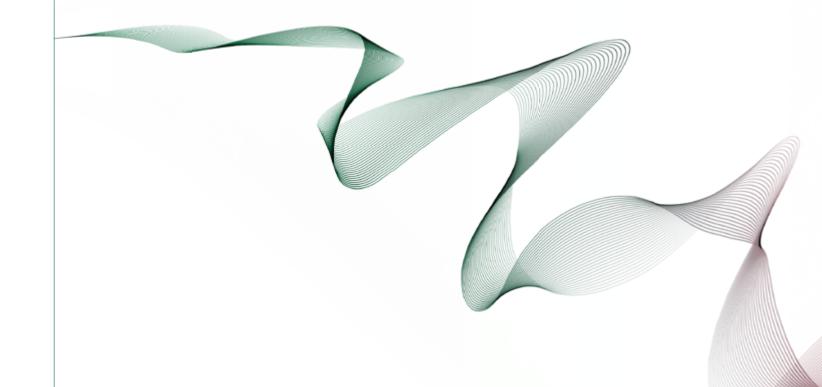
# STRATEGY

OF THE AGH UNIVERSITY
OF SCIENCE AND TECHNOLOGY
IN KRAKOW



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# Introduction





The AGH UNIVERSITY of Science and Technoloqy in Krakow is an institution that fulfils the social mission of creating and transmitting values. A university established in response to the needs of a reborn country that continues to enhance its social role through the development of science, education, and activities that creatively solve real problems of the economy. The AGH UST, as a university with a perennial tradition of exploring and explaining reality, rises tall in the face of new challenges arising from social, technological, and institutional changes, the scale and meaning of which evade predictions and forecasts. Therefore, the strategy of the AGH University of Science and Technology must, first and foremost, be oriented towards internal development, facilitating the use of its strong suits to improve the university's national and international scientific and educational positions.

The previous strategy of the AGH UST, prepared in 2016, served its purpose well. By defining fundamental goals: the implementation of toptier scientific research, the reliable education of students from Poland and abroad, and the efficient organisation in all areas of university activity, the strategy helped to consolidate the significance of the AGH UST in the region, Poland, and around the world. The goals of the previous strategy do remain valid today; however, new conditions in the university environment

demand that the strategy be updated, detailed, operationalised, and include well-defined tasks.

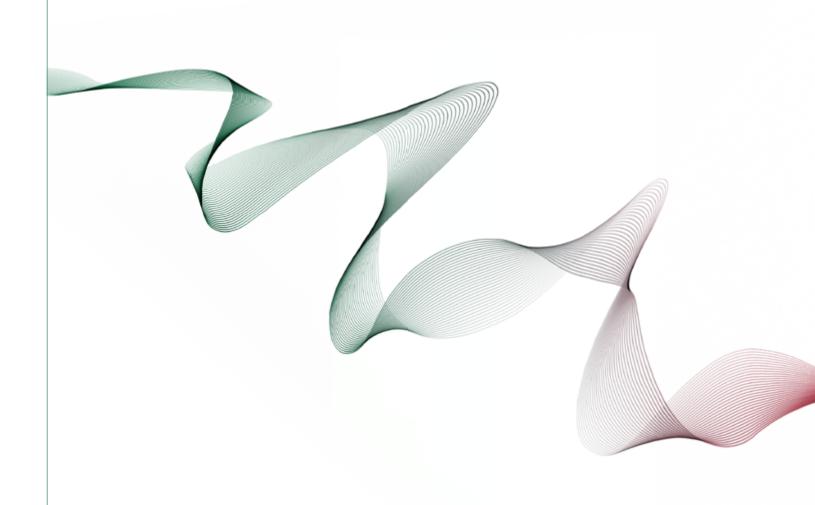
The Strategy of the AGH UST, as a university of values, shall be defined by the pursuit to implement six fundamental goals until 2026:

- Modern education attractive to students and the university environment in Poland and abroad
- University open to students, their professional development and passions
- 3. Leading research university with a high status in Poland and around the world
- University oriented towards national and international cooperation, a leader in innovation and transfer of knowledge
- Attractive workplace for the best scientists, teachers, and support employees
- **6.** Well–managed university with a modern and flexible structure

This strategy charts out directions for the activities planned, but by no means exhausts their catalogue. It has been devised as a framework for making decisions and allocating efforts and resources adequately to the dynamic changes in the conditions of university functioning.

Introduction

Mission, vision, and values of the AGH UST



# Mission of the AGH UST



The AGH UST is a university that has been contributing to the common good of the society for more than a hundred years by developing research and education in the fields of technical, exact, and social sciences, as well as the humanities, ensuring the creation of technological and social inventions to help solve the most challenging problems of the present.

# Vision of the University

The AGH UST has been thriving as a university of the future, based on a more than 100-year-old tradition of accepting scientific challenges, creating technological solutions for the benefit of the economy, and fulfilling tasks that stem from the needs of the state, regional communities, and economic entities.

As a research university, the AGH UST strives to provide top-tier quality in scientific research. At the same time, it has been fortifying knowledge in the fields of technical, exact, and social sciences, as well as the humanities, by developing research that meets the highest international standards of scientific cognition.

The AGH UST actively cultivates its scientific potential and organisational resources employing them towards a comprehensive and sustainable development of Poland and Europe. It fosters cooperation with international and Polish scientific centres to solve the problems of the modern world.

The AGH UST provides the highest level of education, drawing from the achievements of world science. It is a university that launches innovative fields of study in general academic and practical profiles.

Graduates, capable of facing the greatest challenges of the present, become leaders in developing the economy and society.



Our motto: 'KNOWLEDGE — PASSION — BONDS' fully transmits the principles upon which our university has been founded and according to which it develops: KNOWLEDGE means excellent standards of scientific cognition and fidelity in the pursuit of truth and reliability PASSION means the drive to fulfil ones' tasks and perseverance in implementing research and educational goals BONDS means the sense of community of all employees, students, doctoral students, and graduates of the AGH UST.

# Values of the AGH UST |

#### Truth

The foundation of the ethos of the AGH UST employees, students, and doctoral students is the unfettered pursuit of truth, the freedom to conduct scientific research, and the freedom to gain knowledge and seek solutions that best serve individuals and society.

#### Knowledge

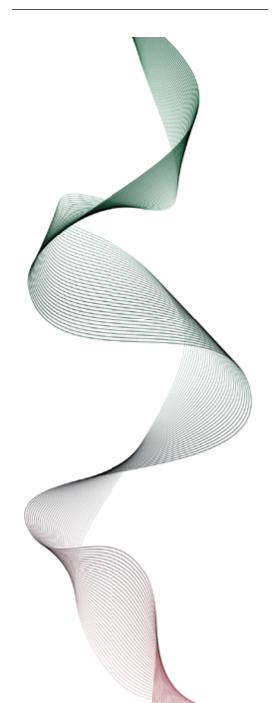
Doing science constitutes a fundamental activity of the AGH UST academic community. As a research university, the AGH UST focuses on top-tier scientific research in the fields of technical, exact, and social sciences, as well as the humanities, cherishing such standards of scientific cognition as reliability, innovation, interdisciplinarity, and cooperation with Polish and international research centres.

