong focus on technological development, AGH University plays a key role in driving innovation and contributing to global scientific progress.













foreign partners

Initiatives Supporting Research and Mobility

13

University is actively engaged in advancing scientific research and international collaboration. The university participates in prestigious programmes supporting career development, and academic mobility. By implementing strategic initiatives, joining global networks, and contributing to international projects, AGH University strengthens its position as a leading research institution, fostering technological progress and supporting scientists at all career stages.

HR Excellence in Research



AGH University received the HR Excellence in Research award from the European Commission for its HR EXCELLENCE IN RESEARCH commitment to the European Charter for Researchers and the Code of Conduct.

Its "HR4R Strategy" outlines a 2024-2025 action plan focusing on ethics, recruitment, working conditions, and training. The university regularly evaluates its progress to ensure transparency and support for researchers at all career stages.

UNIVERSEH



UNIVERSEH European Space University for Earth **UNIVERSEH** and Humanity is a consortium of seven universities from seven countries, including AGH University of Krakow.

AGH University contributes to projects on exploration, emerging technologies, sustainability, and satellite data



Initiative of Excellence - Research **University (IDUB)**



University recognized in the first "Initiative of Excellence -Research University" (IDUB) competition, placing among Poland's top 10 universities.

As part of this programme, it implements 28 initiatives to enhance research and education, including 8 for professors and 7 for doctoral students.

EURAXESS Network



AGH University has joined the EURAXESS network, which supports the mobility and career development of international researchers.

Active in 43 countries with over 670 Welcome Centres. EURAXESS offers personalized relocation assistance and access to job and funding opportunities. As part of this network, AGH University enhances support for international researchers, promotes collaboration, and access to European projects and events. AGH University's Welcome Point at the Centre for International Affairs helps researchers, PhD candidates, and students integrate smoothly. In Poland, EURAXESS is coordinated by NAWA.

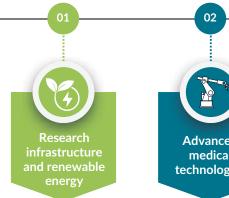




AGH University's Research Projects

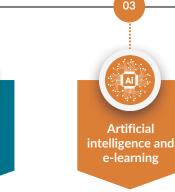
14

The AGH University of Krakow is a leader in innovative scientific and technological research. Our projects range from nanotechnology and biomaterials to artificial intelligence and renewable energy sources.



- National 5G Lab advancing next-gen telecommunication technologies.
- · National Centre for Geothermal and Heat Pumps - researching renewable energy efficiency.

- Advanced medical technologies
- BiofunCardio development of biofunctional substrates for the differentiation of stem cells into cardiomyocytes.
- OPUS project polymeric antibiotic carriers for the treatment of respiratory infections.



- Al4AGH research into modern artificial intelligence algorithms.
- NEXUS project implementation of activities related to **Gender Equality Plans** in European universities.



- V4-Korea project research into perovskite photovoltaic cells with an efficiency of over 27%.
- OPUS 25 grant development of Cu-(Pd, Ag, Zn)-(B-g-C3N4) hybrid materials for CO2 conversion.

Through interdisciplinary projects and cooperation with research centres around the world, AGH University continually contributes to technological progress and the development of a knowledgebased economy.

Student Research Clubs

15

AGH University of Krakow is not only a prestigious technical university, but also a place where students can develop their passions and skills within 140 student's scientific research clubs. Thanks to the commitment and determination of young scientists, AGH University carries out innovative projects that change the world. Among them, one can highlight:



Energy, robotics and

- AGH Solar Boat develops propulsion for autonomous water stations and will present at EXPO 2025 in
- AGH Solar Plane won KOKOS competition with their unmanned lifting aircraft Rura and will present at EXPO 2025 in Osaka.
- AGH EKO-ENERGIA won KOKOS 2023 Ecology and



- Cipher Science Groups focuses on cryptography and organizes top cyber security events.
- ZeroDay competes in international Capture The Flag (CTF) contests, earning recognition.
- Spectrum Group won the 2019 IEEE Signal **Processing Cup and** multiple tech awards.

In addition, several groups were recognised in the competition 'Student Scientific Clubs Create Innovations' organised by the Ministry of Education and Science and received funding for projects:



Space

2025.

Ambitions

transport system.

SpaceTeam AGH won the 2023

Over the Dusty Moon Challenge with an innovative lunar material

AGH Space Systems secured top

spots in the CanSat Competition

and rover challenges worldwide.

