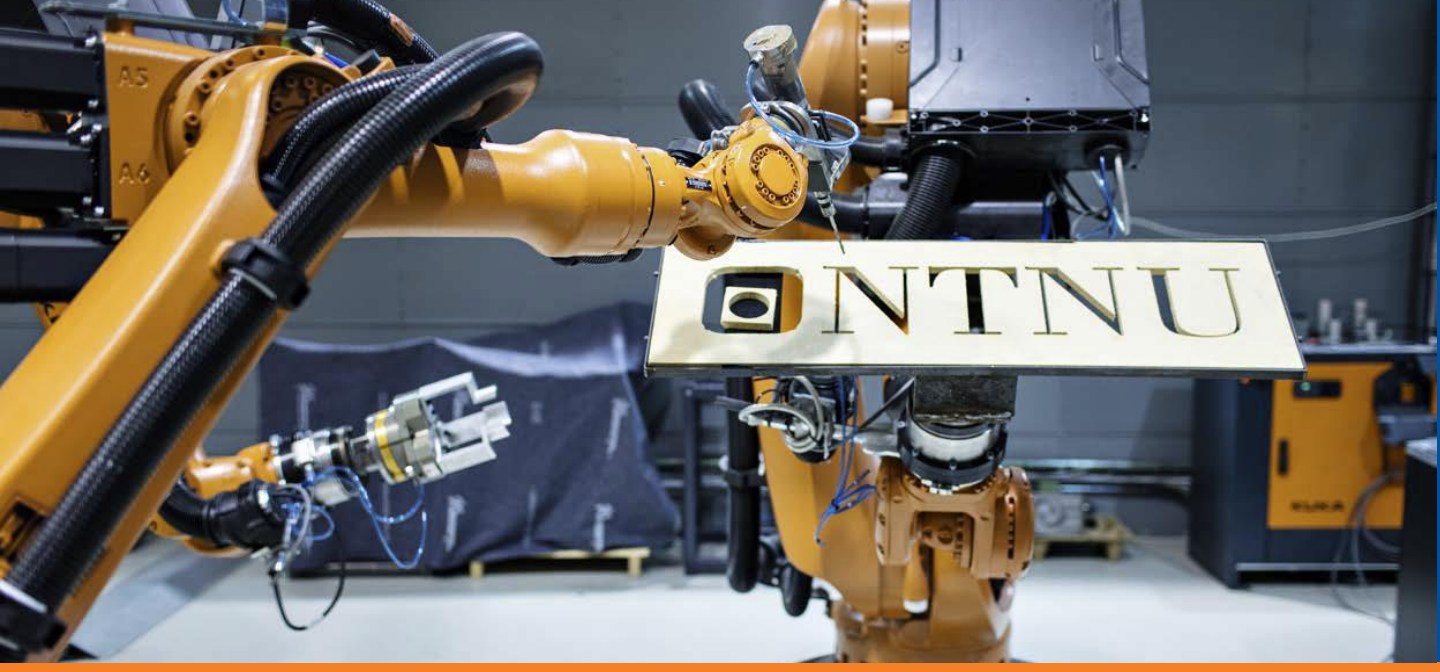
Appointment of

Professor/Associate Professor in Advanced Supply Chain Management

January 2025

NTNU



Executive summary

Norwegian University of Science and Technology hosts over 43,000 students across nine faculties. It is grounded in the natural sciences and engineering, combined with a wide-ranging expertise in classical university disciplines such as the humanities, medicine, and social sciences.

Located in Trondheim, the Faculty of Engineering stands as one of Norway's leading research institutions in engineering science and technology, and it is the nation's main provider of engineering education.

Through interdisciplinary research and industrial partnerships, the Faculty and its eight departments address strategic themes related to sustainability, energy, and oceans.

The Department of Mechanical and Industrial is currently seeking to appoint an outstanding Professor or Associate Professor in Advanced Supply Chain Management.

