

The strategy for the Faculty of Natural Sciences is based on Aarhus University's vision, mission and strategy.

Aarhus University's values

Our fundamental values are described in the Magna Charta of the European Universities.

We safeguard freedom of research and expression, in addition to individuals' opportunities to realise their potential. Open dialogue, tolerance and diversity are the very foundation of the university's vocation. Because we regard the universities as one of the pillars of society, we assume co-responsibility for the development of a democratic, sustainable society.

Aarhus University's vision (extract)

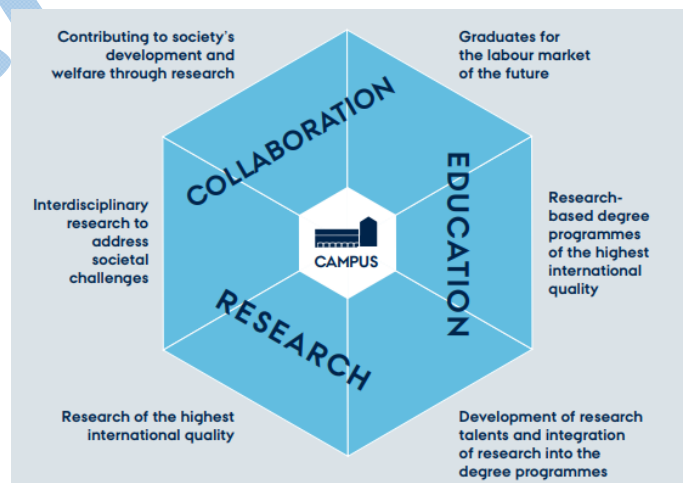
Aarhus University's vision is to be a research-intensive university that aspires to the highest international quality and excels in creating value through knowledge, new insights and collaboration, in addition to facilitating connections between Denmark and the world. Aarhus University's vision for 2025 will be realised through a focus on the following strategic commitments:

- Generating knowledge and research breakthroughs through free, independent research of the highest international quality
- Research-based degree programmes of the highest international quality
- Performing impartial public sector consultancy services of the highest international quality
- Encouraging the university's students, graduates and researchers to bring their knowledge into play in order to shape the society of the future
- Contributing to international collaboration, global engagement and the solution of major societal challenges through interdisciplinary research collaboration
- Generating innovation in established public and private sector companies and start-ups through collaboration, both internally and with external partners
- Intensifying the exchange of talents and knowledge, locally, nationally and globally

Aarhus University's mission

Aarhus University will work to realise this vision through the six core tasks of the university, which define the university's mission:

- Research of the highest international quality
- Research-based degree programmes of the highest international quality
- Contributing to society's development and welfare through research
- Interdisciplinary research to address societal challenges
- Graduates for the labour market of the future
- Development of research talents and integration of research into degree programmes



[Read the full version of Aarhus University's strategy](#)

The Core Narrative for Faculty of Natural Sciences, Aarhus University

The researchers, educators, politicians, business people and stakeholders who founded Aarhus University in 1928 were pioneers. It was the driving force back then, that knowledge at an international level should be developed, produced and communicated in Aarhus – the second biggest city -and not only in the capital of Denmark. The keywords were – and still are – courage, proficiency and persistence. Located close to the city - and, today, in the city centre - the university developed along with society, because both the city and the university depend on the life and the knowledge originating in both places.

Natural science pioneers established the first parts of Faculty of Natural Sciences in 1954, and, in only a few years, set up a number of departments in the classical scientific fields, mathematics, physics, chemistry and later biology, and geology, where students and researchers could follow their curiosity and produce knowledge that changed the world. Since its establishment, the Faculty of Natural Sciences has grown, and more departments have been added; computer science (1968), molecular biology (1968) and nanoscience (2002). Natural Sciences has grown via ambitious researchers and curious students that have moved the boundaries and defined new areas of research, departments, and thus defined the contemporary Faculty.

Pioneering spirit, curiosity and ambition

The values from 1928 have sustained: science pioneers, with a focus on world-class education and research. Thanks to courage, proficiency and persistence, subjects and research that started as niche areas have developed into full-fledged educational programs and research areas.

Natural Sciences is based on basic research, striving for excellence, curiosity and the passion for educating talented candidates for society as well as delivering research-based solutions to societal challenges. The pioneering spirit resides at Natural Sciences: We have a strong and ambitious community in which, talented students early in their studies can become an active part of laboratory research, fieldwork as well as theoretical development. We have a flat management structure, high ambitions and a strong international orientation. At the Faculty, we strive to be the best in the world, and we know that great results are created by exceptional and ambitious researchers. We are proud to have a lively and collaborative study and research environment where every great result is backed by an equally great team of researchers, students, technicians and administrative staff.