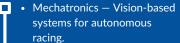
developing Poland's first student

observation satellite, launching in

SatLab AGH and AGH Space

Technology Centre are

- AGH Drone Engineering UAV vision control.
- AGH Solar Boat Autonomous water propulsion.
- Kinematics Composite suspension for SAE vehicles.



• Transpeed – Hyperloop testing in a vacuum.













Student Organisations

16

AGH University hosts approximately 30 student organisations like IAESTE, Erasmus Student Network (ESN), and Board of European Students of Technology (BEST), which enrich academic life through soft skills development, cultural exchange, and practical experiences.

Erasmus Student Network (ESN)

ESN AGH University supports international students in exchange programmes like Erasmus+, helping them integrate through events, trips, and cultural activities. Recently, it collaborated with 16 partners, hosted 211 events, and expanded its



IAESTE AGH University

IAESTE AGH University supports professional development through initiatives like 'Level UP Your Skills,' offering mock interviews, CV assessments, and soft skills workshops.

BEST AGH University

BEST AGH University of Krakow connects students, academia, and businesses, organizing science courses that combine learning, networking, and cultural exploration across Europe.

Erasmus+ at AGH University

17

For the past 25 years, the Erasmus+ Programme has played a significant role in shaping international cooperation and partnerships at AGH University in Krakow. Each year, we welcome approximately 700 students and 130 staff members through the Erasmus+ Programme. Additionally, we regularly host visiting professors from universities around the world, who are renowned researchers and leading experts in their fields.

Erasmus+ Highlights at the AGH University of Krakow



Average Numbers

around 400 Erasmus+ students arriving AGH University Krakow every year (KA 131/KA171)



Past 25 years

Student Mobilities

over 4,000 Erasmus+ AGH University student mobilities (studies and interships)



Past 25 years -Staff Mobilities

over 1,200 Erasmus+ staff mobilities, either for training or teaching



Erasmus+ KA107/171 in Numbers

• 126 student mobilities since 2015

• 331 staff mobilities since 2015



Total Budget for Erasmus+ KA107/171 Programme

Since 2015, a total funding of approx. 1,635,482,00 €



Between 2015 and 2020, International Credit Mobility (ICM) enabled around 220,000 students and staff from 168
Programme and Partner Countries to move between
Higher Education Institutions (HEIs) in Europe and beyond

















NAWA Educational Support Programmes

18



01 Poland My First **Choice Programme**

The programme offers scholarships to talented students from 42 countries including Japan for full-time second-cycle studies at Polish universities. It provides a tuition fee exemption at public universities and a scholarship for the duration of the studies.



04 The ULAM **Programme**

The programme invites international PhD holders to research, teach, and collaborate in Poland. promoting knowledge 11,500 monthly, a mobility allowance, and funding for stays of 6-24 months.



Banach Scholarship Programme

The programme supports young talents from 44 developing countries by offering scholarships for full-time second-cycle studies at Polish universities. It aims to enhance socio-economic progress through education. The scholarship includes a monthly stipend (1,800 PLN), tuition fee exemption at public universities. and a one-time mobility allowance



Anders Scholarship Programme

For young people of Polish origin with a Pole's Card or dual citizenship who completed secondary education abroad. Supports Polish-taught university studies (excluding applied exchange. Fellows receive PLN linguistics and foreign languages), with an optional language preparatory course.



03 Marie Skłodowska-**Curie Staff Exchanges**

The programme supports research and innovation institutions—universities. companies, and non-academic organizations—in international and cross-sector collaboration. Open to consortia of at least three institutions from different countries, it funds staff exchanges, joint research, training, and networking, fostering skill development and EU/non-EU cooperation.



06 Zawacka Exchange Programme

The Zawacka Exchange Programme supports international academic cooperation through study visits, research, and teaching at Polish institutions. Open to students and researchers from universities supervised by Poland's Ministry of Science and Higher Education.

Other Scholarship Programmes

19



CEEPUS Programme

Central European Exchange Programme for University Studies (CEEPUS). This programme supports students, PhD candidates, and research staff from Central and Eastern Europe (including Albania, Austria, Poland, and others) to engage in academic exchanges in Poland. It focuses on education, work placements, and teacher training, fostering cooperation between higher education institutions. The scholarship covers full-time studies in various fields (except applied linguistics and foreign languages), with studies conducted in Polish after a preparatory language course.



