

Evaluation of Mathematics, ICT and Technology 2023-2024

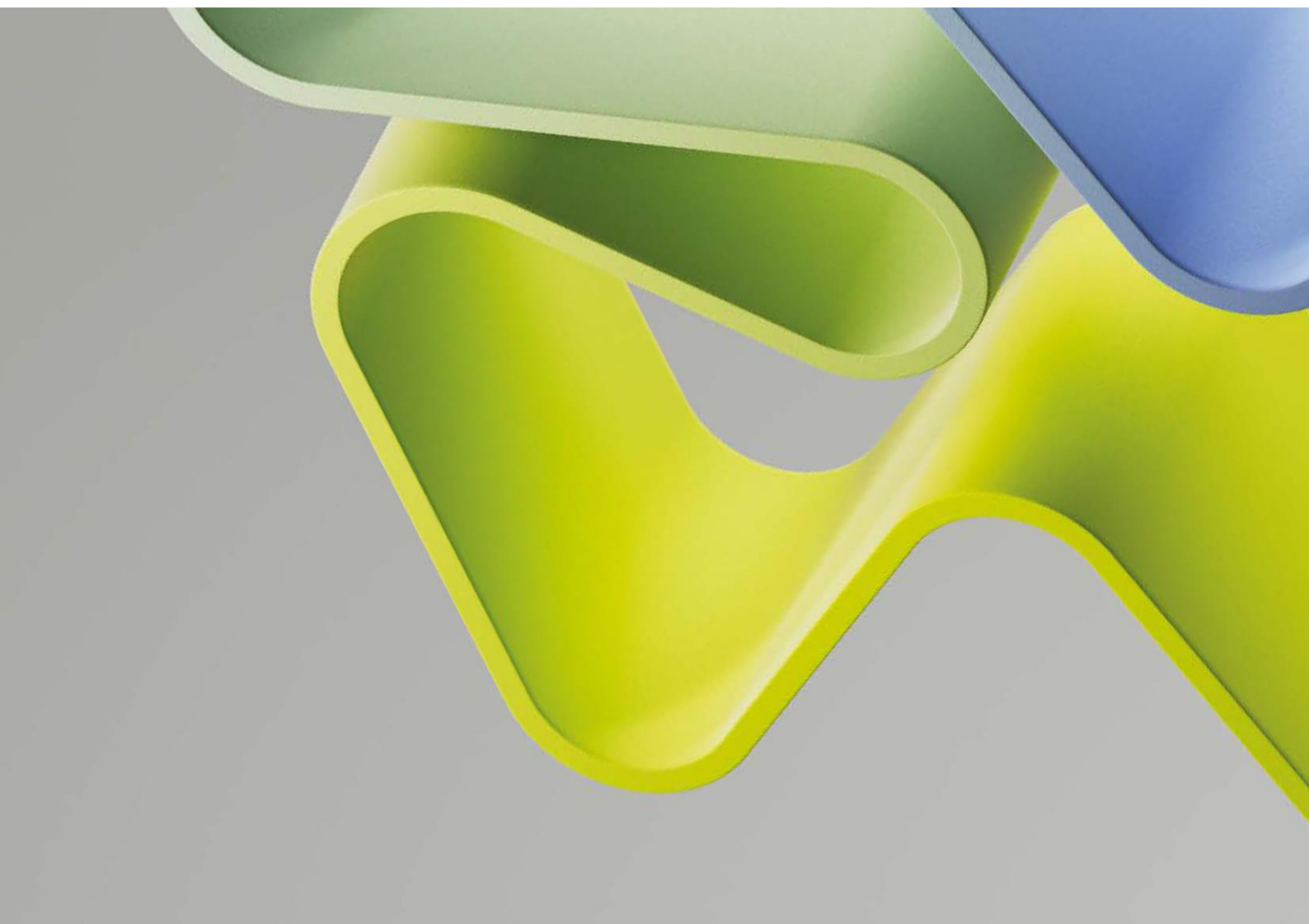
Evaluation Report for Administrative Unit