#### Integrity

The key principle of the AGH UST is to nurture accessibility and inclusiveness in relation to all types of university activity, to make it a place of equal opportunities, free from prejudice and discrimination, ensuring safety to people working and studying here, in which respect for another human being, equal treatment, and recognition of diversity constitute values that determine the norm for interpersonal relationships, simultaneously preserving the precedence of pursuit of truth and freedom of speech.

#### Cooperation

At the AGH UST, special importance is placed on multifaceted cooperation as a means to carry out scientific research and execute the educational process. The AGH UST creates organisational conditions that are conducive to team— and interdisciplinary work. The university resources allocation procedures favour activities based on cooperation between various university departments, in particular including research and educational projects carried out by interdisciplinary teams.



#### Respect

Well-being of students

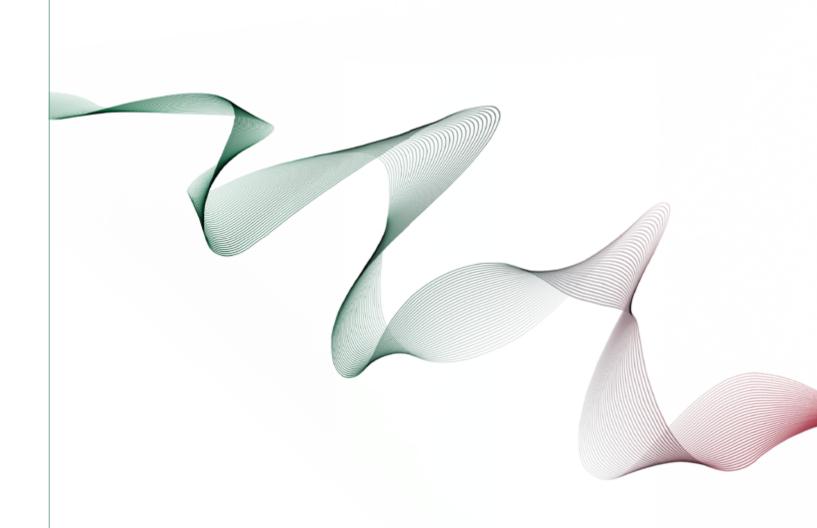
Social responsibility

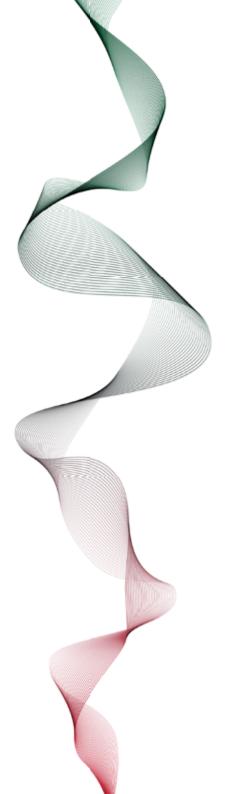
Respecting the activities and achievements of the members of the AGH UST academic community means recognising every action that benefits the common good of our community. Should the capabilities and resources allow it, the AGH UST supports all activities of our employees and students, which contribute to the development of the potential of the AGH UST, promoting responsibility and reciprocal loyalty of the members of the academic community. In our employees and students, the university cultivates the following traits: devotion, diligence in performing duties, and respect for intellectual property and efforts of fellow participants in joint activities.

The AGH UST academic community is student-oriented, which means that the university places the utmost emphasis on excellent quality of education, including students in research projects and implementation activities, creating the best possible conditions for the development of their own scientific pursuits. The AGH UST creates conditions that nurse multifarious forms of social, cultural, artistic, and sports activities of the student community. The university strives to nurture leaders capable of taking the helm of different types of academic, economic, social, and civic activities.

The social responsibility of the AGH UST means taking care of establishing and maintaining long-lasting relationships with various professional environments, economic entities, public administration, and society. These relationships are meant to serve the aforementioned entities in solving relevant issues related to sustainable development, and overcoming threats to the safe existence of humanity.

# Assessment of the current state





The strategy of the AGH University of Science and Technology is being compiled in the times of major unrest, increasing geopolitical threats, and a difficult macroeconomic perspective in Poland and around the world. Demographic changes, the evolution of higher education funding, and the creation of a high-tech industry that supplants the sectors established in the previous century transform traditionally determined frameworks of technical university functioning and bring about new sets of conditions. However, the changes that occur in the university environment constitute a chance for development and entry into new areas of science and education due to the increasing availability of research funds in the European Union, the reindustrialisation of the European area, the recognition of lifelong learning, and the elevation of the role of the best research centres.

The strategy of the AGH University of Science and Technology considers the transforming environment, while simultaneously tapping into its unique resources and potential for prospective consolidation of its position within scientific and educational circles. The potential at this university's disposal includes, for instance:

 Top-tier scientific research in numerous disciplines, combined with effective cooperation with other research centres in Poland and abroad

- Superb educational background that facilitates the introduction of modern teaching methods, making the transmission of knowledge attractive, which is an incentive to study at the AGH UST
- Amazing location in the city of a remarkable history and enticing everyday life, which, in conjunction with the optimally placed campus and comprehensive infrastructure, provides technical education in a rich sociocultural environment.

The AGH UST alumni and their careers corroborate the high quality of the university's education offer. The AGH UST graduates, who have established a unique and supportive community, significantly influence virtually every important area of economic activity in Poland and in the world.

The university also faces challenges resulting from the social and economic conditions related to the scientific research and education systems in Poland, and the evolution of the fields that have been this institution's specialisation. The major unfavourable trends that affect the capabilities and strategy of the AGH UST include:



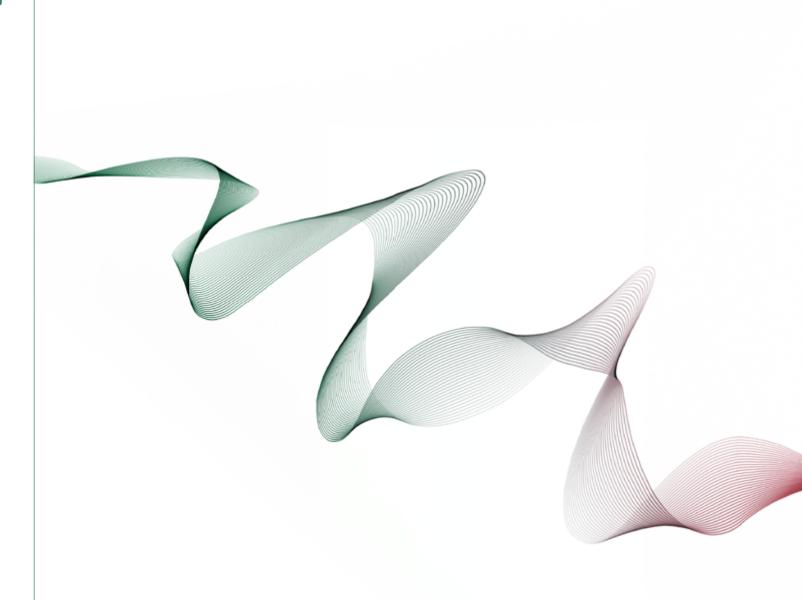
- Ministry of Education and Science subsidy that is difficult to predict and consider in prospective financial plans, which impacts the implementation of multiannual modernisation programmes
- Non-competitiveness of the payroll system in higher education institutions, which significantly hinders keeping on the best employees
- Resigning young employees create a generation gap that retentively influences the university's position in the long term
- Piling up administrative formalities related to funding science that enforce the implementation of procedures are, in many cases, redundant
- Erratic policies regarding the evaluation and recognition of research work, often leading to inappropriate publication practices that consequently do not result in a real improvement in the university's position in world science
- Low birth rates combined with the decreasing prestige of higher education leading to reduction in the numbers of adequately prepared university candidates at all levels of education.

What needs to be emphasised is the need to flexibly adapt the broad mining and metallurgy areas to dynamically changing socioeconomic

challenges and to facilitate their synergy with the service and knowledge processing industries.

The strategy of the AGH University of Science and Technology must consider increasing threats and prepare the university for a period of major unrest in both the financial and educational spheres. According to traditional understanding, a strategy is a document that determines the long-term goals of an organisation, defining directions of development and a resource allocation plan, facilitating the implementation of its objectives. In this context, the AGH UST strategy has been compiled under uniquely difficult circumstances, when it is not entirely possible to determine future resources at the university's disposal.

The most important strategic goal of the AGH University of Science and Technology shall be the development of scientific research and academic competencies of its employees in conjunction with comprehensive education, attractive in its form and methods, as well as adjusted to the current and future needs of the market. A high quality of research and education shall be achieved through organisational prowess and the improvement of conditions for the development of research and educational work, so that joint and individual successes of the employees could integrate the university team.





#### STRATEGIC GOAL 1

Modern education attractive to students and the university environment in Poland and abroad



Education interacting with the environment

The level of scientific research and the quality of education equally determine the position of the AGH UST in academic circles. The roles of a university comprise the creation of knowledge and its responsible dissemination, which must concur with the high quality of education achieved by modifying programmes of study based on insightful observation of the needs of stakeholders, opening up to international students, developing specialised higher-level education, and updating the quality of services provided to students.

Modern education attractive to students and the university environment in Poland and abroad

# Operational goal 1

Improving the quality
of education

The AGH UST organises numerous courses and training sessions for academic teachers, aiming to improve their competences and expand their knowledge in the fields of new teaching methods and techniques. Reward mechanisms have also been established to appreciate the educational activity of the most valued employees. The reward system should improve the process of introducing modern methods of education. These activities shall be implemented by:

- Developing the Education Support System, implementing modern educational methods
- Improving the system that elevates educational work (reward system, promotions, etc.), creating an HR policy that supports the development of educational competences, and ensuring flexibility in the distribution of hours in the teaching load
- Implementing an integrated IT system throughout the university to facilitate flexibility in determining individual programmes of study with greater freedom to choose elective courses.

A steady progression regarding the methods and tools verifying the quality of education and the educational and research facilities shall be achieved through:

- Implementing a mechanism for consistent monitoring and improving the University System for Education Quality Assurance and educational auditing in order to adjust the educational process to the changing needs and expectations, and to eliminate undesirable phenomena
- Designing and implementing a university-wide programme for the development of educational infrastructure
- Designing and implementing mechanisms for the integration of the educational process with scientific research.

Modern education attractive to students and the university environment in Poland and abroad

# Operational goal 2

Adjusting the education offer to current needs and expectations

The AGH UST aims to continuously improve the educational process and make it attractive both in terms of the fields and levels of study, and the way of conducting classes. Adjusting the education offer to the constantly changing conditions and expectations of employers and university candidates takes precedence. The activities in this regard shall encompass, in particular, the following:

- Creating an education offer in cooperation with the socioeconomic environment
- Intensifying promotional activities, expanding cooperation with schools, and creating an automated advisory system for candidates
- Improving elite education mechanisms for the best candidates, while simultaneously retaining an offer for moderately prepared candidates
- Expanding the offer of multidisciplinary programmes, launching the Multidisciplinary Studies School
- Expanding the offer included in the University Database of Electives and individualising education (e.g. tutoring)
- Implementing modern techniques and methods of communication.

# Operational goal 3

Improving the attractiveness of second-cycle programmes

Multiple levels of education provide a chance to acquire new candidates for second-cycle programmes, also from other research institutions. To use this opportunity, the AGH UST places great emphasis on creating an attractive education offer in second-cycle programmes. Activities in this field shall focus on:

- Transforming selected specialties into new fields of study (shortening the admissions process to specialties)
- Developing and implementing a system of incentives to continue education in the second cycle for the AGH UST first-cycle graduates
- Adjusting the algorithm for subsidy allocation to acquire funds for the development and implementation of attractive, flexible, and individual programmes of study in the second cycle.

Modern education attractive to students and the university environment in Poland and abroad

## Operational goal 4

Improving the position of the AGH UST in international education circles Improving the position of the AGH UST in international education circles constitutes an important direction for future activities. The most important tasks in this field include:

- Developing and increasing the efficiency of the internationalisation of the educational process at the AGH UST and participating in international educational initiatives (joint education and programmes)
- Developing cooperation in the field of joint education with foreign universities and institutions (double degree and joint diploma programmes), considering global trends, including the so-called 'STEM' approach.

# Operational goal 5

Implementing further education in cooperation with economic and research circles

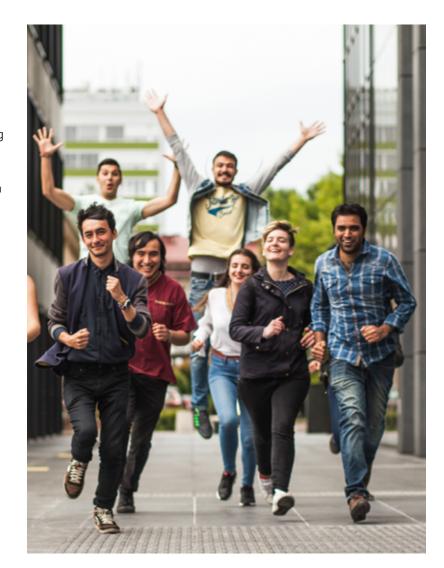
Considering the need to consult the education offer with business and economic circles, as well as the local government, the university plans include:

- Developing detailed solutions related to cooperation between the university and the economic and research environments, spanning part-time studies and non-degree postgraduate programmes
- Creating a broad offer of further education (FE) courses and trainings
- Developing and implementing a comprehensive formula for further education with a system of 'short-term courses' and other modern forms of commercial education.