Vulcanus Programme

This programme offers students from the EU and Single Market-associated countries paid internships in Japanese industrial firms. It aims to introduce advanced technologies, teach Japanese, and deepen cultural understanding. Launched in 1997, Poland joined in 2004, with 47 Polish participants benefiting since then.



















Our Campus

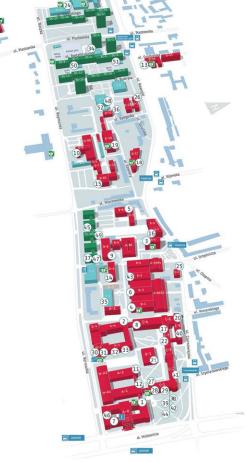
The AGH University's Student Campus is the largest campus in Poland

Spanning nearly 40 hectares, the campus is just 10 minutes by tram or bus from the Main Railway Station, a 6-minute walk to the Old Town, and 30 minutes by bus to Krakow Airport. It blends historic and modern architecture with outdoor sculptures, green spaces, and research-themed installations. There are **20 dormitories** with over **8.000 beds** in three standards (all with free Wi-Fi) and convenient amenities like restaurants, cafes, pharmacies, print shops, and ATMs. The campus also features modern sports facilities and four student clubs hosting around 360 events annually.



AGH University Campus





Achievements and Recognition

Our university has a well-established position in the country and is well-recognised abroad, continuously ranking high in the most prestigious worldwide rankings and has excellence reputation abroad



1st place among Polish Technical Universities



1st place among Polish Technical Universities 2nd place among Polish Technical Universities (Country Rank)





Accreditation for the Faculty Automation, Computer Science and Biomedical Engineering



1st place among Polish **Technical Universities** 150th place in Europe 506th place in the World



1st place among Polish



1st place among Polish **Technical Universities**



Technical Universities



Technical Universities



1st place among Polish Technical Universities

SCIMAGO INSTITUTIONS



1st place among Polish

Technical Universities

Iniversity Ranking by

Academic Performance

2nd place among Polish **Technical Universities**



2nd place among Polish



2nd place among Polish Technical Universities (Country Rank)



Program study of Mechatronic Engineering accredited by the **Engineering Accreditation** Comission of ABET













International Cooperation at AGH University

22

AGH University is a globally connected institution, actively engaging in international education and scientific cooperation. Through numerous academic agreements, exchange programmes, and research collaborations, the university fosters strong partnerships with institutions worldwide. Its commitment to innovation and excellence is reflected in extensive research output, collaborations with top global scientists, and contributions to diverse scientific fields.



International Cooperation at AGH University Education Cooperation

300+ General Agreements

With partners in over 60 countries, most are with universities in Ukraine. France, China, the U.S., Germany, and Japan.

600+ Erasmus+ Agreements

Each year, approximately 700 students and 130 employees. both incoming and outgoing, take part in academic University

452 Visiting **Professors**

Since 2012, the university has welcomed most guests from Ukraine (61), Germany (56), India (33), France (32), the USA (24), Saudi Arabia (21), Canada (15), the United Kingdom (13), and Japan exchange programmes at AGH (8), reflecting strong global academic ties.

24 Double Degree Agreements



Scientific Cooperation

1,000+ R&D **Agreements**

which more than half are from industry

World Top 2% **Scientists**

79 scientists from AGH University

50,905 Publications

with 446.075 citations, with 8.490 authors. Between 2021 and 2025, 45% of the publications were international collaborations and 3.275 articles appeared in the top 10% of journals.

Research Covers

Engineering (18.4%), physics and astronomy (17.6%), material sciences (14.4%), computer science (10.6%), mathematics (7.8%) and earth sciences (6.2%).

AGH University: Main Collaborator



Its network cover Europe (1,000+ collaborations), Asia (818), North America (392), South America (115), the Middle East (220) and Africa (98).

















Cooperation with Japan

23

AGH University of Krakow has a long-standing tradition of scientific collaboration with Japanese universities and research centers. The first official cooperation agreement was established in 1983 with Kyoto University, granting AGH University scientists access to the Fujitsu VP400 supercomputer and state-of-the-art measurement equipment.

From 2000 to 2025, several agreements were signed with other leading Japanese institutions, including the University of Tokyo (initial agreement in 2013, renewed in 2018) and the Faculty of Engineering at Kyoto University. Notably, AGH University is the only European university partnered with the Japan Coal Energy Center (JCOAL) in advanced energy systems research.

This collaboration has yielded significant outcomes:

- 200+ joint publications, books, and book chapters
- Numerous joint seminars and conferences
- Dual doctoral programmes, with degrees awarded in both countries.



