

International development plan 2022–2025

Norwegian University of Science and Technology



NTNU

Knowledge for a better world

COVER:
Students by the coast in Chile.

Photo: Ragnhild Hammeren

PUBLISHED JANUARY 2022
LAYOUT: NTNU KOMMUNIKASJONSAVDELINGEN
PRINT: SKIPNES KOMMUNIKASJON

01

International cooperation, alliances and partnerships

- 1.1 International cooperation, alliances and partnerships7

02

Participation in the EU framework programmes for education, research and innovation

- 2.1 EU Framework Programme for Education, Erasmus+ 10
- 2.2 EU Framework Programme for Research and Innovation, Horizon Europe 11

03

International mobility

- 3.1 International student mobility 13
- 3.2 International employee mobility 14

04

Internationalization at home

- 4.1 Study programmes 17
- 4.2 Recruitment of staff and students 18
- 4.3 Language 18

International development plan

Internationalization is one of the focus areas in NTNU's strategy: Knowledge for a better world, and the international development plan shall contribute to implementing NTNU's strategy. One of the strategy's overarching goals is for all NTNU departments to have academic groups at a high international level in at least one of their core areas. Four development goals drive the priorities in the international development plan:

- Take better advantage of the EU's funding for research, innovation and education to ensure high quality and relevance in our activities.
- Establish strategic partnerships with selected institutions worldwide.
- Strengthen international recruitment of outstanding researchers and increase the international mobility of our employees.
- Increase the proportion of full-degree students who spend a study period at an educational institution abroad.

Quality, Sustainability and One NTNU are key elements in all our activity. Internationalization is a tool to increase the quality and relevance of our core missions: education, research and innovation.

Through this international development plan, NTNU will implement policies that follow up on Norway's national strategies. The development plan should be seen in relation to the institution's other strategies, development plans and policies, especially NTNU's environmental development plan and development plan for gender equality and diversity. NTNU will also actively assess ethical issues related to international cooperation.

This development plan is based on strategic goals with their associated development goals and will be operationalized through specific measures noted in the annual plans of the various parts of the organization. Development progress will be followed up regularly during the plan period.

¹This includes, among other things:

- The Government's strategy for research and higher education cooperation with Brazil, Canada, India, Japan, China, Russia, South Africa, South Korea and the USA (2021-2027).
- Partner countries in development policy (Report to the Storting 17, 2017-2018).
- The Government's strategy for Norwegian participation in Horizon Europe and the European Research Area - Strategy for Norwegian participation in Erasmus+ and the European Education Area.
- A world of opportunities – international student mobility in higher education (Report to the Storting 7, 2020-2021).
- Education for transformation – increased working life relevance in higher education (Report to the Storting 16, 2020-2021).



ALL OUR DEPARTMENTS HAVE ACADEMIC GROUPS
PROVEN TO BE AT A HIGH INTERNATIONAL LEVEL
IN AT LEAST ONE OF THEIR CORE AREAS.



01

INTERNATIONAL COOPERATION, ALLIANCES AND PARTNERSHIPS



1. International cooperation, alliances and partnerships

Cooperation and dialogue across national borders are prerequisites for being able to meet the major global challenges facing the world.

NTNU's academic staff have a broad international network of contacts, significant international involvement and participates in a variety of international arenas. Collaboration with academic institutions in other countries, access to international research and e-infrastructures, and contact with international business and industry form the foundation for NTNU's international cooperation. Participation in international alliances and bilateral strategic partnerships are important measures. Collaborating with the best actors internationally promotes quality, and international co-publishing often results in a higher citation rate and greater scientific impact. NTNU will focus on cooperating with Norway's priority partner countries, and emphasis will be placed on cooperation agreements that combine education, research and innovation. The mobility of employees and students is also an important part of the collaboration.

STRATEGIC GOAL

NTNU shall be an active and attractive international university and partner.

DEVELOPMENT GOALS

- NTNU shall collaborate with selected global institutions and networks and be active contributors in the university alliances ENHANCE and Nordic 5 Tech.
- NTNU shall ensure the quality of existing collaborative agreements and increase the visibility of collaborative agreements that can benefit the entire university or several units.
- NTNU shall actively cooperate with partners in low- and middle-income countries in dialogue with national and international funding bodies.

- NTNU shall strengthen its long-term collaboration with international research infrastructures and e-infrastructures.
- NTNU shall increase the proportion of research published in the most recognized international channels.
- NTNU shall increase the proportion of co-publishing with international co-authors.