This position aims to develop knowledge and competences for the current and future engineers and managers for the design, improvement and installation and re-use of integrated supply chains, with a system perspective of people, materials and products, information, equipment and infrastructure, and energy and environmental resources.

The candidate for this position is expected to develop her/his research in line within the Production Management research group at the Department of Mechanical and Industrial Engineering at NTNU.

The research group, with its Logistics 4.0 Lab, focuses on the design and planning of production and logistics systems, developing specialized knowledge, applying mixed methodology, multidisciplinary approach, joining skills, principles and methods of engineering, management, and computer science.

Research is done in close cooperation with industrial and international networks, funded by funding bodies, as EU commission and Research Council of Norway, and results are published in high-quality journals.

Members of the research group are actively involved in editorial boards of relevant journals (IJPR, IJPE, JIM, and others) as well as active and managing roles in international societies (IFIP, IFAC, IISE and others).

NTNU

Norwegian University of Science and Technology

The Norwegian University of Science and Technology (NTNU), Norway's largest university, boasts a heritage dating back to 1767. Although NTNU offers a wide range of academic disciplines, it maintains a strong focus on science and technology. Its core mission is to develop the technological foundations for the future society through research, teaching, and the enhancement of industrial partnerships.

In 2016, the Norwegian University of Science and Technology (NTNU), headquartered in Trondheim, merged with university colleges in Gjøvik, Ålesund, and Sør-Trøndelag. This strategic consolidation aimed to bolster NTNU's research and educational prowess in the fields of science and technology. Today, NTNU operates from its main campus in Trondheim and additional campuses in Gjøvik and Ålesund, collectively forming Norway's largest and most innovative university.

NTNU has a strong focus on natural sciences and engineering, set within a broad and interdisciplinary academic framework.

The university is structured into nine academic faculties and 55 departments distributed across three campuses.

It provides a comprehensive range of research and teaching disciplines, including architecture, engineering, social sciences, business, natural sciences, and medicine.

Of the university's 43,000 students, half are enrolled in disciplines related to natural science and technology.

NTNU

Norwegian University of Science and Technology

NTNU offers a diverse array of educational programs, encompassing approximately 400 Bachelor's, Master's, professional, and Doctoral programs, along with numerous opportunities for continuing and further education. As Norway's leading university for engineering education, NTNU plays a crucial role in the nation's higher education in technology.

The university's partnerships with business and industry are notably centered on innovation and entrepreneurship. A prime example of this is NTNU's close collaboration with SINTEF, Scandinavia's largest independent research institute and one of the largest contract research organizations in Europe. This robust engagement with industrial partners has led to NTNU being ranked number one globally for collaboration with industrial partners, according to the Times Higher Education rankings in 2017.

Strategic research areas

NTNU's strategic research areas are crafted to tackle complex societal challenges through interdisciplinary collaboration. The university aims to address global challenges with a flexible and interdisciplinary approach, enhance partnerships with industry and the workforce, boost its capacity for innovation, and grow its share of international research funding.

The strategic areas are: Civil security; Ocean and coast; Community; Energy; and Health and life science.

Mission and vision

NTNU's mission, encapsulated in its strategy ***Knowledge for a Better World***, is premised on the creation of knowledge and solutions aimed at enhancing everyday life and fostering a better world. Leveraging its academic diversity and interdisciplinary expertise, NTNU is committed to contributing to sustainable social development. This includes addressing complex issues and enriching our understanding of the interconnections between technology, society, and the environment.

Detailed information on NTNU's approach and objectives can be explored further in their strategic documentation available at www.ntnu.edu/strategy.

NTNU

Faculty of Engineering

The Faculty of Engineering Science and Technology at NTNU, located in Trondheim, stands as one of Norway‘s premier institutions for engineering science and technology research, and it is the leading provider of engineering education in the country.

The Faculty is characterized by its focus on "Technology for Sustainability and Innovation“, a guiding principle that shapes both its research endeavors and its educational curriculum.