Three Japanese University professors who cooperate with AGH University were awarded medal of the national education commission:

Prof. Kenjiro Suzuki, Kyoto University, in 2001

Prof. Hiruki Ozoe, Kyushu University, in 2005

Prof. Akito Takasaki, Shibaura Institute of Technology, in 2011



AGH





25



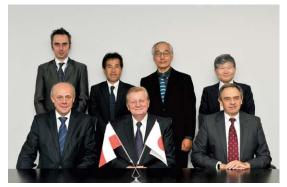




Our Cooperation

24







Polish-Japanese seminar with participation of Hokkaido University scientists (2014), Visit of AGH University of Krakow to Institute of Industrial Science, The University of Tokyo (2014), and Guest Lecture on "Al and Robotics for Space Missions" by Prof. Kazuya Yoshida (22.05.2024) - Space Technologies Centre









Bilateral Agreement

Kyoto University (1983), Kyushu University (2000), Shibaura Institute of Technology (2004), Hokkaido University (2007), University of Toyama (2018), Muroran Institute of Technology (2009), Kumamoto University (2010), Ryukoku University (2010), Tokyo Metropolitan University (2011), The University of Tokyo (2013), Rigaku Corporation, JCOAL (2014), and Tohoku University (2017).

Erasmus+ Agreement

Tohoku University (2018), Shibaura Institute of Technology (2018), Hokkaido University (2019), and The University of Tokyo (2019). In this programme, approximately 12 incoming mobilities from Japan and 9 outgoing mobilities to Japan have been realized.

Double Degree Programme

Currently, AGH University has 2 double degree programmes: one with Hokkaido University, resulting in two doctoral degrees awarded to 2 Japanese Students, and another with Shibaura Institute of Technology, where 10 doctoral degrees have been awarded — 9 to Polish students and 1 to a Japanese student. In the past, we also had a double degree programme with Kyushu University, through which three doctoral degrees were jointly awarded by AGH University and Kyushu University.



Number of Student Mobility Under Bilateral Agreement Framework (2016-2025)

>50 Japanese Students Mobility to AGH University

AGH University organize winter school every year for Japanese Students

>40 AGH University Students Mobility to Japan



Selected Research Projects Realized with Cooperation of Japanese Institution (2016-2025)

NCBR- JCOAL Project

AGH (Prof. J. Szmyd) - Tokyo University (Prof. S. Kaneko) Fundamental Drying Characteristics of Polish Lignite, Increasing efficiency of lignite fuelled power plants by low rank coal upgrading technologies - Innovating superheated steam drying system (NCBR-JCOAL Project)

Project financed by the Japan Society for the Promotion of Science and the Polish Academy of Sciences, AGH University (Prof. J. Szmyd) – Kyoto University (Prof. H. Yoshida) Development of mesoscale electrode-electrolyte interfaces in SOFCs using 3D printing for efficient energy conversion)

AGH University's cooperation with Japan not only strengthens scientific innovation but also nurtures an active exchange of knowledge and expertise.







AGH University's main partners in Japan

Shibaura Institute of Technology (SIT), founded in 1927 in Tokyo, is a leading private university specializing in engineering and science. It hosts 7,592 students and operates 265 research laboratories through partnerships with over 200 universities worldwide, including the University of Sheffield and the University of Queensland. SIT has maintained a strong collaboration with AGH University in energy engineering since 2004. SIT has a global alumni network of over 100,000 and ranks 32nd in Japan (Times Higher Education 2025), 1,501st globally (World University Rankings 2025), and 1,175th in the QS World University Rankings 2024.

public universities. It offers 12 undergraduate faculties and 21 graduate schools, enrolling 17,920 students, including 2,042 international students. HU's partnership with AGH University covers material engineering, ceramics, metallurgy, and industrial computer science. The cooperation includes student exchanges (HUSTEP), visiting professors since 2010 (Prof. T. Ohmi, Prof. K. Matsuura), and two joint PhD diplomas awarded in 2012 and 2015. Currently, Prof. K. Matsuura serves as a research faculty member at AGH University's Faculty of Materials Engineering and Ceramics. HU ranks 8th in Japan (Times Higher Education 2025), 351-400 globally (World University Rankings 2025), and 660th in the QS World

Tōhoku University

The University of Tokyo (UT), founded in 1877, is Japan's oldest and most prestigious university, enrolling 29,213 students, including 5,104 international students. With more than 467,000 alumni, including 13 Nobel laureates and 16 prime ministers, UT has over 500 international agreements and 27 overseas offices. UT collaborates with AGH University on the NCBR-JCOAL project, focusing on the drying process of Polish brown coal. UT ranks 3rd in Japan (Times Higher Education 2025), 28th globally (World University Rankings 2025), and 11th in the QS World University Rankings 2024.