Modern education attractive to students and the university environment in Poland and abroad

Key indicators to monitor strategic goal 1 include, in particular:

- Number of fields of study, including those created in cooperation with the business environment
- Number of student publications (number of students participating in grants and projects)
- Percentage of students continuing education (percentage of first-cycle students continuing education in the second cycle)
- Number of second-cycle students
- Percentage of fields of study taught in English compared to the number of all fields of study
- Ratio of international students to all university students in comparison to other European Union and OECD countries
- Percentage of business specialists in the educational process
- Number of implementations of modern education techniques and methods.





#### **STRATEGIC GOAL** 2

University open to students, their professional development and passions



Safe space without barriers and discrimination

A high quality of education at the AGH UST is not only based on the professionalism and knowledge of its employees, but also requires an adequate system of support for students, ensuring inclusiveness and welfare safety of the academic community and the possibility of versatile individual development. To this end, the university establishes a variety of scholarship programmes and systems to support the development of interests and competences of students. The AGH UST also responds to the current problems of the academic community, developing a system of psychological support for students and taking steps to increase the community's awareness of the needs of people who seek that support, including people with disabilities. The university adamantly opposes all forms of discrimination regarding sex, religion, age, and other personal traits.

University open to students, their professional development and passions

# Operational goal 1

Expanding an attractive offer of scholarships and motivational funds for students

Every year, several thousand graduates leave the walls of the university, finding employment in the job market. The AGH UST must strengthen the bonds that tie the alumni to their Alma Mater. A cooperation area that should prove attractive to both sides should be support lent to students, and consequently potential employees, by partner companies. The university plans in this area include:

- Supporting the university fund with money from donors and engaging graduates in donating money to university scholarship funds
- Using the scholarship fund to motivate students and gain competitive advantage in the education market.

### Operational goal 2

Improving the quality of service provided to students

Documenting the course of study, meeting the constantly evolving legal requirements related thereto, and archiving the course of study constitute tasks for which an effective student service system is of paramount importance (including student activities, such as education, projects, Rector's grants, support benefits, and scholarships). With the development of the aforementioned system, the university plans include:

- Centralising support benefit services for students
- Introducing electronic archiving of scholarship documentation
- Providing IT solutions in the form of e-services for people with disabilities, consistent with WCAG standards.

University open to students, their professional development and passions

# Operational goal 3

Developing research projects and student self-governance

Previous experiences of cooperation with students show an immense potential bustling in student organisations. The university plans in this area include:

- Arranging a modern space for self–governing and scientific activities of students
- Acquiring additional funds for student activities.

# Operational goal 4

Launching activities related to sport and cultural offer for students

The AGH UST is a place where students can pursue their passions. The following actions shall be conducive to their development:

- Organising a flexible timetable of sports classes, adjusted to individual student timetables
- Establishing new sports sections in the Academic Sports
   Association according to the interests and expectations of
   students
- Expanding space for creative and media-related student activities
- Expanding the offer of activities across the AGH UST Student Campus.

# Operational goal 5

Supporting professional development of students

Taking care of the professional development of students and preparing them in the best possible way for entering the job market constitutes a significant form of support. Achieving this goal shall be possible by:

- Preparing a training offer focusing on the development of professional and soft skills
- Intensifying actions in career counselling
- Establishing networks of cooperation with internal and external environments, including social and business circles.

University open to students, their professional development and passions

Key indicators to monitor strategic goal 2 include, in particular:

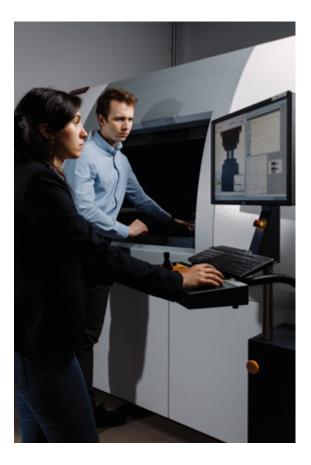
- Number of stakeholders, number of donors, amount of money obtained, number of scholarships granted and paid
- Number (percentage) of students receiving support benefits
- Number of programmes and voluntary projects
- Selected indicators reported by the Careers Centre
- Number of projects, number of awards and commendations, number of media reports on the AGH UST
- Number of students and graduates involved in the Academic Sports Association
- Number of student clubs and other forms of activity influencing student culture
- Number of trainings focusing on the development of professional and soft skills.





## **STRATEGIC GOAL** 3

Leading research university with a high status in Poland and around the world



Science for society

The AGH UST is a modern university of values that actively participates in world science. The research carried out by university employees stands out as innovative, current, interdisciplinary, and recognisable by the scientific community. The AGH UST strives to further grow as one of the leading research universities in Poland, and to constantly improve its position in international rankings.

Leading research university with a high status in Poland and around the world

# Operational goal 1

Strengthening the academic position of the university

There are many factors that determine the position of a university in national and international rankings, the most important ones include: the quality of research publications and their presence in international journals, the number of publications created in cooperation with international partners, the number of citations of published articles, the implementation of research projects, the quality of academic staff and their presence in academic associations. The university's priority is to continue improving research processes and their effectiveness to answer the needs, problems, and challenges of the modern world. The following actions have been taken to achieve this goal:

- Carrying out top-tier scientific research, strengthening the position of the AGH UST as a research university
- Obtaining high scientific categories, allowing the university to award academic degrees within the evaluated disciplines
- Improving and consolidating positions in leading international rankings
- Increasing the number of research grants carried out independently and in scientific consortia with the best universities in Poland and abroad
- Acquiring prestigious ERC grants by university employees
- Providing scientists with optimal administrative support in preparing and carrying out projects and implementing systemic solutions for project risk management
- Increasing the number of AGH UST scientists in bodies that
  make decisions related to science policy and funding, awarding
  academic degrees and titles, in institutions and organizations
  granting funds to projects (Polish and international), ministerial
  teams, scientific councils, and other advisory and expert bodies
  and institutions in Poland.

Leading research university with a high status in Poland and around the world

### Operational goal 2

Internationalising research and academic staff

The growing globalisation and competitiveness of higher education and scientific research markets requires the university to improve the indicators related to internationalisation. Facing this challenge shall be possible due to the following actions:

- Increasing the internationalisation of full-time academic staff (post-doc, distinguished professor) and the formula of visiting professor
- Increasing the participation of university scientists in editorial teams of international scientific journals, especially prestigious ones with high impact factor, holding managerial functions in editorial teams of international journals.