This focus underscores the Faculty's commitment to innovations that not only advance technological capabilities but also promote sustainable solutions.

These programmes are supported by the Faculty’s eight departments:

- Civil and Environmental Engineering
- Energy and Process Engineering
- Geoscience and Petroleum
- Structural Engineering
- Marine Technology
- Mechanical and Industrial Engineering
- Manufacturing and Civil Engineering
- Ocean Operations and Civil Engineering

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Department of Mechanical and Industrial Engineering

Department of Mechanical and Industrial Engineering holds a broad interdisciplinary expertise and strong industry partnerships.

The Department of Mechanical and Industrial Engineering has broad interdisciplinary expertise in the fields of manufacturing & materials, design & robotics, project quality & production management, and RAMS. Through its strong connection with national and international industry, the Department aims to secure Norwegian industry and administration with access to knowledge and expertise on an international level.

The Department has over 200 employees.

Research Groups

The research at the department focuses on development, optimization and improvement of industrial processes and production systems.

Its research includes a wide range of activities within seven specialist areas:

Design and Engineering – the focus areas of this group are the intersection of advanced design, engineering and prototyping of cyber-physical systems.

Materials – The group works with advanced design of traditional and innovative materials employing emerging technologies and is closely linked to multiple labs at the department.

Manufacturing - The focus area of this group is manufacturing processes such as metal forming, in particular aluminium forming. Traditional manufacturing processes such as extrusions and profile and tube bending. In addition to the existing processes, the group works on new innovative technologies such as screw extrusion of aluminium chips and new methods for solid state joining of aluminium.

Production Management – the group of Production Management focuses on theory, models, systems and solutions to improve production and logistics within the industrial value chain.

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Department of Mechanical and Industrial Engineering

Robotics and Automation – this research group combines robotics, machine tool technology and metrology with automatic control and sensor systems.

Project and Quality Management – this group has competence areas in management of challenging projects, early-warning in projects, organizing project-oriented work and blended learning within project management.

Reliability, Availability, Maintenance and Safety – the group focuses on safety and reliability of complex systems, i.e. Reliability Engineering, Risk Analysis, Maintenance Technology, and Safety & Security.

The Department hosts several Centres for Innovation based Research (SFI) and six other research centres.

Additionally, the Department is member of a number of international and national research centres and research projects.

For more information on the Department's areas of expertise and research centres, please visit: www.ntnu.edu/mtp/research

Laboratories

Experimental research, education and practice is a vital part of the department's strategy. In particular the RAMS lab shall be mentioned. Among the equipment in the RAMS lab is ultrasonic devices, vibration sensors with software and an autonomous stidio. All laboratories at the Department can be found here: www.ntnu.edu/mtp/laboratories

Education

The Department provides educational programmes at Bachelor's, Master's and PhD level within mechanical and industrial engineering. In addition, the Department provides part-time "experience-based" Master degree programmes. For more information on the Department's educational programmes, please visit: www.ntnu.edu/mtp/study-programmes

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Production Management Research Group

The Production Management Research Group at Department of Mechanical and Industrial Engineering is a team of about 15 professors and researchers (PhD candidates, Post-Docs, Research Assistants) focusing on the design and planning of production and logistics systems, seen as integrated systems of people, materials and products, information, equipment, and energy and environmental resources.

The research group develops specialized knowledge, applying mixed methodology, combining qualitative and quantitative methods, from action research and case studies to statistical analysis and operations research. Focus is put on multidisciplinary approach, joining skills, principles and methods of engineering, management, and computer science.

Research is done in close cooperation with industrial and international networks, funded by funding bodies, as EU commission and Research Council of Norway. The current portfolio is composed of more than 5 active research projects, for about 2.5 million euro.

The Production Management Research Group conducts its research activities in several industrial and public sectors, and it is expanding its areas of interest thanks to new collaborations with national and international partners.