26

Shibaura Institute of Technology



Hokkaido University (HU), founded in 1876 in Sapporo, is one of Japan's most prestigious University Rankings 2024.

Tōhoku University (TU), established in 1907 in Sendai, is one of Japan's top research institutions, with 17,816 students, including 1,746 international students. TU comprises 10 faculties, 19 graduate schools, and six research institutes. Its collaboration with AGH University focuses on mechanical engineering, robotics, and space engineering, including initiatives like the Autumn School on Space Resources and the 7th Space Resources Conference. Notable professors involved in these activities include Prof. K. Yoshida, and Prof. M. Maeda, specializing in space robotics & aerospace engineering. TU is ranked 1st in Japan (Times Higher Education 2025), 120th globally (World University Rankings 2025), and 488th in the QS World University Rankings 2024.

University of Tokyo



тоноки





Scientific Collaboration with Japan

27

Scientific cooperation between AGH University and Japanese universities plays a key role in the development of innovative technologies and knowledge exchange. Thanks to international research projects, academic exchange programmes and joint publications, scientists from both countries can work together on cutting-edge solutions in engineering, IT, or energy,



Scientific Cooperation with Japan

According Scopus and Scival, data from 2014-2023

1.612 Joint **Publications**

Consists of 1.414 scientific articles, 111 conference papers, 39 erratum, 19 Editorial, 15 review papers

118 Japanese Institutions

Includes 1,577 publications with 96 academic institutions, 726 with 12 government institutions, and 12 with 9 corporate institutions.

Renowned Journals

The scientific articles were published in renowned Journals including 336 Journal of Energy Physics, and 285 European Physical Journal C.



Main Research Areas

405 Engineering 1,365 Physics and Astronomy

82 Computer Science 65 Mathematics

106 Material Science

65 Energy

70 Publications

Related to Sustainable Development Goals 7: Affordable and Clean Energy

Main Collaborator Institutions in Japan



AGH University co-authored with Tsukuba University (1,690 articles), The University of Tokyo (1,612 articles), Kyoto University (1,007 articles), Nagoya University (989 articles), Osaka University (987 articles), Institute of Science Tokyo (980 articles), Kobe University (970 articles), Kyushu University (957 articles), Hiroshima University (762 articles), Shibaura Institute of Technology (108 articles), Tohoku University (32 articles), and Hokkaido University (19 articles).









NAGOYA

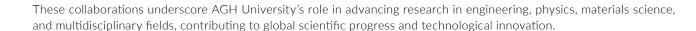


SCIENCE TOKYO



















28 29

Key Collaborative Initiatives with SIT



Prof. Dr hab. Eng. **Tadeusz Słomka** Former Rector of AGH **University of Krakow** 2012-2020

Honorary Doctorate of SIT Awarded on March 2015. Krakow



Prof. Dr hab. Eng. **Jerzy Lis** Rector of AGH **University of Krakow** 2020-2028

Honorary Doctorate of SIT Awarded on November 2024, Tokyo



Prof. Janusz S. Szmvd. D.Sc., Ph.D., Dr.H.C. Rector's Representative for **Cooperation with Japan**

Honorary Doctorate of SIT (March 2015, Krakow) & Laureate of Distinguished International Achievement Award given by SIT (November 2024, Tokyo)

Since 2004, AGH University of Krakow has maintained a strong and lasting partnership with Shibaura Institute of **Technology (SIT).** This collaboration encompasses joint research projects, double-degree programmes, and student and faculty exchanges, fostering deeper institutional ties and advancing the internationalization of education, Together, AGH University and SIT have successfully completed five international research projects, supported by esteemed organizations such as the EU, the Japan Society for the Promotion of Science, NAWA, NCN, and PAN. The 3E joint master's programme has produced 22 graduates, with 30 students currently enrolled. Additionally, 10 doctoral double degrees have been awarded, and more than 150 students have participated in exchange and internship programmes, including Erasmus+. Our researchers have also made notable academic contributions, publishing over 80 papers in prestigious journals listed in the Philadelphia List. These accomplishments underscore our shared commitment to highimpact research and global academic collaboration.