# Operational goal 3

Acquiring and educating outstanding doctoral students

Effective implementation of the university's research mission requires an adequate HR policy, with special attention paid to the acquisition of exceptional doctoral students talented in the field of carrying out scientific research. Actions in this area include current trends and problems in the job market, legislative changes, and the need to expand academic staff. The university shall achieve this goal by:

- Putting emphasis on a high level of content-based education of doctoral students
- Increasing the recognisability of the AGH UST Doctoral School in Poland and abroad
- Increasing the quality of education at the AGH UST Doctoral School
- Improving organisational activities at the AGH UST Doctoral School.

Leading research university with a high status in Poland and around the world

# Operational goal 4

Providing broad-based availability and facilitating effective use of specialist research equipment Carrying out scientific research at the highest level requires access to state-of-the-art and often unique research equipment. In this area, the AGH UST has been in the lead among Polish and foreign universities for years. To keep this level and fully efficiently use these resources, the university shall implement the following actions:

- Implementing decisive actions in acquiring funds for purchasing new and modernising already owned infrastructural resources and equipment
- Implementing effective procedures and tools improving the distribution of equipment and infrastructural resources between university units, and facilitating access to academic resources and services for external entities.

# Operational goal 5

Providing access to scientific information

Achieving success in carrying out scientific research and publishing articles depends on multifarious factors, including expanding and improving access to library collections and scientific information resources, as well as developing and presenting data and information on the achievements of members of the academic community. The university shall take the following actions in this field:

- Creating an information ecosystem that supports access to knowledge, integrating physical and digital resources from the AGH UST Main Library, faculty libraries, and databases of international scientific information providers that offer free and paid access
- Improving IT methods and tools in the fields of collecting, processing, and sharing data and information about the achievements of academic staff, doctoral students, and students of the university.

Leading research university with a high status in Poland and around the world

# Operational goal 6

Improving the recognition of the AGH University Press

Publishing, carried out by the AGH University Press, plays a crucial role in determining the scientific position of the university. Among other factors, increasing visibility on the international arena will be a challenge for the next few years. To achieve this goal, the following actions shall be taken:

- Strengthening the position of the AGH University Press as a publishing entity and a distribution coordinator for AGH USTbased materials in Poland and abroad
- Implementing a support programme for AGH UST journals and improving their recognisability in international scientific circles – providing resources for efficient publishing and the dissemination of journals according to the best practices.



Leading research university with a high status in Poland and around the world

Key indicators to monitor strategic goal 3 include, in particular:

- Number of publications in the most prestigious scientific journals
- Number of other prestigious research articles in journals that boast an adequately high level of bibliometric indicators
- Percentage of research articles in the top decile of Scopus/Web of Sciences
- Percentage of research articles created in international cooperation
- Number of publications in journals scored according to the ministerial list
- Normalized citation indicators for publications of AGH UST employees (FieldWeighted Citation Impact (Scopus)/ Category Normalized Citation Impact (WoS), including research articles in international cooperation – with and without selfcitations)
- Number of research monographs in prestigious publishing houses
- Number of academic staff by professional titles, scientific degrees, and the title of professor, and the degree of staff internationalisation

- Places in the most important international scientific rankings
- Number of international grants in which the AGH UST is a leader, number of ERC grants, and national grants
- Number of doctoral students in the Doctoral School – overall and in the formula of industrial doctorate, and the degree of doctoral students internationalisation
- Ratio of papers written by doctoral students and published in journals of the top citation quartile to the number of doctoral students
- Number and quartile indicators of AGH UST journals indexed on the Journal Citation Reports list (Web of Science) and in the Scopus base
- Number of published research monographs and academic textbooks.



#### STRATEGIC GOAL 4

University oriented towards national and international cooperation, a leader in innovation and transfer of knowledge



Cooperation, partnership, entrepreneurship, development

Universities constitute crucial entities that ensure economic and social progress. Nowadays, their role has been expanding to include cooperation with the business environment and social circles. In addition to traditional goals, including education and research, the third mission of academic centres is the transfer of knowledge. It is a complex phenomenon, evolving dramatically, revolving around multifarious stakeholders, and pertaining to various activities, such as: increasing the level of innovation, commercialisation of research results, generating additional funding influx, supporting local and regional economic growth, and promoting the public value. The university introduces deliberate and strategic actions related to cooperation with the socioeconomic environment, as well as the commercialisation of knowledge and research results. Considering the current situation and predictions for the years to come, several operational goals have been compiled to achieve this strategic goal.

University oriented towards national and international cooperation, a leader in innovation and transfer of knowledge

# Operational goal 1

Strengthening the position of the AGH UST in cooperation with the socioeconomic environment Despite a high and well-established position in cooperation with industrial, public, and social stakeholders, the AGH UST keeps taking actions towards improving these instances of cooperation and increasing the effectiveness of processes involved therein. This operational goal, aiming at strengthening this position, shall be achieved by:

- Creating conditions for issuing expert opinions, providing services, and establishing effective teams tailored to upcoming challenges
- Developing a competence base to support research teams in providing efficient solutions to interdisciplinary issues raised by the socioeconomic environment
- Developing principles on giving opinions and comments by university scientists in the public debate
- Increasing the number of R&D&I grants in cooperation with entrepreneurs
- Reviewing, simplifying, and updating procedures related to concluding and monitoring agreements on cooperation and the preparation of expert opinions, as well as consulting and R&D&I services
- Improving internal procedures of cooperation with the public administration
- Implementing systemic solutions for project risk management
- Incorporating the INNOAGH Krakow Centre of Innovative Technologies into the system of R&D&I services.

University oriented towards national and international cooperation, a leader in innovation and transfer of knowledge

### Operational goal 2

Providing systemic support in the fields of cooperation and international exchange

Cooperation with international institutions, centres, and partners requires continuous improvement of the efficiency of processes and procedures needed to manage it. The AGH UST has identified the most important areas related to the development of relations with international partners and has determined the following activities to achieve this operational goal:

- Developing and perfecting existing support procedures for international guests
- Increasing the number of acquired projects and partnerships
- Introducing complete digitalisation of support procedures (document and information flow).

#### Operational goal 3

Increasing the commercialisation of research results

In the socioeconomic environment, the AGH UST enjoys the opinion of a university engaged in the development of entrepreneurship with a rich experience in the field of research results commercialisation. For years, the university has been establishing structures and units supporting the process of commercialisation. However, there is still a need to improve and increase the level of commercialisation of research tasks carried out at the university. The following actions shall be introduced to achieve this goal:

- Increasing the effectiveness of the innovation brokers network (knowledge and technology scouting) – developing and implementing a system to measure and evaluate brokers' performance
- Intensifying cooperation with the socioeconomic environment to increase the number of implementations, projects, and R&D agreements
- Providing systemic support for the process of intellectual property protection, considering its commercial potential
- Improving a support system for the processes of transfer and commercialisation of knowledge and technology.