Administrative Unit: **Department of Electrical Engineering and Computer Science (IDE)**

Institution: **University of Stavanger (UiS)**

Evaluation Committee Higher Education Institutions 1

December 2024



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Statement from Evaluation Committee Higher Education Institutions 1

The members of this Evaluation Committee have evaluated the following administrative units at the higher education institutions within Mathematics, ICT and Technology 2023-2024 and has submitted a report for each administrative unit:

- Department of Informatics, University of Bergen (UiB)
- Department of Mathematics, University of Bergen (UiB)
- Department of Informatics, University of Oslo (UiO)
- Department of Mathematics, University of Oslo (UiO)
- Department of Computer Science (IFI), UiT The Arctic University of Norway
- Department for Mathematics and Statistics (IMS), UiT The Arctic University of Norway
- Department of Mathematical Sciences (IMF), Norwegian University of Science and Technology (NTNU)
- Department of Computer Science (IDI), Norwegian University of Science and Technology (NTNU)
- Department of Mathematics and Physics (IMF), University of Stavanger (UiS)
- Faculty of Engineering and Science (TekReal), University of Agder (UiA)
- Department of Electrical Engineering and Computer Science (IDE), University of Stavanger (UiS)

The conclusions and recommendations in this report are based on information from the administrative units (self-assessment), digital meetings with representatives from the administrative units, bibliometric analysis and personnel statistics from the Nordic Institute for Studies of Innovation, Research, and Education (NIFU) and Statistics Norway (SSB), and selected data from the National survey for academic staff in Norwegian higher education and the National student survey (NOKUT). The digital interviews took place in the autumn 2024.

The members of the Evaluation Committee are in collective agreement with the assessments, conclusions and recommendations presented in this report. None of the committee members has declared any conflict of interest.

The Evaluation Committee consisted of the following members:

Professor Rebecka Jörnsten (Chair)
Univ. Gothenborg/Chalmers

Professor Matthias Schütt
Leibniz Universität Hannover

Professor Jan Hesthaven
École Polytechnique Fédérale de Lausanne

Professor Mads Nielsen
University of Copenhagen

Professor Tiziana Margaria
University of Limerick

Dr. Joanna Staneva
Helmholtz Zentrum Hereon

Professor Björn Engquist,
University of Texas at Austin

Professor Plamen Angelov
Lancaster University

Description of the Administrative Unit

The department consists of different research groups of various sizes. Informally, the department has three overlapping areas of expertise: Computer Science, Data Science and Artificial Intelligence, and Cybernetics and Biomedical Engineering. The department's size creates an ideal environment for close collaboration between research groups. Research groups focusing on AI are also part of 'Stavanger AI Lab,' a collaborative platform that brings together research groups engaged in AI research at an institutional level.

The department has a permanent staff of 27 scientific personnel, which includes 10 Professors and 17 Associate Professors, fostering a continuous dialogue to identify improvement areas and opportunities. Responsibilities are shared among staff, with three serving as study programme leaders and committees formed as needed to evaluate study programme improvements. The department has been successful in increasing the number of female employees, reflecting our commitment to promote gender diversity within our staff. Currently, we have four women among the permanent scientific staff. While challenges remain, the current gender imbalance aligns with broader trends seen across technical disciplines. However, approximately 25% of our PhD students are female, indicating a gradual shift towards gender balance.

The research is organised in the following research groups:

- Computer Science
- Cybernetics and Biomedical Engineering (CBE)
- Data Science and Artificial Intelligence

The department's research and educational activities are closely aligned with the faculty's strategic priorities within energy, health and technology, and digital technology, as well as the university's strategic priorities in energy, as well as health and welfare. By expanding its focus to include medical technology and power systems, the department aims to enhance its offerings, exemplified by a new bachelor's degree in medical technology and a specialization in power systems. The overarching strategy of the university emphasizes green transition, prompting the faculty to prioritize research and innovation activities within energy transition, environment, circular economy, and resource utilization, aiming to contribute to solving significant societal challenges and facilitating more sustainable social development through cooperation with both public and private sectors.