KATAMARAN - Establishing and conducting joint second-cycle studies



Preparation of a study programme related to dual diplomas for level 7 of the European Qualifications Framework in the field of Energy and Environmental Engineering

691.400 PLN

Approx. 27 million JPY funding from NAWA

Joint Master Degree **Programme 3E**

28 June 2021

In collaboration with SIT, a joint master degree programme in Energy and **Environmental Engineering was** established.

from both institutions, offering a distinctive programme study in Poland.

The programme is taught in English to prepare professionals for

the global energy and environmental sectors. As a double-

degree course with SIT, graduates earn a Master of Engineering

February 2024

11 students of double-degree programme had successfully graduated



01

2022 The 3E programme was launched



3E Programme Graduates in Frame































Strategic Partnership Programme

The Strategic Partnership Programme at AGH University has developed international cooperation in science, teaching and innovation through long-term partnerships with universities and research institutions. The programme supported the implementation of joint research and development projects, the exchange of students and academics, and the organisation of international conferences and workshops. As part of this programme, AGH University was able to realise:

30



STRATEGIC PARTNERSHIP Programme

Implementation of long-term research and teaching cooperation with Japan within the Energy and Environmental Engineering degree programme

1.7 Million PLN

equal to 66 million JPY of the grant amount was funded by NAWA







Programme Output and Achievement





- 14 AGH University students visited SIT for a training programme, while 10 SIT students came to AGH University for an educational programme.
- 25 expert visits to AGH University for research & teaching cooperation
- 17 expert visits to SIT within the same framework
- 20 Energy & Environmental Engineering candidates traveled between SIT & AGH for scientific meetings
- A visiting professor from Delft University of Technology for 2-month at AGH University



4 Scientific Meetings



Academic & Resources

- 11 master's theses defended
- 16 scientific articles published
- Enhanced education with newly purchased teaching



- Scientific Summer School Sept 10-28, 2022
- Winter Science School | Feb 9-21, 2023



- SIT-AGH University Symposium on Energy & Environmental Engineering | July 12-14, 2023
- Eurotherm Seminar 118: Hydrogen Energy Technologies | May 8-10, 2024

SPINAKER - Intensive International Education Programmes

International School at AGH University

The programme supports the creation and implementation of intensive international education courses such as summer and winter schools, specialised courses, training and study visits. The programmes are conducted in foreign languages and can be delivered on-site, remotely or in a hybrid format. As a beneficiary, AGH University has carried out the following activities:

PROGRAM SPINAKER

31

Second Edition of SPINAKER at AGH University

Activities

- Global Recruitment Development of regulations and foreign student enrollment.
- Comprehensive Learning Creation of highquality teaching materials.
- Expert Faculty Training Academic tutoring workshops for educators.
- Hybrid Learning Experiences Engaging Winter & Summer Schools

Main Subject Areas

- · Energy Engineering & Sustainability
- Advanced Manufacturing & Automation Environmental Protection & Monitoring
- Groundwater Quality & Management
- Reverse Engineering & Rapid Prototyping • Trenchless Technologies & Gas Pipeline

Participants

- Total of 68 participants, 4 from SIT (Japan) 8 lecturers lead 2 intensive courses where 1
- lecturer is from Japan (Prof. A. Takasaki)



Innovation

Total Grant: 471.588 PLN. approx. 18.2 million JPY





Activities

• IVS Website - A dedicated hub for the Interactive Virtual School.

First Edition of SPINAKER at AGH University

- E-Learning Integration IVS section added to AGH University's platform.
- Digital Résources Electronic materials for online education.
- Faculty Training Mastering online teaching with

Intensive International **Education Programmes**

- Fundamental Energy
- **Problems** Modern Trenchless
- Technology
 Regional & Historical geology
- Deep Sea Mining

Participants

- Total of 62 participants, 6 from SIT (Japan)
- Students and Doctoral Students from Japan. Nepal, Ukraine, and Vietnam
- 8 lecturers lead 4 intensive courses where 1 lecturer is from Japan (Prof. A. Takasaki)

Total Grant: 82,688 PLN approx. 3.2 million JPY

















33



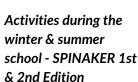


















32









Partner Universities in the SPINAKER Programme













SIT SHIBAURA INSTITUTE OF TECHNOLOGY









SATBAYEV NAME OF AMERICA SACRIFICATION OF AMERICA SACRIFICATION OF AMERICA

















20th Anniversary Celebrations of AGH University - SIT Cooperation

On May 8, 2024, AGH University and SIT commemorated the 20th anniversary of their partnership. This milestone event, attended by distinguished guests, including the Japanese Ambassador to Poland, Mr. Miyajima Akio, provided an opportunity to reflect on the achievements of both institutions and explore future directions for collaboration. A followup ceremony was held on November 5, 2024, at SIT, further commemorating the long-standing cooperation between the two institutions. The anniversary celebration underscored the continued commitment of AGH University and SIT to fostering academic excellence and promoting cultural exchange between Poland and Japan.