University oriented towards national and international cooperation, a leader in innovation and transfer of knowledge

## Operational goal 4

Supporting entrepreneurship and the processes of establishing start-ups and spin-offs

Supporting the establishment of academic technological start-ups and developing business based on knowledge and modern technologies, orbiting primarily around the INNOAGH Krakow Centre of Innovative Technologies, shall be developed by:

- Defining career paths and support actions for scientists and doctoral students who will decide to commercialise the results of their research on their own
- Attempting to establish the AGH UST Technology Park with an entrepreneurship and innovation incubator
- Building a competent team of experts to support the process of initiating, establishing, and developing start-ups and spin-offs.

## Operational goal 5

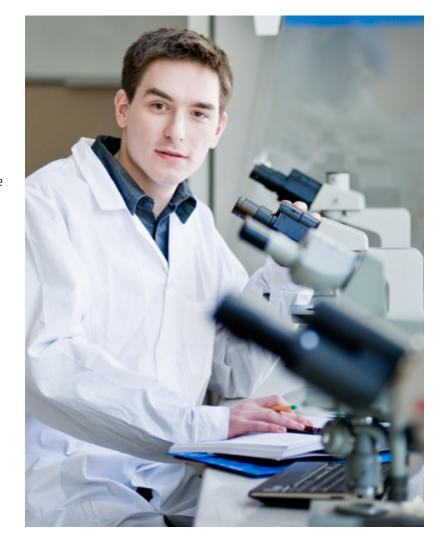
Increasing the participation of the AGH UST in the creation of normative documents In reality, almost every aspect of public, social, and economic life is governed by various types of norms and standards. In the intricate and interconnected global economy, norms perform a crucial function and contribute to ensuring the quality of services and products, improving the standard of living, and the overall functioning of institutions regardless of industry. Research and science centres, including the AGH UST, play a vital role in the development of normative documents and standards. The university shall introduce the following activities to actively shape such documents:

- Increasing activity in the work of normative committees
- Increasing the number of accredited laboratories (solutions for electromobility, hydrogen technologies, energy technologies)
- Maintaining a registry of laboratories operating at the AGH UST, and carrying out regular inspections to check activity, infrastructure, purchasing, and investment-related needs.

University oriented towards national and international cooperation, a leader in innovation and transfer of knowledge

Key indicators to monitor strategic goal 4 include, in particular:

- Number/sum of implementations
- Number of ongoing pre-implementation activities
- Number of activities supporting commercialisation
- Number of registered intangible assets
- Number of experts/people involved in activities supporting the development of start-ups
- Number of normative acts introduced with the direct participation of AGH UST employees
- Number of accredited laboratories
- Number of R&D&I grants carried out in consortia with entrepreneurs
- Revenues from the commercialisation of the results of research and development work, know-how, patents, and licences
- Number of inventions for which the university has obtained a European patent or an international patent in at least one of the countries belonging to the Organisation for Economic Co-operation and Development
- Revenues and incomes from the commercial activity of the AGH UST and INNOAGH.





## **STRATEGIC GOAL** 5

Attractive workplace for the best scientists, teachers, and support employees



Personal fulfilment, development, and support

The development of the AGH UST depends on the competencies, involvement, and cooperation of all university employees. The AGH UST strives to create such conditions for its employees to allow them to achieve their personal goals in compliance with the strategic goals of the university, simultaneously ensuring a satisfactory — financial and non-financial — recognition for individual involvement. The AGH UST plans to fulfil this strategic goal by determining unequivocal definitions of HR policy priorities, determining clear long—term career path scenarios, and increasing possibilities for personal development within competently managed teams, including the creation of an international and active work environment. This strategic goal shall be achieved through the implementation of several operational goals.

Attractive workplace for the best scientists, teachers, and support employees

# Operational goal 1

Optimising the HR policy system, ensuring quantitative and qualitative development of staff potential at the university in accordance with the strategic goals of the university

The AGH UST employees constitute a group that is well-prepared and competent, albeit diverse, in terms of research achievements and the level of involvement in activities for the benefit of the university. The staff appraisal system does not allow the authorities to fully appreciate the best employees, and it sometimes does not provide enough incentive to develop research interests and participate in the functioning of the university. To optimise the HR policy system, the university shall introduce the following actions:

- Improving HR policies focused on developing the research and educational potential of the university by codifying rules and regulations of: internal competitions and promotions, approval for changing positions, employment of pensioners, and additional employment of employees
- Improving the appraisal system of academic staff, including the ongoing monitoring of results; performing a review and then modifying the appraisal system so that it can deliver ongoing support in the management of professional careers of employees.

# Operational goal 2

Developing a system of employing foreign academic staff

International cooperation, including the exchange of researchers and the employment of foreign scientists, is a necessary condition for the continued growth of the university. The AGH UST and Krakow can be attractive workplaces for the best professionals, provided that there is a comprehensive offer of employment for national and international employees, as well as versatile administrative support, in both the adaptation process and the research and educational activity. Acquiring the best employees, including foreigners, shall be achieved especially by:

- Developing and implementing effective procedures for disseminating information on competitions, reaching targeted environments in Poland and abroad
- Developing an adaptation programme for new employees, especially those from abroad.

Attractive workplace for the best scientists, teachers, and support employees

# Operational goal 3

Improving payroll policy focusing on rewarding employees involved in the development of the university

The university payroll system is not competitive in relation to the conditions of the job market, primarily because it is based on centrally distributed public money. The university intends to increase the motivational role of salaries by increasing the funds obtained from sources other than the subsidy and by adjusting the payroll system to tie employee incomes more closely with the results of their work. Improving the quality of work shall be achieved through the following processes:

- Improving the rules of rewarding all employees for effectiveness, efficiency, competence, and creativity
- Developing and improving a payroll policy related to promotions and academic degrees and titles
- Developing and improving tools of rewarding employees for exceptional achievements in the fields of education, research and innovation activity, cooperation with the university environment, and actions for the benefit of the university, including refining procedures that facilitate flexibility in the distribution of hours in the teaching load
- Developing and improving support systems for acquiring funding for research, including administrative support in preparing grant applications and requisite financial support related to procedures.

## Operational goal 4

Increasing opportunities for personal development and the improvement of employee competences The university aims to provide substantial support to the personal development of employees — both in the group of academic teachers as well as other university employees — in accordance with modern trends in human resources management. The following actions shall be taken in the area of professional competences:

- Increasing opportunities for personal development of employees by expanding the offer of foreign language courses and IT trainings, including those related to the use of modern teaching methods in education and other courses that support teaching skills
- Increasing personalisation of available development paths for the purpose of taking into consideration the diverse needs of employees, providing equal access to them, and an incentive to continue versatile education both in the field of professional competences and creative non-professional interests.