The administrative unit prioritizes fostering strong national and international collaborations to enhance its research and educational efforts. This includes establishing formal agreements for joint research projects, knowledge-sharing initiatives, and funding partnerships, as well as hosting national and international conferences to facilitate communication. The unit maintains a robust network of adjunct positions with organizations like SINTEF and ABB, which bridges the gap between academia and industry, ensuring research aligns with practical applications. Furthermore, the presence of permanent staff in prominent companies like Google and AkerBP enhances these connections, contributing to impactful and relevant work.

Overall Assessment

The Department of Electrical Engineering and Computer Science at the University of Stavanger, hereafter referred to as the administrative unit, produces high-quality research in top outlets. The external funding level is on the low side and is uneven across the research groups. The administrative unit pursues research that has a high societal impact. The administrative unit emphasises cross-disciplinary research and impact in other domains as the direct underpinning of the overall strategy. Specific prioritizations are related to United Nations sustainability goals, including health care, urban planning, and disease prevention.

The educational programs have increased in recent years, and the administrative unit has increased its teaching staff in response.

In the report, the evaluation committee has provided detailed comments and recommendations. Key observations are summarised here.

Strengths

- The administrative unit is productive, and several faculty members are internationally recognised as leading field experts
- The administrative unit is excellent in terms of interdisciplinary and collaborative research
- The administrative unit is successful in innovation and knowledge transfer, e.g. through the commercialisation of research results.
- The administrative unit's scientific areas align well with the university's strategy and thematic priorities within energy, health and technology, and digital technology.

Weaknesses

- The PhD program is undersized, which could negatively impact productivity and research excellence in the long term
- The MSc program is also a bit on the small side, which could make recruiting top talent to the PhD program difficult
- The administrative unit lacks specific strategic planning at the unit and research group levels

The administrative unit raised several points in their terms-of-reference document. The comments and recommendations have been taken into consideration by the evaluation committee.

The Terms of Reference for the administrative unit is attached to the report.

Recommendations

1. The administrative unit should review the organisational structure and follow-up processes to assess resource allocation strategies.
2. The administrative unit and research groups should develop more detailed and specific strategic plans, including long-term recruitment strategies, prioritisation, staff composition and resource allocation between research groups.
3. The strategies need to be sharper: which areas to prioritize, which group to allocate resources to, PhD recruitment, incentives and follow-up processes, etc.
4. The evaluation committee recommends that the administrative unit reviews what a reasonable size PhD program should be for each research group.

5. The evaluation committee recommends that the administrative unit develops a collaboration strategy. Internal collaboration can help build up areas of strength with a more clearly defined profile and higher visibility. The administrative unit should be selective in choosing external collaborations to commit to and prioritize collaborations where faculty members play a substantial role.
6. The administrative unit needs to recruit strategically to build on areas of strength to increase visibility and recognition of the unit. A coordinated publication strategy is encouraged to increase visibility and impact.
7. The administrative unit may consider recruiting a scientific advisory board to help direct research prioritizations to increase the unit's share of EU funds. The administrative unit should include international networking (mobility and research visits) in their strategic plan. Deeper collaboration with a select set of international and national partners could benefit research, education and improve external funding levels.
8. The administrative unit should explore funding opportunities with local industry and other stake holders, e.g. industry PhDs or postdocs.

1. Strategy, Resources, and Organisation of Research

The administrative unit is organized into three research groups. The groups are partly autonomous, but recruitment strategies are set at the department level. The size of each group is on par with research groups at other administrative units but the groups span perhaps a somewhat wider research field than most of the other AUs which are more cohesive departments. This can pose a challenge for visibility and positioning.

The department aims to produce high quality research of high relevance to other domains such as medicine, energy and linguistics. The department also aims to increase the visibility of the unit at the national and international stage.