20 year of cooperation between AGH University and Shibaura Institute of Technology



Prof. Jerzy Lis,

Rector of AGH University of Krakow

"Our partnership was built on a shared vision and commitment, leading to remarkable achievements. Over the years, we have developed a strong network for academic exchange and research collaboration, enhancing education quality and driving innovative projects."







Prof. Masaomi Kimura

Director of International Programmes Centre, Shibaura Institute of Technology

34

"First of all, on behalf of Shibaura Institute of Technology (SIT), I would like to express my sincere appreciation for NAWA for providing such wonderful support through AGH University. SIT is delighted to continue our collaboration with AGH University of Krakow through the Welcomes You 2.0 Project. This partnership has created invaluable opportunities for cultural exchange and academic growth for our students, faculty, and staff members. We view this project as a vital step toward deepening mutual understanding between Poland and Japan. By facilitating joint research, cross-border academic initiatives, and student exchanges, this collaboration enables our students to experience an international perspective, enhancing their academic and professional aspirations. We are excited to see our partnership with AGH University of Krakow advance further and make meaningful contributions to global education."





Prof. Hisaya Igarashi

The Late Chairman of the Board of Directors Shibaura Institue of Technology

Honorary Consul of AGH University of Krakow Awarded on November 2017, Tokyo



Prof. Akito Takasaki, Dr.Eng., D.Sc.

Former Vice President of Shibaura Institue of Technology

Honorary Consul of AGH University of Krakow Awarded on November 2017, Tokyo



Prof. Kiyotaka Matsuura

Professor at Hokkaido University and AGH University of Krakow

Honorary Consul of AGH University of Krakow Awarded on June 2018, Krakow



Prof. Masato Murakami

Former President of Shibaura Institue of Technology

Honorary Consul of AGH University of Krakow Awarded on November 2024, Tokyo

AGH University Alumni Association in Tokyo

35

On 6 November 2024, AGH University of Krakow celebrated the inauguration of its Alumni Association in Japan, marking a significant step in strengthening academic and cultural ties between Poland and Japan. This milestone event was held under the honorary patronage of the Embassy of the Republic of Poland in Tokyo. The inauguration took place at the Polish Embassy in Tokyo.

The inaugural gathering brought together AGH University alumni, friends, and academic partners from both countries, creating an inspiring platform for networking, collaboration, and community building. Distinguished representatives from prestigious Japanese institutions, including Shibaura Institute of Technology, the University of Tokyo, Hokkaido University, Nagoya Institute of Technology, and Tohoku University, attended the event.













The Inauguration of AGH University Alumni Association in Japan, Tokyo, 6.11.2024













AGH University at Expo 2025 Osaka, Kansai

36







Thirteen Polish universities including AGH University will present their achievements at Expo 2025 in Osaka, which will begin on 13 April and last six months. This prestigious event will bring together participants from 161 countries and regions and 9 international organisations. The Polish pavilion, operating under the tag-line 'Poland. Heritage that fuels the future', will focus on promoting the country's scientific achievements and educational potential. The programme is organised by the National Agency for Academic Exchange (NAWA), which, through its 'Kierunek EXPO' initiative, supports international academic cooperation and popularises Polish higher education.

Among the key events will be the Polish Science Day, which will feature meetings between Polish and Japanese universities and a seminar entitled Study and Research in Poland. Polish universities will present innovative projects, including autonomous vehicles or space technologies. There will also be cultural accents, such as Chopin concerts and Polish language workshops. Leading Japanese universities, including the University of Tokyo, Waseda University and Osaka University, as well as the renowned think tank International Research Center for Japanese Studies, will participate in the Expo.

The project is entitled. 'Participation of the AGH University of Krakow in the International Scientific Event at the World Expo 2025 presentation of research cooperation with Japan in order to strengthen the recognition of Poland through the promotion of Polish science and higher education'.