When organisations grow, so does the interest from society and its need for governance and regulation. This is also the case for Aarhus University and the Faculty of Natural Sciences. The number of rules concerning education, research, employment and international collaboration has grown along with the university environment and our faculty. Rules support and provide a secure framework for the development of free research and opportunities for development, collaboration and innovation. We constantly challenge ourselves to further streamline our processes, so that we can spend more of our time developing our core tasks together: delivering world-class education and research.

In the middle of the city – in the middle of the world

Not many large university faculties can expand in a coherent location in a city centre, where the cultural life of the city is just outside the door. But we can!

Our faculty has developed and grown – and at the same time, we have succeeded in establishing a research infrastructure of the highest standards within the framework of a large Campus in the middle of Aarhus. Furthermore, our researchers own, operate or participate in international research infrastructures in the

Arctic, at CERN, ESS, the Canary Islands and many other places on the planet. And we have collaborations all over the world.

By working together across departments and centres, we have a tradition of creating degree programmes and research environments that would be almost impossible to create at a single department or centre. A good example is iNANO, where researchers from several departments and faculties since 2002 have created a common platform across disciplines. Based on our strong core disciplines, we develop our interdisciplinary collaboration in the coming years.

Furthermore, we develop our outreach and collaboration with society, i.e. public institutions, businesses and schools. We reap the benefits of the united and unique location in the middle of the city, in the middle of Denmark, and in the middle of the world with close ties with international universities and research environments. The IT City Katrinebjerg is a good example of an environment where researchers, students and companies since 1999 have created a new vibrating ecosystem for IT research and digitization.

At the faculty, we are front runners in promoting societal interest in natural sciences, and to stimulate curiosity and the joy of discovering new things. We stimulate young people's curiosity for science - from primary school, through secondary school and onwards to university. Here, for example, the Science Museums and the series of popular public lectures with thousands of participants play a central role.

We develop our collaboration internally at the faculty and with other faculties – so as to find answers and solutions to how new research can help create a better world. And we have a clear ambition to communicate new research results openly and widely, not only to the people who may apply them but to everyone interested in gaining insight and knowledge.

We grow and develop as a faculty through our pioneering spirit, curiosity, innovative thinking, excellent research, ground-breaking results and persistence. This growth requires making room for ideas, room for research to thrive, and room to develop new methods of teaching, new ways of working and new research areas. We have the courage to think alternatively across departments and faculties, and to reach out to businesses and organisations that share our thirst for knowledge and insight.

Supporting talent and creating international relations

Faculty of Natural Sciences offers an ideal framework for researchers and students to harness their talent to participate in the top of the international research communities. With room to follow your curiosity comes the responsibility and freedom to develop your talent. Therefore, students, teachers, laboratory technicians, researchers, administrative staff and professors alike have an obligation to develop their skills and produce more and greater results. We strive for the highest quality: in our degree programmes and teaching, in our research and in the way in which we engage with the world. We are driven by our desire to be at the top of our class, internationally!

Natural science is inherently global. The global community has succeeded in advancing and developing research and changing society only by working together across national borders, businesses and universities. We are part of the global university and research environment, and we actively work to become even more visible, both nationally and internationally. We continually reach out to the international research community that we are a part of - both by traveling ourselves and by attracting researchers to conferences and positions in Aarhus. We welcome international researchers and students with openness and cooperativeness. They should feel that they are seen, included and welcome.