02

PARTICIPATION IN THE EU FRAMEWORK PROGRAMMES FOR EDUCATION, RESEARCH AND INNOVATION

EU FRAMEWORK PROGRAMME FOR EDUCATION, ERASMUS+

EU FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION, HORIZON EUROPE



2. Participation in the EU framework programmes for education, research and innovation

Norway has high ambitions for participation in the EU framework programmes for education, research and innovation, which are the leading external instruments for quality and relevance in Europe. Through the renewed European Research Area, the new European Education Area and the forthcoming European Innovation Area, universities are expected to contribute to the necessary transformation that Europe and the world are facing together with institutions from other sectors. NTNU has a good starting point with its interdisciplinary and cross-cutting profile and its ability to link education, research and innovation. The high ambitions of NTNU are in line with the national ambitions.

2.1 EU Framework Programme for Education, Erasmus+

STRATEGIC GOAL

NTNU shall increase its participation in Erasmus+ in line with Norway's ambitions.

DEVELOPMENT GOALS

- NTNU shall increase the use of Erasmus+ to achieve the goal of increased student mobility for both short and long exchange stays.
- NTNU shall increase its participation in collaborative projects under Erasmus+ compared with the previous period, especially in centralized actions.
- A wider range of academic groups shall increase their participation in Erasmus+ projects compared with the previous framework programme period.

2.2 EU Framework Programme for Research and Innovation, Horizon Europe

STRATEGIC GOAL

NTNU shall increase its participation in Horizon Europe in line with Norway's ambitions.

DEVELOPMENT GOALS

- During the Horizon Europe programme, NTNU shall double its portfolio of European Research Council (ERC) projects compared with the previous framework programme.
- NTNU shall increase its portfolio of Marie Skłodowska-Curie Actions (MSCA) projects through systematic quality work in the application phase.
- Strategic research infrastructures at NTNU shall develop applications to Horizon Europe where this is relevant.
- NTNU shall be one of the top 20 participating universities, and the Norwegian university that performs the best in terms of project allocation in Pillar 2: Global Challenges and European Industrial Competitiveness.
- NTNU shall increase its number of applications to and double its number of awarded projects from the European Innovation Council (EIC) Pathfinder programme compared with the previous framework programme.
- NTNU shall utilize instruments under Pillar 3: Innovative Europe and participate actively where this is relevant to its strategic initiatives and development plans.



03

INTERNATIONAL MOBILITY

INTERNATIONAL STUDENT MOBILITY

INTERNATIONAL EMPLOYEE MOBILITY



3. International mobility

3.1 International student mobility



Students from NTNU and Ghana in the Norpart-project Intercultural Historical Studies at the University of Education, Winneba.

Photo: Jon Olav Hove

International mobility shall provide quality in education, language skills, international experience and intercultural competence and will prepare students for a global labour market.

In its mobility report, the Norwegian government establishes the goal for half of all students who complete a bachelor's or master's degree in Norwegian institutions of higher education to have an exchange period abroad. Through the Bologna process, Norway has committed itself to the same.

Universities around the world have adopted digital exchanges during the Covid pandemic. This will be an integral part of the total educational offerings and will mainly supplement physical mobility, rather than substitute for it.

STRATEGIC GOAL

NTNU shall arrange for at least 50% of students to have a physical exchange period or internship abroad.

DEVELOPMENT GOALS

- NTNUs shall have a portfolio of quality-assured exchange agreements that are linked to the individual study programmes.
- NTNU shall establish a scheme where students themselves must actively unregister for exchange stays or internships abroad.
- More student exchange stays to and from NTNU shall be linked to existing collaboration within research and innovation.



- Student exchange stays shall be linked to Norway's priority partner countries to a greater extent.
- NTNU shall facilitate exchange stays for all students, regardless of their functional ability or care situation.
- At the institutional level, there shall be a balance between incoming and outgoing exchange students.

3.2 International employee mobility

Active participation in an international academic community is an important part of academic work. International mobility contributes to developing meritorious academic collaboration, which also contributes to greater work relevance for doctoral and postdoctoral candidates. International mobility periods during research sabbaticals are a good measure, and mobility stays can be linked to educational, research and/or innovation activities.

Visiting researchers bring with them valuable academic perspectives and networks. Increasing the number of international guest researchers provides a great benefit in this way.

Digital solutions can help supplement physical mobility and strengthen collaborative relationships over time, in addition to reducing the climate footprint from physical travel.

STRATEGIC GOALS

NTNU's academic staff shall be active participants in the international academic community and shall participate in various international arenas.

NTNU shall host good international guest researchers.



DEVELOPMENT GOALS

- NTNU shall have flexible international mobility schemes for academic staff and technical and administrative staff.
- NTNU shall facilitate international research periods for PhD candidates and postdoctoral fellows who lack international experience.
- NTNU shall have good academic and practical arrangements for international guest researchers.
- NTNU shall make it possible for employees who cannot participate in physical mobility to acquire international competence.