Poland Pavilon, World Expo 2025, Osaka, Kansai Sources: https://expo.gov.pl/





AGH University projects activities during EXPO:



Showcasing AGH University **Innovation: Solar Boat & Plane** Workshops

22-26.04.2025

•••••





Damian Brzana AGH University Solar Boat Team Member



Przemvsław Domagała AGH University Solar Boat



AGH University's Centre for International Affairs, alongside AGH Solar Plane and AGH Solar Boat student groups, will host hands-on workshops featuring unmanned aerial and autonomous boat models. Part of the Week of Polish Science and Education, this initiative is supported by NAWA's Welcome to Poland project.

Barka and Celka, AGH Solar Boat Team won 3rd overall place at 11th Monako energy Boat Challenge, July 2024









Organization of scientific workshops at Hosei **University in Tokyo** and Kansai **University in Osaka**

14-15.06.2025



Polish - Japanese Symposium on **Hydrogen Energy Technologies** and Advanced Energy Systems

More Information:



02-05.07.2025



JASSO Study Abroad Fair 2025

Embassy of the Republic of Poland in Tokio

26.07.2025











39

Path to Professional Success

38

AGH University of Krakow is your gateway to a prosperous career and high earnings. Recognized as a leader in educating future millionaires, AGH University equips students with top-notch education and skills highly valued by employers. According to Polish Graduates Tracking System, AGH University's alumni earn an average of PLN 7,264. The university boasts impressive statistics:



AGH University: Path to Professional Success

68%

93% Employment Rate

were professionally active or start their own business within six months of graduation



students work

before graduating

Top Earners by Field of Study

7.927+ PLN

Computer Sciences

7.292+ PLN

Mining and Geology

Automation and Robotics, Oil and Gas Engineering, and Electronics and Telecommunications

79%

after graduation

work in jobs aligned with their

education and 56% receive multiple

job offers with nearly 10% earning

salaries of PLN 6.500 net immediately



Company

Where most of our graduates work





5.000+ PLN















Alumni Profiles and Testimonies

Every year, more international students choose Poland for their academic journey, with many launching their future at AGH University of Krakow. A degree from AGH University opens doors to limitless opportunities—whether in research. academia, industry, business, or entrepreneurship, both in Poland and worldwide. No matter where their path leads, our graduates take with them cutting-edge knowledge, invaluable experience, and lifelong connections that shape their success.



Dr Eng. Yosuke Komatsu

Project Research Associate at Institute of Industrial Science, The University of Tokyo

President of AGH University Alumni Association in Tokyo. Former grantee of the Double Degree programme AGH University-SIT

"Studying at AGH University broadens your mind and brings new perspectives. In the beginning I had problems with language barrier, but taking the Polish classes and connecting with people, helped me to adapt and taught me the importance of the cross-culture approach. In Poland I appreciate the sense of community, the friendships that I made, and the beauty of the Polish culture and landscapes. Of course I miss a lot polish pierogi, schabowy, bigos, I cannot name all of them."

Dr Eng. Toko Tokunaga | Assistant Professor, Nagoya Institute of Technology

Department of Physical Engineering, Materials Functions Former grantee of the Double Degree programme between AGH University and Hokkaido University

"I am pleased to share my experience with the Double Degree programme between AGH University of Krakow and Hokkaido University. Throughout the programme, I received generous support from both institutions and warmly remember the kindness of the people in Krakow, from research colleagues to dormitory staff and neighbours. Beyond achieving research results, immersing myself in a different culture and forming friendships that embraced mutual understanding was invaluable. I wholeheartedly endorse this programme and encourage more students to seize this unique and enriching opportunity."



FOR ACADEMIC EXCHANGE

Irie Megumi Former grantee of the 3E programme

"If you are wondering whether is it worth to study at AGH University, I strongly recommend you to try it. I have a lot of mottos, but one of them is "Do not miss the chance that is in front of you, it may never come back." So if you have any chance, in this case studying at AGH University, if you miss it, it will never come back so do not hesitate -just go for it!"

Tomohiro Kinoshita

Employee at Shibaura Institute of Technology

Former grantee of the 3E programme

"Master-level classes in English can be challenging for international students, but the support from friends, colleagues, and dedicated teachers makes it manageable. At AGH University, we study together, take exams side by side, and build lasting friendships. Living in the dormitory enriches this experience — it's a place where connections are easily made, meals are shared, and unforgettable memories are created. Studying at AGH University and living in the dormitory is a truly valuable and memorable experience."







Thank you!

Centre for International Affairs

@ AGH University of Krakow

csm@agh.edu.pl

+48 12 617 57 42 +48 12 617 57 29