ETO and Customized Production

Human-Centric Manufacturing

Construction

Food and Retail

Healthcare

Public Sector

Renewable Energy Supply Chain

Additive Manufacturing Supply Chain

Warehousing and Logistics

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Production Management Research Group

The Production Management Research Group is responsible of the **Logistics 4.0 lab**, the Norway's first logistics laboratory that merges digital technologies with traditional production and logistics systems, enabling researchers, practitioners, engineers, pioneers, students, and other enthusiasts to come together and collaborate on common ground.

- **Research:** investigating the impact of new technologies on production and logistics systems, creating new knowledge on design and management of such future systems.
- **Industrial collaborations:** relationships with suppliers of new technologies for production and logistics, and with national and international companies interested in applying our research work.
- **Education:** innovative learning approaches through a series of activities in real life systems (learning games, project-works, specialization and master projects)

Results of the research activities are published in relevant journals, such as International Journal of Production Research, Production Planning and Control, International Journal of Production Economics, European Journal of Operational Research, Journal of Intelligent Manufacturing, International Journal of Operations and Production Management.

Members of the research group have been included in the Stanford/Elsevier Top 2% Scientists List and they actively involved in editorial boards of relevant journals (IJPR, IJPE, JIM, and others) as well as active and managing roles in international societies (IFIP, IFAC, MHI, and others). They recently organized APMS2023 and currently IFAC MIM2025.

NTNU | Production Management Research Group
- LOGISTICS 4.0 LAB -

NTNU

Appointment of Professor/Associate Professor in Advanced Supply Chain Management

Supply chain management is crucial for businesses to remain competitive, deliver high-quality products, and meet customer expectations. Supply chains have gained unprecedented attention from both industry and academia, spanning their strategic development to tactical and operational planning. Recent disruptions have highlighted the need for resilient and sustainable supply chains. Digital technologies are enabling innovative solutions to drive this transformation. In this context, Norwegian companies are undergoing a substantial transformation, propelled by the Green Shift and Digitalization, in particular the ones in the maritime and energy sectors. Their advance is crucial for ensuring the viability, scalability and success of their supply chains, while maintaining the competitiveness and strategic importance of Norway's industrial sector.

The Department of Mechanical and Industrial Engineering (MTP) at NTNU is actively searching for distinguished candidates that will adopt a holistic perspective when advancing the research field, combining industrial engineering and management approaches with other ones, such as of decision science, computer science, social science, natural science.

Particular attention will be paid on the impact and implementation of emerging technologies (such as AI and other digital technologies) and advanced supply chain management theory on the configuration, scalability, and operations of traditional and emerging supply chains.

The successful applicant will demonstrate leadership and a track record of innovation and excellence in both teaching and research. Candidates will be required to initiate new research directions and contribute to the enhancement of existing academic programs, ensuring that the department remains at the forefront of Supply Chain Management. Ideal candidates should demonstrate exceptional abilities in generating and securing external funding, both from industrial and academic sources, and should possess an extensive network

This is a full-time, permanent professorship affiliated with MTP.

The position will be based in Trondheim.

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Appointment of Professor/Associate Professor in Advanced Supply Chain Management

Person specification

Your academic research must be deeply rooted in advanced supply chain management.

You must demonstrate the ability to conduct interdisciplinary research across both traditional and emerging sectors, utilizing a mix of qualitative and quantitative methods. Your expertise should include qualitative methodologies like case research, action research, and conceptual modeling in supply chain management, as well as quantitative methodologies such as analytical modeling and AI-based data-driven modeling. Proficiency in programming and simulation tools for supply chain management is essential.

A strong track record of publications in highly ranked journals within your field is required, with scientific articles from the last five years (excluding career breaks) being most relevant. These publications should highlight the use of interdisciplinary approaches and will be evaluated considering the length of your academic career and the research field.

You must have documented experience as a researcher or post-doctoral equivalent in the field. Additionally, you need to have experience in preparing research funding applications, both nationally and internationally.

For a professorship position, successful funding applications and managing roles in research projects are crucial.