1.1 Research Strategy

The administrative unit has identified domains of particular interest; energy, marine technology, health and technology, digital technology and security. These prioritizations reflect the faculty's strategy, and the digital technology focus is most relevant for the administrative unit. The administrative unit could have clarified strategic goals that are more specific rather than identify the subset of the faculty goals relevant for the administrative unit. However, in the SWOT analysis the administrative unit does point to the distance between the researchers and project activities to the administration at the faculty level as a weakness and the lack of administrative unit level strategy is probably due to this organization.

Recommendations:

- The evaluation committee recommends that the administrative unit develops a strategic plan at the unit level, including long-term recruitment strategies and prioritizations between research groups and staffing.

1.2 Organisation of Research

The administrative unit and research group level strategy is somewhat vague and mainly refers to domains where collaborations with other administrative units and external stakeholders can lead to contribution with high societal relevance. It is certainly clear that working closely with external partners will increase the chance of this outcome. However, in terms of the other goal of increasing visibility nationally and internationally it is important that the department strategy also takes excellence of research within the field into account.

The permanent staff is 27 members but from the research group reports one can conclude a larger number of researchers are also active within each group (8+11+29 for the 3 research groups respectively). The PhD program (13+13+9) is of a somewhat small size for DSAI and CS given the number of researchers and quite small for the Cybernetics and Biomedical Engineering group. The administrative unit motivates this by having to increase the number of teaching staff to meet the need in response to an increasing number of students and a different resource allocation may be undertaken going forth.

The allocation of PhD students to groups is handled through an internal committee. Sabbaticals are handled at the faculty level. Reduced teaching for productive researchers is handled at the department level. There are support programs at the faculty for promotion support to address gender balance issues.

Recommendations:

- The evaluation committee recommends that the administrative unit reviews what a reasonable size PhD program should be for each research group and analyse how resources are best allocated to increase productivity and visibility in areas of strength.
- The Cybernetics and Biomedical Engineering group, especially, needs to review the low number of PhDs compared to research staff. The group is perhaps struggling the most in terms of cohesive organization with the group including members from other departments as well. The subdivision into two labs with apparently limited collaboration between them is also a concern.

1.3 Research Funding

The administrative unit report refers to increased basic funding to the department. The funding level of external to basic funding is good but is uneven across the research groups. DSAI sees funding levels in an upward trajectory but recognizes the risk with relying on RCN funds too much if RCN budgets are reduced. CS funding levels are unclear from the report since it was mainly aggregated at the level of the administrative unit. Cybernetics and Biomedical Engineering rely on internal funding.

The administrative unit's policy of reducing teaching for productive researchers is an incentive. The administrative unit also reduces teaching for those involved in centers-of-excellence applications.

Recommendations:

- The evaluation committee commends the current practise of the department to incentivize the writing and involvement in research grant applications. However, it is important to follow-up these forms of resource allocations, especially given the demand for teaching because of an increase in the number of students.
- Allocation of resources (e.g., increased teaching staff, reduced teaching) should be evaluated against alternatives such as increasing the number of PhDs. A larger PhD program might increase research productivity and improve chances for obtaining large external grants.
- The evaluation committee also recommends that the administrative unit reviews how internal collaboration can help build up areas of strength with a more clearly defined profile which might help in the grant application process
- Collaboration with other universities is also highly encouraged, especially if the department wants to increase national and international visibility.

1.4 Research Infrastructures

The administrative unit does not report on RI in the report. The Evaluation Committee recommends that the research groups investigate their possible participation in HPC and e-infrastructures.

1.5 National and international collaboration

The administrative unit collaborates with other units at UiS and other academic institutions in Norway. The administrative unit also collaborates with industry partners, hospital and municipalities which reflects the ambition of the unit to produce research with direct relevance to other domains.

The successful collaborative profile of the administrative unit is also reflected in the separate evaluations of the research groups where societal relevance scored quite high for all groups.

The CS group collaborates with industry which has lead to start-ups and projects with international relevance.