Attractive and stimulating workplace

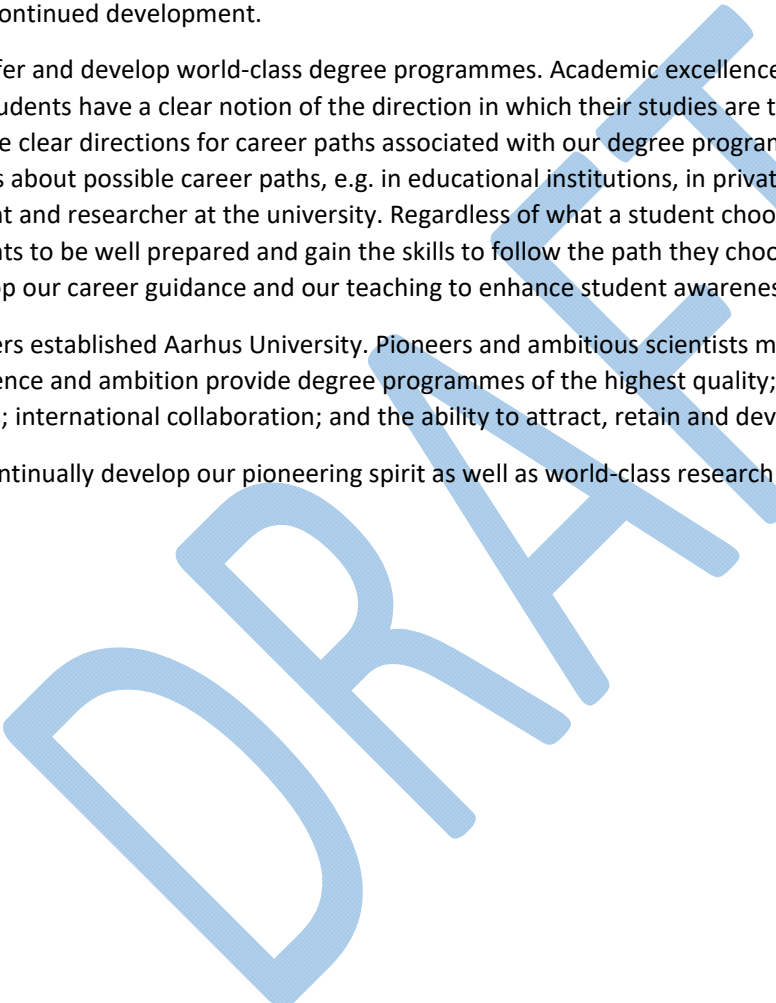
We develop the faculty into an even more attractive workplace for ambitious researchers and teaching staff – those we educate inhouse as well as those we recruit. We actively reach out and engage with the rest of the world to recruit the best.

We are an attractive faculty both for employees we invite in, and for those who are already here. We develop the talented people employed at the faculty. We believe that world-class comes from developing and supporting individual careers, such that thoughts, ideas and research initiatives can flourish. We focus on clear career paths and expectations, so that everyone can see the conditions and the expectations for their continued development.

We offer and develop world-class degree programmes. Academic excellence and didactics go hand in hand, and students have a clear notion of the direction in which their studies are taking them. In this way, we provide clear directions for career paths associated with our degree programmes. Students should have no doubts about possible career paths, e.g. in educational institutions, in private companies or as a PhD student and researcher at the university. Regardless of what a student chooses, it is our ambition for all students to be well prepared and gain the skills to follow the path they choose. That is why we continually develop our career guidance and our teaching to enhance student awareness of the different options.

Pioneers established Aarhus University. Pioneers and ambitious scientists made our faculty. And curiosity, excellence and ambition provide degree programmes of the highest quality; more and greater research results; international collaboration; and the ability to attract, retain and develop talent.

We continually develop our pioneering spirit as well as world-class research and degree programmes.



Strategic goals and action plan 2021-2022 for Natural Sciences

The overall Aarhus University strategy sets the framework including mission and vision for the Faculty of Natural Sciences as well as many of the actions to be initiated. In the following we describe specific strategic focus areas for the Faculty.

The overall vision for Faculty of Natural Sciences can be expressed in short:

The Faculty of Natural Sciences creates the best work and collaboration environment for excellence in research and education to develop scientific knowledge, technologies and graduates to solve current and future societal challenges.

Thus the Faculty of Natural Sciences wishes to strengthen the work environment to support excellent basic research and at the same time strategically to contribute solutions to current and future societal challenges. Research and education of the highest quality and active collaboration with the surrounding society are key pillars in fulfilling this vision.

This strategy will ensure that researchers, teaching staff and students can contribute to creating new knowledge and solutions. This will in the context of education be in terms of production of graduates with STEM and digital competences. In the context of research and collaboration, it will be in terms of contributions to: the green transition, combat climate change, digital transformation, infectious diseases, and other societal challenges.

The strategy for the Faculty of Natural Sciences has a five-year aim as the overall university strategy, keeping in mind that we still need longer-term goals, since many initiatives take a long time to describe and implement.

The faculty has prioritised four focus areas: collaboration and management, career development, recruitment and internationalisation. The strategy is an expression of the faculty's priorities and complements the initiatives that are initiated as an extension of Aarhus University's strategy.