Teaching experience is also vital, including supervising master students and assisting in the supervision of PhD students. You should be able to develop innovative teaching activities, and for a professorship, documented experience in supervising PhD students is required.

Personal characteristics

- high ambitions, both on behalf of your own achievements and those of colleagues
- reliable and respectful
- positive, curios and willing to learn,
- self-motivated and motivational
- problem solver, systematic and systems-thinker
- willing to collaborate both within groups in the department and across NTNU
- able to work both independently and in a team
- willing to share results with colleagues locally and globally

In the assessment of the best-qualified applicant, we will emphasize education, experience and personal suitability as well as your motivation for the position.

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How to apply?

The application and description of the academic works to be used as the basis for the assessment must be in English.

The application must include:

- CV, certificates and diplomas
- academic works - published or unpublished - that you would like to be considered in the assessment
- details of the projects you have initiated, participated in and managed, with information about funding, duration and size
- a description of the academic works that you regard as most relevant and that you particularly want to be considered in the assessment
- a description (maximum 3-5 pages) on how the candidate envisions her/his research in a Norwegian context and what would be the main sources of funding
- a description of the teaching activities that you regard as most relevant and that you particularly want to be considered in the assessment
- a description (maximum 2 pages) on how the candidate envisions her/his teaching activities in a Norwegian context
- name and contact details of three references

Submit your application with your CV, diplomas, documents and certificates via jobbnorge.no.

Applicants invited for interview must bring certified copies of certificates and diplomas. Mark the application with reference number: Ref.: 2024/100723.

Full detailed description here and link to apply:

https://www.jobbnorge.no/en/available-jobs/job/273421/professor-associate-professor-in-advanced-supply-chain-management

If you have any questions about the position, please contact Prof. Fabio Sgarbossa (Production Management group leader), email: fabio.sgarbossa@ntnu.no.

If you have any questions about the recruitment process, please contact Linn-Cecilie Felle Brattheim, e-mail: linn.c.felle@ntnu.no

Deadline for applications: **08.02.2025**

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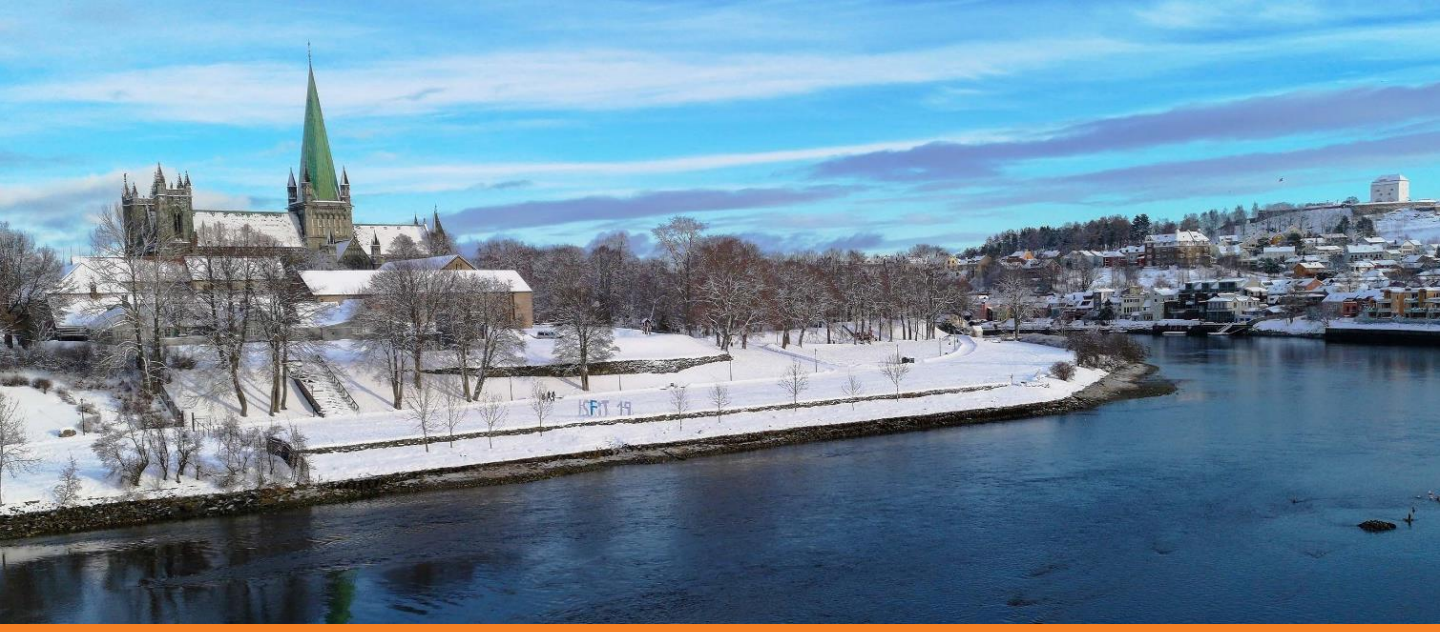