Recommendations:

- The evaluation committee recommends that the administrative unit increases collaborations with other groups to increase interdisciplinary research activities.
- However, it is also recommended that the research groups and administrative unit are selective in choosing which collaborations to commit to. The administrative unit should develop a collaboration strategy, building on current areas of strength and ensuring that the contribution of the faculty members in collaborations is substantial rather. The contributions by department members in collaborative and cross-disciplinary projects should be balanced in terms of time resources allocated and expected recognition/visibility.
- The panel recommends that the administrative unit and research groups review where their main areas of strength are and if there is critical mass to build on where international and national collaborations have high potential to lead to high impact results.

1.6 Research staff

The administrative unit allocated 40% of teaching to its members. There are sabbatical programs in place at the faculty. There are reduced teaching programs in place to incentivise research applications. Junior staff mobility programs are in place as well. Promotion support programs are also utilized.

The recruitment and research strategy is rather vague. The research groups could benefit from a more specific plan regarding which areas to strengthen, either to build on an area of excellence or because a research group is understaffed. The CS group has doubled in size of the last 10 years and are producing high quality research and doing quite well in terms of funding. The DSAI group is in a highly competitive field where many other universities are competing for top candidates. The group is productive but could expand both the PhD and master programs to have a bigger impact both in knowledge dissemination and to increase productivity and high impact research output. DSAI is a field where the need for “man-hours” is increasing in order to be competitive. The Cybernetics and Biomedical Engineering group is underperforming in terms of funding levels, number of produced PhDs and international impact output.

Recommendations:

- The evaluation committee recommends that the research group considers recruitment strategies that increases the PhD program and/or direct collaboration with other units, also on the experimental side.
- The evaluation committee recommends that the administrative unit reviews the allocation of resources (e.g. hiring, PhD funding) between the research groups. The administrative unit is small and could benefit from a more focused research profile to increase visibility and impact.

1.7 Open Science

The faculty funds publications cost for OA. The administrative unit is currently publishing in OA at rate 45% based on the RCN summary. There is clearly room for improvement and publishing more in OA, including preprints, can also help increase the visibility of the department research groups.

Recommendations

- The evaluation committee recommends that the administrative unit introduces a policy regarding Open Access, e.g. making preprints available is expected.

2. Research production, quality and integrity

The administrative unit produces high-quality research in good outlets. The administrative unit report emphasises the multidisciplinary of all research groups and their involvement with the Stavanger AI lab.

There are policy documents regarding academic integrity at UiS, but ultimately, the individual researcher has to take responsibility for compliance.

2.1 Research quality and integrity

The AU demonstrates varying degrees of research quality across the research groups.

The Computer Science research group produces excellent research and has utilised the growth to build a strong profile at UiS and nationally. The group could benefit from deriving concrete strategic plans to consolidate on the upward trajectory of the last 10 years, increasing their PhD output and strengthening international recruitment.

The CBE research group struggles with a cohesive profile, and there is limited synergy between the two sub-groups. Given the group size, this might work against the unit's wish to increase overall visibility and impact. The PhD programme is undersized. The research group could strengthen the collaboration with external partners and involve them more directly in research to increase direct impact and relevance. Increased collaboration could also lead to the identification of new sources of research funding.

The DSAI research group should sharpen their strategy and direct collaborative efforts to increase the impact and relevance of the group's research. The group should also consider reviewing publication strategies to increase their share of publication in top outlets for DSAI. The group could expand the master's and PhD programmes to increase contribution and relevance to society further.

Research group Computer Science overall assessment

The Computer Science Group strongly contributes to education at master's and PhD level and provides professional trainings to industry. The budget table provided in the self-assessment is related to the department rather than the group, which makes it hard to assess the latter's capability to acquire funds. The group lists two larger EU collaborative projects and many projects funded by the Norwegian Research Council. The project list does not contain projects funded by industry or public sector; hence it is difficult to evaluate which kind of projects are obtained from these sources and how much money is involved. The collaboration between the topic groups and the interdisciplinary collaborations more generally could be further strengthened (except for the tunnel safety group in the latter case). The publication output in international journals is very strong. However, in the stronger publications the weight of the authors from the group seems to be limited. In terms of demonstrated societal impact, there is a broad range of results including a software tool for universities, several patents, collaborations with two companies and a start-up. While this is positive, limited quantitative data is provided to assess the impact. The outreach activities to the broader public and the interdisciplinary collaborations could be strengthened. Through international collaborations the group contributes to excellent research. The evaluation of the research without such collaborations is very good at an international level. The group has a strong profile in applied research and contributes to Norwegian and international ecosystems.