Collaboration and management

The right framework conditions and incentives are prerequisites for high-quality education and research, interdisciplinary collaboration and collaboration with businesses. Therefore, we will:

- Strengthen internal collaboration (at the Faculty as well as with other faculties) on education and research - based on strong core disciplines
- Promote interdisciplinary collaboration – through supporting new, bottom-up initiatives as well as through introducing top-down initiatives for new, externally financed, strategic establishment of centres
- Intensify collaboration between the Faculty (researchers/students), public institutions and businesses
- Continue to develop attractive physical facilities for students and researchers, including developing the research infrastructure strategically
- Be an attractive and visible faculty with a clear profile, both nationally and internationally
- Make the Faculty's administrative support even more coherent and user-driven, so that we can work together to develop our core tasks

Initiatives

	In the short term (2021-2022)	In the slightly longer term (2023 -2025)
General	<ul style="list-style-type: none"> - Revise the financial model, so that it is robust, transparent, and supports collaboration to a greater extent - Create accessible and user-oriented administrative support - Develop a communication strategy that integrates recruitment, communication and outreach activities throughout the Faculty, including creating increased awareness about the faculty's research - Closer dialogue with private foundations and politicians/special interest groups - Further develop workplace and collaborative culture 	<ul style="list-style-type: none"> - Set up a leadership/management development programme - Raise external awareness about workplace and collaborative culture - Define an overall outreach initiative with a focus on encouraging curiosity for natural science
Research	<ul style="list-style-type: none"> - Evaluate the thematic centres to identify the best framework conditions for interdisciplinary collaboration - Develop and implement a full cost model for externally funded projects which specifies more clearly co-financing by departments - Prepare a catalogue of future needs for research infrastructure - Ensure better conditions for interdisciplinary bottom-up initiatives (e.g. "Faculty Club" initiatives, seminars, workshops, synergy packages, Nat talks/Friday bar, interdisciplinary academic networks, matchmaking, etc.) 	<ul style="list-style-type: none"> - International evaluation of research activities at departments every five years - Establish new, externally funded mission-driven centres, e.g. together with Tech and Health - More shared VIP appointments across departments/faculties - Upgrade and launch major infrastructure projects - Establish core facilities across departments
Education	<ul style="list-style-type: none"> - Prepare a catalogue of future needs for teaching infrastructure - Maintain incentives for collaboration on courses across departments and faculties - Ensure digital competences in all Faculty educations - Contribute to development of digital teaching tools to meet the requirements of blended and remote learning 	<ul style="list-style-type: none"> - Modern and flexible physical and digital environments for teaching to support the development of new teaching methods - More interdisciplinary courses (also at PhD level), e.g. summer schools and more online courses aimed at an international market - Build an 'internal market' for education across the faculty and, ultimately, across the university
Business and industry	<ul style="list-style-type: none"> - Develop a Faculty strategy for innovation and entrepreneurship in research and education - Ensure coherence between local entrepreneurship activities at the Faculty and activities in the Kitchen, e.g. by easy access to researchers and infrastructure for entrepreneurs 	<ul style="list-style-type: none"> - Disseminate the concept of 'Open Science' to more subject areas - Develop Katrinebjerg (ICT Hub) together with Arts and Tech - Develop and disseminate a concept where businesses have on-campus offices to strengthen collaboration on projects and start-ups, and so that researchers can take a 'sabbatical' at a business

Career development

Targeted career development for students, scientific staff and technical and administrative staff at all levels is a prerequisite for achieving our goals. Therefore, we will:

- Make career steps and requirements clear and transparent for students as well as scientific staff and technical and administrative staff, with clear and well-known opportunities for progression and development
- Be known as a hotbed and career path for the research leaders of tomorrow
- Enhance diversity, including achieve a significantly better staff gender balance
- Ensure that all students and researchers employed in temporary positions know about their career opportunities, including in the private and public sectors and in academia

Initiatives

	In the short term (2021-2022)	In the slightly longer term (2023 - 2025)
Research	<ul style="list-style-type: none"> - Exploit the possibilities available in the new governmental job structure, including tenure-track to professor - Adjust ABC requirements for scientific assessment to account for greater flexibility in relation to internationalisation in terms of study/research periods abroad - Focused career guidance for PhD students and postdocs (academia, businesses and high school) 	<ul style="list-style-type: none"> - Describe and raise awareness of career paths for scientific staff beyond the usual professorship (e.g. management, course director, infrastructure manager, teaching associate professor, etc.) - Prepare a model to identify and retain the affiliation to AU for the most talented PhD students (mentoring, flexible model for research abroad, etc.) - Prepare and raise awareness of career paths for technical and administrative staff - Further develop the career development programme for future principal investigators and research center directors
Education	<ul style="list-style-type: none"> - Raise awareness of career paths in recruitment initiatives, including involving alumni as role models - Evaluation of honours programmes for students who want a career in research and mutual exchange of experiences - External evaluation of the PhD degree programme - Mapping how the Faculty manages its teaching obligation for PhD students, including in comparison with other faculties 	<ul style="list-style-type: none"> - Systematic competency development for teaching staff - Career guidance throughout students' studies, including raising teacher awareness about their role in this regard - More flexible framework conditions for the PhD degree programme - Further develop digital competencies for all students
Business and industry	<ul style="list-style-type: none"> - Greater use of external teachers from business and industry (e.g. as part of strategic agreements with businesses) - Increase the number of students who choose to do industry collaboration projects during their studies - Develop courses in innovation and entrepreneurship throughout Nat - Involve alumni as mentors, visiting lecturers, for testimonials, etc. 	<ul style="list-style-type: none"> - Shared employments between departments and businesses, including start-ups - Establish subject-specific courses etc. to support innovation and entrepreneurship among students - Improve opportunities for guest stays (sabbatical, leave, etc.) – either a researcher in a company or vice versa