Attractive workplace for the best scientists, teachers, and support employees

# Operational goal 5

Developing support and self-help systems ensuring satisfaction and stability in the personal lives of employees The university will support activities related to further education and non-professional development of personal interests of employees, as well as maintaining inter-generation relationships, also with pensioners and families of AGH UST employees. The main activities in this area shall include:

- Developing and improving employee support programmes, including those for pensioners within the framework of social welfare
- Expanding non-financial motivational programmes facilitating the development of employees' interests; this pertains to leisure time, physical activity, and the cultural sphere
- Improving mental health support programmes for employees, developing a support programme for employees in crisis, and disseminating information on the possibilities of reaching out for help
- Maintaining and improving support programmes for employees in a difficult housing situation; such programmes will provide a fair and objectively justified temporal support, and introducing them will be preceded by an audit of the current system and an indication of the areas in need of urgent changes
- Improving procedures to counteract discrimination and inappropriate relations in the place of work and education.

A safe and comfortable atmosphere in any workplace is a key condition for permanent development. The university shall adamantly oppose any forms of discrimination regarding sex, religion, age, and other personal traits. To ensure this, the AGH UST will expand the programme allowing employees to report problems safely and quickly, requesting intervention in interpersonal relations between colleagues.

Attractive workplace for the best scientists, teachers, and support employees

# Operational goal 6

Optimising and computerising processes related to the management of employee matters

Efficient university management requires optimal cooperation between research and educational teams at faculties, faculty administrations, and central administration. The procedures tend to be overly bureaucratised, and documents are not always verified and accepted on time, which, to a considerable degree, stems from the lack of an electronic document circulation system, which would facilitate the execution of university tasks promptly and in compliance with regulations. The university will develop an IT solution to support the circulation of documents and other employee services, and the following tasks shall constitute the most important activities:

- Introducing the alignment of human resources processes with the principles and regulations in force in the European Union, e.g. HR Excellence in Research (HRS4R – The Human Resources Strategy for Researchers)
- Implementing document standardisation related to human resources processes
- Implementing and optimising cooperation and information exchange procedures between central and faculty administrations.

Attractive workplace for the best scientists, teachers, and support employees

Key indicators to monitor strategic goal 5 include, in particular:

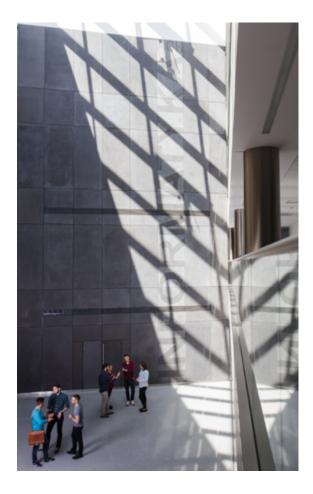
- Amount of money from the AGH UST Social Benefits Fund per employee
- Number of certificates of completed courses in modern methods of education
- Number of available counselling sessions and consultations related to psychological support for employees
- Ratio of academic teachers to the overall number of university employees
- Average age of academic staff as per position
- Number of teaching hours per employee
- Amount of money allocated to academic and educational awards funded by the AGH UST
- Surveys assessing the level of satisfaction in relation to employment at the AGH UST.





## STRATEGIC GOAL 6

Well-managed university with a modern and flexible structure



# Multidimensional sustainable development

In many aspects, a modern university, carrying out its research and educational mission, should be managed as a large modern corporation with well-defined management processes, a comprehensive system for delivering information to support management, and stable and secure IT support. One of the challenges for the AGH UST is to update the university management system and redesign it to fit the needs of a research university that integrates academic investigation and transmission of knowledge at the highest level. IT support constitutes an indispensable condition for success; however, the quality of internal processes and relationships between university units also require reinvention. The AGH UST will support the development of participative management that integrates employee teams around common goals. The university wants to be unequivocally identified as a socially responsible institution, aware of contemporary civilisational challenges, including those related to the environment, which minimises the ecological footprint and teaches its students about the significance of sustainable development.

Well-managed university with a modern and flexible structure

## Operational goal 1

Establishing an optimal and flexible organisational structure, based on units playing different roles (research and educational activities) crucial to the functioning of a modern university

The impermanence of conditions in which the university functions forces its organisational structure to adapt to current and foreseeable challenges. Tendencies in employing graduates, evolving popularity of various fields of study, and new trends in academic investigations and research funding compel the university to monitor the phenomena in its surroundings and consider them in its research, financial, and organisational perspectives. Strategic plans regarding university functioning in the area of optimising the organisational structure include:

- Continuously analysing and, should the need arise, modifying specific rules of basic unit activity within the AGH UST structure, including the rules of establishing and dissolving units, and the rules of implementing recovery programmes
- Continuously adjusting the structure of the university and particular AGH UST units to current requirements resulting from the development of science and the socioeconomic environment, including modern fields of knowledge, prospective branches of the economy, changes in the job market, and directions of domestic and international cooperation
- Designing the rules for establishing and functioning of interfaculty units to optimise and improve the quality of the educational process in related fields of study
- Designing the rules for establishing and functioning, as well as launching an interdisciplinary education system (in the first and second cycles) in fields of study taught at the university with possible participation of partners from other universities, research institutes, companies, and international institutions.

Well-managed university with a modern and flexible structure

# Operational goal 2

Introducing modern rules of university management using the instruments of enterprise architecture framework

A modern university must have an efficient internal organisational system, well—defined goals, and adequate decision—making procedures. Reaching efficiency in management requires the university to implement IT tools that support decision—making processes and task assignment and accountability. To achieve this, the AGH UST intends to take the following actions:

- Improving management mechanisms, including upgrading the tools for financial and managerial accounting, financial management, ownership supervision, as well as supporting the improvement of managerial skills of directors and heads of units through an adequate training scheme
- Introducing an electronic document circulation system and adequate solutions supporting management at all levels of the organisational structure
- Developing methodology and analytical tools to continuously inspect the university's position in Polish and international research and educational environments
- Developing a comprehensive system to monitor the functioning of university units, including their expenses, and to monitor the status of strategy implementation
- Redesigning the system of creating and publishing internal regulations, as well as the way of controlling and verifying its concordance with external law.

## Operational goal 3

Implementing the concept of a digital university

Effective university management requires a comprehensive and well-designed IT infrastructure. Most of the processes that are currently being conducted with the use of paper documents should be transposed to the digital form, and this is crucial to improve management and increase the security of procedures. In this area, the university implements prompt activities, among which the following are crucial:

- Introducing an integrated system for managing resources, content, circulation, identity, and access
- Introducing IT solutions supporting content publication, as well as internal and external communication in all areas of university activity.