04

INTERNATIONALIZATION AT HOME

STUDY PROGRAMMES

RECRUITMENT OF STAFF AND STUDENTS

LANGUAGE



4. Internationalization at home



NTNU shall be a university that is attractive to students, researchers and partners from all over the world. Diverse perspectives and cultures enrich our activity and contribute to knowledge for a better world through internationally oriented work environments and learning arenas. Our employees and students shall develop international competence. International competence is complex and involves knowledge of other societies, cultures and languages, as well as the international dimension in one's own disciplines.

4.1 Study programmes

Study programmes at NTNU shall contribute to our candidates being attractive in the global labour market. Knowledge and intercultural understanding are essential to solve the challenges facing the world. After studying at NTNU, our students should have acquired international competence, either through study abroad or through the international profile of NTNU's study programmes.

STRATEGIC GOALS

NTNU's study programmes shall have an international profile that provides the students with international competence.

NTNU shall integrate exchange periods into their study programmes.

DEVELOPMENT GOALS

- Students, including those who are not able to undertake a physical exchange, must be able to acquire international competence.
- The learning outcome descriptions in the study programmes shall include international competence.
- The resource represented by international students at NTNU shall be made use of to a greater extent than is currently done.
- Online educational solutions shall be part of the international

educational portfolio at NTNU.



4.2 Recruitment of staff and students

Recruitment of highly qualified students and academic staff from other countries contributes to the quality of the academic activities and to the development of international cooperation. Recruitment of international academic staff to NTNU requires systematic work over time.

Developing good recruitment processes and high quality reception and integration work is a prerequisite for attracting and retaining good students and academic staff from abroad.

STRATEGIC GOALS

NTNU shall be an attractive employer for international researchers and employees.

NTNU shall attract highly qualified international students.

DEVELOPMENT GOAL

- NTNU shall have a holistic perspective on recruitment, onboarding, inclusion and taking care of international employees and students.

4.3 Language

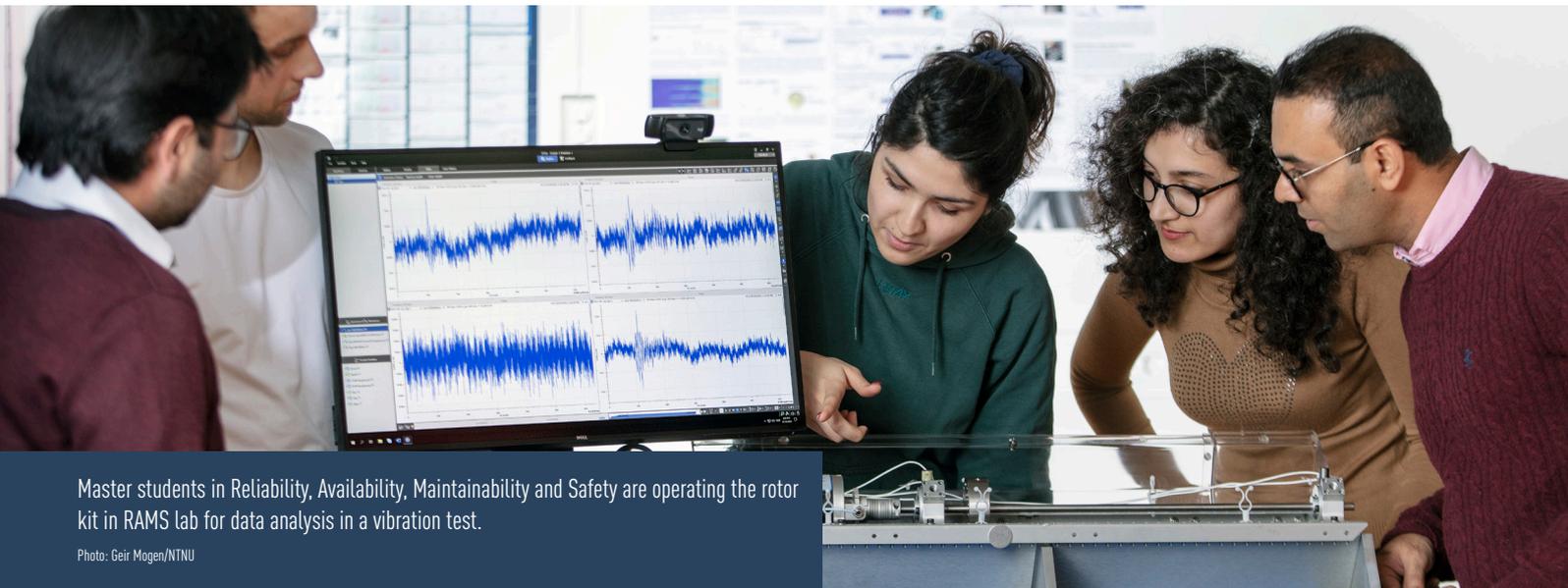
NTNU has a responsibility to manage and further develop Norwegian as a professional language at the same time as it is responsible for enabling our students to work in an international environment. NTNU's employees should have a good command of both Norwegian and English. NTNU must be attentive towards how language is used and be able to balance the use of language to contribute to an inclusive work and learning environment. NTNU has its own language policy guidelines.