Recruitment

Targeted recruitment of scientific staff is a prerequisite for ensuring high quality and diversity in the faculty's educational and research environments. Therefore, we will ensure that:

- We are internationally competitive, so that we can attract the best-qualified individuals possible taking the Danish salary and welfare system into account.
- The departments' recruitment processes support diversity and recruitment of the best-qualified individuals
- A research career at the Faculty is known as an attractive career path both within and outside the faculty
- We promote Aarhus city, our campus, the Danish welfare system, including a good work-life balance, actively and as an integral part in the recruitment of staff and students

Nat will strengthen the recruitment of students by:

- Stimulating curiosity and interest in science among children and young people
- Increasing the number of qualified applicants per student place
- Improving students' transition to the faculty's degree programmes and increasing retention and completion rates

Initiatives

	In the short term (2021-2022)	In the slightly longer term (2023 - 2025)
Research	<ul style="list-style-type: none"> - Conduct a review of the current recruitment process - Establish fast-track appointments (conditional contract) - Establish diversity forums at the faculty and at all departments - Start a dialogue with the AUFF on improved adjustment of funds to the individual needs of faculties (start packages) - Initiatives to scout for candidates for postdoc positions among the faculty's own PhD students (and ensure they continue their career at the Faculty) 	<ul style="list-style-type: none"> - Prioritise start-up packages in the Faculty's own finances, so that all new employees are offered a start package (including systematically exploiting the opportunities offered by external foundations) - Fixed and broad annual job postings (to provide opportunities for promotions as well as increased interdisciplinarity and diversity) - Strengthen existing offers for spouses/family packages (university programme and collaboration with foundations)
Education	<ul style="list-style-type: none"> - Revise the Faculty's content on bachelor.au.dk and add more video material, including appealing more to the underrepresented gender - Initiate special recruitment initiatives for degree programmes with low uptakes - Evaluate the mentorship programme for new students and implement best practice throughout Nat - Increased focus on qualifying/quantifying dropout rates so that we can target efforts 	<ul style="list-style-type: none"> - Increase knowledge of the relevance of Nat programmes (the correlation between basic research and current societal trends) among potential prospective students, their parents and student counsellors - Develop an 'education preview' (virtual alignment of expectations) - Incorporate the green transition and other societal trends into introduction courses and philosophy of science courses.

Internationalisation

Nat will strengthen internationalisation within research and education by:

- Enhancing the visibility of the faculty's scientific research environment internationally
- Increasing the internationalisation of degree programmes to enhance the study environment and produce more natural science graduates for society

Initiatives

	In the short term (2021-2022)	In the slightly longer term (2023 -2025)
General	<ul style="list-style-type: none"> - Establish 'Faculty Club' activities at Nat - Offer Danish courses (via LærDansk) at the faculty (during working hours), e.g. to provide better opportunities for international employees to be part of committees and in the delivery of courses taught in Danish - Increased use of English as the written working language in the administration 	<ul style="list-style-type: none"> - Establish a faculty lounge at AU/Nat
Research	<ul style="list-style-type: none"> - Closer collaboration between AIAS and the faculty/department (including a visiting-researcher programme) - Improve the possibilities for sabbaticals 	<ul style="list-style-type: none"> - Host more major international conferences, academic workshops or an international speakers' programme
Education	<ul style="list-style-type: none"> - Continue current initiatives aimed at international Master's degree students 	<ul style="list-style-type: none"> - Establish targeted exchange programmes with selected universities (including English-language tracks on our own degree programmes) - Increase the proportion of students who go on exchange
Business and industry	<ul style="list-style-type: none"> - Establish dialogues with international businesses with offices in Denmark on potentials for collaboration 	<ul style="list-style-type: none"> - Expand existing partnerships with businesses on job recruitment within more fields to maintain international graduates in Denmark - Cultivate collaborative relationships with international companies - Utilize alumni employed in international businesses to attract international business activities and work places to Aarhus