Research group Cybernetics and Biomedical Engineering (CBE) overall assessment

The Cybernetics and Biomedical Engineering consists of two subgroups that are both loosely organised: BMDLab, which focuses on analysis of biomedical data using machine learning tools, and CSBLab, which focuses on analysis of biological processes using differential equations and control theory. The BMDLab has some success related to issues with newborns, while the CSBLab works on theoretical issues and is also gaining some visibility. The work is generally good and in collaboration with international partners. However, little synergy seems to exist between the BMDLab and the CSBLab in terms of applications or methods. Individually and collectively, BMDLab and CSBLab may benefit by more explicitly stating the scientific and societal problems that they aim to solve. The societal impact is mostly related to dissemination. Given the research topics, the groups would benefit to have an intellectual property rights strategy (IPR strategy) (they do list one patent) and a goal to have impact on society by spin-out companies. Also, it is a weak point that BMDLab and CSBLab do not seem to collaborate. The CSBLab suffers from lack of experimental facilities and should find experimental collaboration partners or obtain resources to build experimental facilities. The ratio between the number of PhD students and the number of faculty seems low to do world-class research and more funding for PhD students is recommended. The groups do publish in internally recognised journals and participate in international research projects. The visibility of the group in the international scientific community is modest and could be improved.

Research group Data Science and Artificial Intelligence overall assessment

The group is regularly publishing in Core A and A* ranked journals, and the best-in-field conferences and journals are represented. The publications highlighted in the self-assessment indicate that the group is publishing high quality work within their respective domains, as the listed publications are of high international standard. They are covering a broad spectrum in data mining, fake news detection, and machine learning methodologies in applications. They represent the faculty of the group, but also include international collaborations. They excel in putting theory in applicational context. The external funding is

moderate to high, increasing, diverse, but with emphasis on RCN. The group is involved in interdisciplinary projects with applications of data science and AI, is active in medias. The group has moderate to high success in the dimensions of interdisciplinary research and commercialisation also including one spin out founded. The group has a high level of user involvement in interdisciplinary projects. Relations to two MSc programmes, each with very few students (20 per year). Relative to the number of professors (eight), a small number of PhDs have been produced over the evaluation period (20 over 10 years). Currently, 13 are enrolled, which shows a positive trend.

3. Diversity and equality

The administrative unit describes policies, policy documents, and resources that are in place to ensure that the AU is a safe and inclusive place of work.

The administrative unit has reduced the gender imbalance over the evaluation period. However, gender imbalance is still a problem, and the administrative unit is actively participating in promotion programs and considering the gender aspect during the recruitment process.

Recommendation

- The evaluation committee recommends that the administrative unit continue its efforts
- The administrative unit is encouraged to build a network with local industry to identify job opportunities for significant other of applicants

4. Relevance to institutional and sectorial purposes

The administrative unit's PhD programme is on the small side. The graduating PhDs transition to academia and industry, but specific numbers were not provided to the evaluation committee.

The administrative unit encourages mobility for junior staff. International student recruitment is also a priority. The administrative unit is active in education in fields with rapid development. It works on developing new courses and adapting current courses to ensure that the educational programs remain relevant and attractive to students.

The administrative unit involves students directly in research (research-based education) and encourages student innovation. There are student projects with industry partners where students can apply for funding at UiS to support innovation and start-up activities.

UiS collaborate and is a partner with an innovation office which lowers the barriers for faculty innovation and start-up activities.