Living and working in Norway

Norway

Norway, with its population of just over five million, is one of the three Scandinavian countries. Best known for its stunning natural beauty, Norway is ranked by the United Nations as one of the best countries to live in.

A rugged country of mountains, fjords and glaciers, Norway covers an area of approximately 324,000 square kilometres as Europe's northernmost country. The Kingdom of Norway is famed for its mountains and spectacular fjord coastline, as well as its history as a seafaring power.

Norway is the world's seventh largest oil and third largest natural gas exporter and deposits the surplus wealth from this exploitation into its oil fund – now the world's largest sovereign wealth fund.

Although not a member of the EU, Norway is fully integrated into the European community through the European Economic Area (EEA) agreement. Norway is a founding member of the North Atlantic Treaty Organisation (NATO) and a member of numerous other international organisations.

Norwegian society

Norwegian society Norway is a progressive welfare state; its values are rooted in egalitarian ideals and openness, equality, and equal rights are important values.

It is considered to be one of the most developed democracies and constitutional states in the world.

Norway enjoys one of the world's highest standards of living, and, for 13 consecutive years, has been ranked 'the best country to live in' by the United Nations Human Development Report.

Norway is also rated high for its literacy rate, educational levels and material wealth. In addition, Norway has one of the best welfare systems in the world and has one of the lowest crime rates in the world.

Benefits of living and working in Norway include a satisfying work-life balance, high standards of living, an excellent education and health system, and a strong sense of community.

NTNU

Living and working in Norway

About Trondheim

With a population of 193,000, of which 33,000 are students, the vibrant city of Trondheim is the third largest city in Norway. Although the most northerly of the big Norwegian cities, Trondheim is located in central Norway, in the Trondheimsfjorden – Norway's third-longest fjord.

With its colorful warehouses, waterways and wooded hills, it is home to some of Norway's most popular attractions. As the country's former Viking capital, Trondheim offers cosy shopping streets, a myriad of restaurants and bars, museums to visit as well as Europe's northernmost Gothic cathedral (Nidaros Cathedral).

Trondheim also has a proud musical heritage; visitors can explore this heritage with not one, but two great music museums.

Beyond the city's outskirts there's a wealth of wilderness to explore. To the south-west of the city, Bymarka (the city forest) offers hundreds of kilometers of hiking and cycling trails, which transform into cross-country skiing trails in the winter.

Trondheim has a long tradition in education and is well-known as a top location for students and academics: the city has been ranked several times as Norway's best student city. The 33,000 students, leave their mark on the city and contribute to a high level of innovation and culture.

Trondheim Airport Værnes serves international and national flights. The Norwegian State Railways, NSB, operates four daily trains between Oslo and Trondheim; the journey takes approximately seven hours. Trondheim can also be easily reached by train from many other Norwegian cities.

NTNU