▀ STRATEGIC GOAL

NTNU shall be attentive towards how language is used and chosen for daily work.

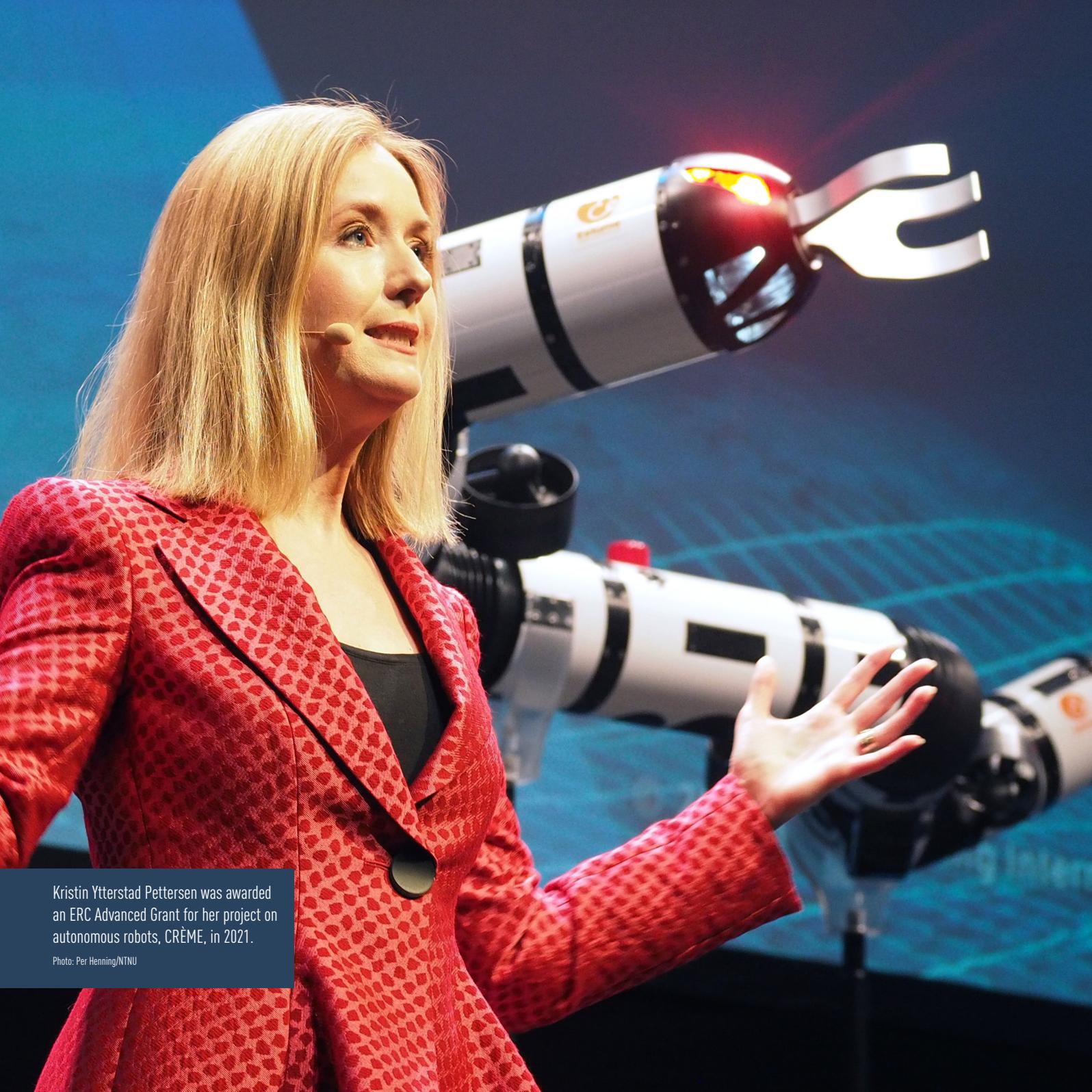
☞ DEVELOPMENT GOALS

- NTNU shall offer courses conducted in English and/or course packages where this is academically appropriate.
- NTNU shall offer Norwegian language training for international employees and for students where this is relevant.



Master students in Reliability, Availability, Maintainability and Safety are operating the rotor kit in RAMS lab for data analysis in a vibration test.

Photo: Geir Mogen/NTNU



Kristin Ytterstad Pettersen was awarded an ERC Advanced Grant for her project on autonomous robots, CRÈME, in 2021.

Photo: Per Henning/NTNU