The administrative unit is involved in three MSc programs, where there is international recruitment. The MSc projects are often directly connected to research. The administrative unit does not list connections or collaborations to research institutes.

5. Relevance to society

The administrative unit emphasizes cross-disciplinary research and impact in other domains as the direct underpinning of the overall strategy. Specific prioritizations are related to UN sustainability goals, including health care, urban planning, and disease prevention.

5.1 Impact cases

Comments to impact case 1: Smartphone use in CPR

The first impact case describes an interesting trajectory of research. Originating with a master thesis project developing an algorithm that uses smartphone cameras to measure CPR quality, close collaboration with partners at Laerdal medical led to a PhD project centering on improving the algorithm for training purposes. The external stakeholder (hospital) were directly involved in driving the research in a particular direction. The project involved student researchers.

The research has been published in scientific outlets, both within the field and in domain application outlets.

The methodology has been fully developed as a software product (app) that has been downloaded 100k+ times and is used for CPR training. The research group has established national and international partnerships to integrate the product into medical training.

The research has been recognized by the scientific community and by international press.

The impact case is an excellent example of how direct involvement with external stakeholders ensures that research results translate to products and solutions with direct societal impact.

Comments to impact case 2: Deep neural networks for factchecking - factiverse

The impact case centers on work on Trustworthy AI. Researchers at the academic unit have developed novel methodology, hierarchical deep attention networks, to identify false or misleading information in real-time. The model has been trained on factchecking sources (e.g. Politifact).

The research results have been published in scientific outlets and has been well-cited. In addition, the results have been commercialized, and the company currently employs 6 people. Plug-in softwares, for chatGPT and browsers, have been developed.

This is an excellent example of a research program that spans from novel methodology to finished, commercialized products. The program has involved MSc students directly in the research and ongoing research and development has led to external funding awards for research and innovation.

The program has been recognized in the popular press and has also been awarded with an innovation prize.

Comments to impact case 2: The smart community neighborhood

The impact case describes a research program on intelligent energy management. The research program has led to several highly cited and impactful publications and several PhD theses.

The research program has led to patents and commercialization. The research results have been recognized in the popular press.

The research program is highly successful with direct social impact and high visibility.

The impact case is an excellent example on high quality research, published in top outlets and constituting an active research field, with direct societal impact.

Methods and limitations

Methods

The evaluation is based on documentary evidence and online interviews with the representatives of Administrative Unit.

The documentary inputs to the evaluation were:

- Evaluation Protocol that guided the process
- Terms of Reference
- Administrative Unit's self-assessment report
- Administrative Unit's impact cases
- Administrative Unit's research groups evaluation reports
- Bibliometric data
- Personnel and funding data
- Data from Norwegian student and teacher surveys (only for HEI's)

After the documentary review, the Committee held a meeting and discussed an initial assessment against the assessment criteria and defined questions for the interview with the Administrative Unit. The Committee shared the interview questions with the Administrative Unit at least two weeks before the interview.

Following the documentary review, the Committee interviewed the Administrative Unit in an hour-long virtual meeting to fact-check the Committee's understanding and refine perceptions. The Administrative Unit presented answers to the Committee's questions and addressed other follow-up questions.

After the online interview, the Committee attended the final meeting to review the initial assessment in light of the interview and make any final adjustments.

A one-page summary of the Administrative Unit was developed based on the information from the self-assessment, the research group's evaluation reports, and the interview. The Administrative Unit had the opportunity to fact-check this summary. The Administrative Unit approved the summary.

The Committee judged the information received through documentary inputs and the interview with the Administrative Unit sufficient to complete the evaluation.

List of administrative unit's research groups

Institution	Administrative Unit	Research Groups
University of Stavanger	Department of Electrical Engineering and Computer Science	Computer Science
		Cybernetics and Biomedical Engineering (CBE)
		Data Science and Artificial Intelligence

Terms of Reference (ToR) for the administrative unit

The board of University of Stavanger mandates the evaluation committee appointed by the Research Council of Norway (RCN) to assess the UiS Department of Electrical Engineering and Computer Science based on the following Terms of Reference.