Well-managed university with a modern and flexible structure

## Operational goal 4

Establishing a flexible and efficient structure of units providing services to the entire university

The university's actions in relation to supporting units will encompass the modification of their structures in order to allow them to fully deliver on their functions. Activities in this area shall include the following:

- Implementing organisational actions to optimise the structures of units providing services to the entire university, determined after process audits
- Implementing the institutionalisation of security services management
- Implementing, maintaining, and managing infrastructure and telecommunications systems.

## Operational goal 5

Increasing the scale of activities generating profit by means of using human resources and infrastructure, as well as the AGH UST position in the socioeconomic environment

Financial situation of the university depends, on the one hand, on the condition of public finances and the higher education funding policy and, on the other, on the effectiveness of acquiring money independently of centrallydistributed subsidies. The AGH UST will commit to increasing the scale of activities generating profit – the increase in incomes from sources other than subsidies will have a fundamental bearing on the improvement of the academic position of the university, including the possibility of employing prospective academic staff, and will be based on an adequately prepared and geared research and training offers, adjusted to the needs of the socioeconomic environment. The agenda oriented towards increasing university income includes the following actions:

- Creating conditions, monitoring and controlling the economic activity of the university and its units, including compliance with the law, rules related to public finances, and the internal regulations of the AGH UST
- Developing rules for implementing the policy of rational participation of the AGH UST in external companies
- Developing and introducing a system for accepting donations from external entities and natural persons
- Expanding various forms of separate business activity.

Well-managed university with a modern and flexible structure

## Operational goal 6

Introducing rational management of AGH UST resources

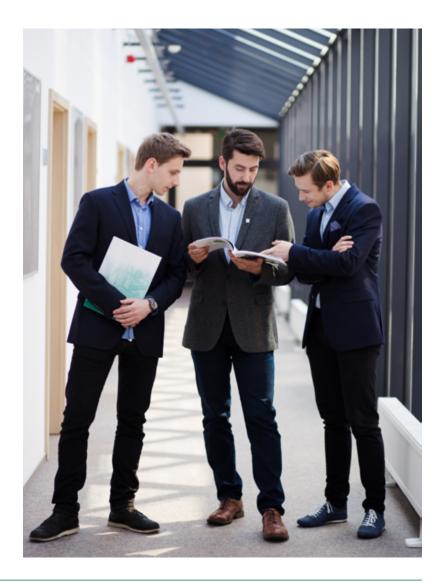
Assets owned and managed by the AGH UST must be protected, used efficiently, and shaped accordingly to facilitate the continuous growth of the university. The AGH UST aims to ensure the integrity of its resources by developing instruments facilitating a cohesive and effective management of the university's property. The following actions shall be introduced to achieve this goal:

- Developing and implementing comprehensive solutions dedicated to collecting, processing, and analysing data on university resources
- Carrying out multidirectional and multi-annual analyses of needs in the field of developing and maintaining the infrastructure – multi-annual development and renovation plans, etc.
- Monitoring and protecting the integrity of real property
  resources on the AGH UST main campus, acquiring new facilities
  and implementing actions for the optimal use thereof to meet
  the needs of the university
- Modernising residential facilities for the university community, especially student accommodation, as well as the infrastructure located within the area of the AGH UST Student Campus, considering the principles of sustainable development
- Developing rules and creating infrastructure to adequately meet the needs of rational energy management and raising ecological awareness
- Developing and implementing mechanisms used to protect the elements of movable property, and continuous monitoring of their effectiveness and adequacy
- Developing a strategy to minimise carbon footprint in the activities of units, reporting selected indicators based on the Global Reporting Initiative (GRI).

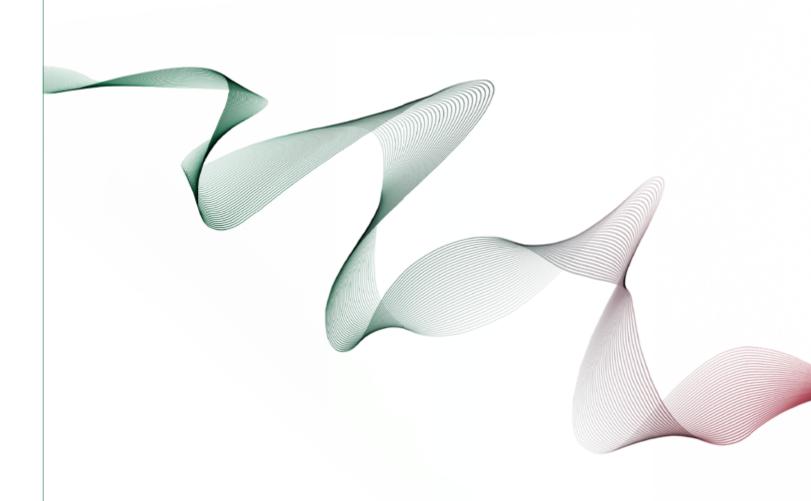
Well-managed university with a modern and flexible structure

Key indicators to monitor strategic goal 6 include, in particular:

- Surface area of real property resources
- Income from business activity other than research and educational and training activities
- Capital expenditure
- Remuneration costs
- Amount of money from donations and other transfers received by the AGH UST
- Level of university debt
- Liquidity ratio
- Environmental impact indicators (water, wastewater, waste, and energy) developed in accordance with the GRI.



Implementation and monitoring of the strategy





The Strategy of the AGH UST is a comprehensive document that synthetically defines the goals and tasks at all levels of the organisation. The strategic goals are general in nature and must be read in the context of the entire institution. Implementing the strategy across the entire university is a process that requires the disaggregation and cascading of general goals to the level of particular units, in a form tailored to their specificity and capabilities. In the process of implementing the strategy of the AGH UST, respective university units shall prepare strategy implementation framework programmes, in which they will indicate specific goals, time frames, and implementation stages, in compliance with the general strategic goals. The framework programmes shall be analysed by university authorities and, after being endorsed, they will form strategies of respective units, compliant with the strategic goals of the university. Annual consultations between the university authorities and unit heads, related to problems and needs regarding the implementation of the framework programmes and their compliance with the university goals, shall serve as the element of monitoring the status of the implementation of the strategy.

The set of goals indicated in the strategy and their co-dependencies create a complex network, changing dynamically under the influence of the surroundings and other necessary adjustments.

Compared to enterprises, oriented towards economic indicators, the university must also focus on goals in the following dimensions: scientific, educational, social, economic, technological, etc., which cannot be unequivocally ordered in terms of their superiority and importance. Therefore, considering its social tasks, the university must monitor its activities to a wider extent than commercial enterprises, even those that have implemented a sustainability charter.

At the AGH UST, the status of the implementation of the strategy will be monitored by analysing changes in the factors presented in the description of the six fundamental strategic goals of the university. Continuous analysis will be performed by comparing indicators at the university level with the indicators of the status of the implementation of framework programmes by university units. The conclusions reported shall serve to adjust the tasks of the university and its units, and to adequately allocate money to various programmes.