Assessment

You are asked to assess the organisation, quality and diversity of research conducted by the UiS Department of Electrical Engineering and Computer Science as well as its relevance to institutional and sectoral purposes, and to society at large. You should do so by judging the unit's performance based on the following five assessment criteria (a. to e.). Be sure to take current international trends and developments in science and society into account in your analysis.

- a) Strategy, resources and organisation
- b) Research production, quality and integrity
- c) Diversity and equality
- d) Relevance to institutional and sectoral purposes
- e) Relevance to society

For a description of these criteria, see Chapter 2 of the mathematics, ICT and technology evaluation protocol. Please provide a written assessment for each of the five criteria. Please also provide recommendations for improvement. We ask you to pay special attention to the following 4 aspects in your assessment:

1. The coupling and relevance to research in other domains, like medicine, energy, linguistics, etc., and the coupling to industry, hospitals and other partners.
2. The national and international visibility and brand of the group/institution. If possible, suggest actions that may be taken to strengthen the visibility. Does the brand and visibility correctly represent the actual scientific quality?
3. The research group's potential for acquiring EU-funding, in particular ERC-consolidator/advanced grants within the coming 10-year period. If possible, suggest actions that can be taken to develop this potential.
4. The use of, and future needs for, local/national/international research infrastructure. If possible, suggest actions that can be taken to consolidate/develop existing activities: Laboratories and laboratory equipment, HPC, membership of international consortia and large scale experimental facilities.

In addition, we would like your report to provide a qualitative assessment of the UiS Department of Electrical Engineering and Computer Science as a whole in relation to its strategic targets. The committee assesses the strategy that the administrative unit intends to pursue in the years ahead and the extent to which it will be capable of meeting its targets for research and society during this period based on available resources and competence.

The committee is also invited to make recommendations concerning these two subjects.

Documentation

The necessary documentation will be made available by the mathematics, ICT and technology secretariat at Technopolis Group.

The documents will include the following:

- a report on research personnel and publications within mathematics, ICT and technology commissioned by RCN
- a self-assessment based on a template provided by the mathematics, ICT and technology secretariat

Interviews with representatives from the evaluated units

Interviews with the UiS Department of Electrical Engineering and Computer Science will be organised by the evaluation secretariat. Such interviews can be organised as a site visit, in another specified location in Norway or as a video conference.

Statement on impartiality and confidence

The assessment should be carried out in accordance with the *Regulations on Impartiality and Confidence in the Research Council of Norway*. A statement on the impartiality of the committee members has been recorded by the RCN as a part of the appointment process. The impartiality and confidence of committee and panel members should be confirmed when evaluation data from the UiS Department of Electrical Engineering and Computer Science are made available to the committee and the panels, and before any assessments are made based on these data. The RCN should be notified if questions concerning impartiality and confidence are raised by committee members during the evaluation process.

Assessment report

We ask you to report your findings in an assessment report drawn up in accordance with a format specified by the mathematics, ICT and technology secretariat. The committee may suggest adjustments to this format at its first meeting. A draft report should be sent to the UiS Department of Electrical Engineering and Computer Science and RCN. The UiS Department of Electrical Engineering and Computer Science should be allowed to check the report for factual inaccuracies; if such inaccuracies are found, they should be reported to the mathematics, ICT and technology secretariat within the deadline given by the secretariat. After the committee has made the amendments judged necessary, a corrected version of the assessment report should be sent to the board of University of Stavanger and the RCN no later than two weeks after all feedback on inaccuracies has been received from the UiS Department of Electrical Engineering and Computer Science.

Appendices

1. Description of the evaluation of EVALMIT
2. Invitation letter to the administrative unit including address list
3. Evaluation protocol
4. Template of self-assessment for administrative unit (short-version)

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Publikasjonen kan lastes ned fra
www.forskningsradet.no/publikasjoner

Design: [design]

Foto/ill. omslagsside: [fotokreditt]

ISBN 978-82-12-04145-5 (pdf)

