Periodic program evaluation of the master's programmes, TIK and ESST, 2024 University of Oslo

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1. Introduction and key recommendations

1.1. Mandate

This evaluation shall provide a basis for professional and strategic assessments of the need for changes in the aforementioned programmes. The committee's work shall follow the procedure for periodic program evaluation as outlined in Kvalitetssystemet¹, at the University in Oslo. The periodic program evaluations are conducted every 6 years. The goals in Strategy 2030 shall guide the panel's assessments².

In accordance with the stated mandate, this program evaluation has the intention to make a comprehensive evaluation of the two master programs, TIK and ESST, based on the information that has emerged during the period, and thus arrive at measures that ensure and strengthen the program's quality. The committee shall base its evaluation of the two programs on the centre's self-evaluation as well as interviews with centre staff and students. In addition to this, the information basis is as following:

- 1. Relevant subject reports for mid-term evaluation
- 2. The annual program review of the study programs
- 3. Supervisory sensor reports
- 4. The program management's self-assessment of the program
- 5. Student evaluations conducted by the program.
- 6. Workforce surveys/alumni surveys
- 7. Studiebarometeret³
- 8. Relevant statistics about the study program
- 9. The program websites

Goals for the report as of particular relevance for the centre is how the master programmes function as educating students for advanced problem solving in a wide range of work areas, and how the centre manages to educate students who are in demand at the job market. The following elements have made the basis for the content of this periodic program evaluation:

- The learning objectives of the two master programs, TIK and ESST
- Coherence of the master programs
- The TIK centre's resources and infrastructure
- Student recruitment and results
- Conclusion/recommended measures

https://uio.no/om/regelverk/studier/kvalitetssystem/systembeskrivelse.html

¹ Kvalitetssystem for utdanningsvirksomheten ved UiO

² https://www.sv.uio.no/om/strategi/strategi2030/strategi-2030.pdf

³ For TIK: Evalueringer – Teknologi, innovasjon og kunnskap (master - to år) – Universitetet i Oslo (uio.no), for ESST: Evalueringer – ESST - Society, Science and Technology in Europe (master - halvannet år) – Universitetet i Oslo (uio.no)

1.2. Main points from the previous report (2013)4

The previous report concluded that the programmes are well functioning, suiting the students for their future work life through unique but intense programmes. The report found it a strength for the two programs that they include both STS and innovation studies through the introduction course provided the first semester. The report gave some recommendations for the centre:

- Better cooperation and balance between the two specializations. The 2013 report found that the two research areas could benefit from being more complementary and coherent. This was also visible through the number of applicants to the specializations, where a major part of the students picked innovation studies. The report suggested that much could likely be gained through mutual respect and loyalty between the two research fields. It further suggested for continuously considerations on how the subjects can open up for each other throughout the first semester.
- Learning objectives. The report found that the learning objectives for the programmes and subjects should be continuously reconsidered and clarified as the subjects are adjusted. In the learning objectives for the specializations, it could be clearer what specific subperspectives students are expected to acquire. The 2013 report also recommended considering how students can be oriented around the programmes' structure and focus already from the start.
- Written evaluations. The 2013 report found a lack of written documentation on work life relevance, as well as on the quality of the studies. The report therefore suggested that courses should be continuously evaluated, while data on previous students' workplace should be collected. This way, written documentation on program quality as well as work life relevance can be provided.
- **Better resource basis.** The resource basis was considered to be vulnerable. The TIK-centre is a research centre, and research projects are therefore prioritized before lecturing. The report also saw this to mean that there is only a small group available for teaching and supervision. This was imagined creating problems for continuity and responsibility.

1.3. Reflection on our findings vis-à-vis the previous report

The 2013 report found that the two research areas could benefit from being more complementary and coherent. Since then, TIK has worked strategically with strengthening collaboration across the two fields, both in relation to the educational efforts and in relation to other activities at TIK. This is exemplified by the implementation of the bridge module in the introduction course. The committee suggests that current efforts towards strengthening collaboration are continued.

The 2013 report found that learning objectives should be reconsidered and clarified as the subjects are adjusted. The evaluation committee suggests that a more stringent approach to formulating and updating learning objectives across the courses are implemented.

The 2013 report found that written evaluations of the courses should be implemented systematically. This remains a priority for the future. At the course level, any assessment of the quality of the education activities is significantly compromised by a lack of systematic and structured course evaluations. The committee finds that consistent implementation of structured course evaluations should be prioritised.

⁴ See https://www.uio.no/studier/program/tik-master/studiekvalitet/periodisk-programevaluering/2008-2012/

The 2013 report found that the resource basis of TIK was considered to be vulnerable. This remains a challenge today. Given the popularity and quality of the two master programmes, it ought to be a priority for the Faculty of Social Sciences to ensure a stronger resource basis for permanent employment at TIK, in particular now, as TIK also initiates responsibility for courses at the BSc level.

1.4. Main points from the self-evaluation

The centre's self-evaluation provides an overview of strengths and weaknesses to the programs from the centre's own perspective, as well as considerations on adjustments for the future.

- Higher competition. An increasing number of universities and higher education institutions
 are providing cross disciplinary programs, such as TIK/ESST. This can result in TIK facing
 stronger competition from similar programs in the future.
- Reconsideration of the program structure. There is a difference between TIK which is 120
 ECTs and ESST which is 90 ECTs. This is experienced as inconvenient due to several
 reasons. A restructuring of the ESST program into 120 ECTs is therefore being considered.
- Collaboration between STS and innovation. A bridge-module has been included in the introduction course to make them more intertwined. There are actions taken to evolve synergies and new ways of thinking around the two fields, and the self-evaluation describes a desire to continue this cross disciplinary collaboration, both in research and teaching.
- **Exam format and AI.** The current exam format using take-home exam face a challenge with the development of AI. New formats are therefore considered. The self-evaluations express a desire to include more hands-on usage of AI in teaching and writing.

1.5. Reflection on our findings vis-à-vis the self-evaluation

The self-evaluation described a decrease in number of applicants to the TIK/ESST master programs. The self-evaluation found that the establishment of similar cross disciplinary master programs provides a competition for the TIK centre. The number of applicants to the two MSc programmes are high, although slightly decreasing over the past years (but the committee also understand that the very recent round of applications resulted in a considerable increase). The evaluation committee considers the challenge of unfilled study places might be addressed by increasing overbooking slightly, as early dropout often occurs when students receive offers from multiple institutions, in line with the self-evaluation.

The self-evaluation found that the difference in ECTS between the two master programs provided difficulties and a larger workload to the centre administration. The self-evaluation also reported an overlap between design seminar and method course. The self-evaluation therefore considered making both programs 120 ECTS for better structure and less double work. The evaluation committee support the suggestion to merge the method course (TIK4031) and design seminar (TIK4040) into one 15 ECTS course or, alternatively, include the design seminar into the master thesis, to free more ECTS for specialization courses.

The self-evaluation describes the bridge module of the introduction course (TIK4001) as a measure to make the collaboration between innovation and STS stronger. The committee finds the work to join the two fields closer together in the lectures through the bridge module a positive addition and suggests that possibilities for further development of bridge building learning activities are further investigated.

The self-evaluation describes the need to investigate new exam formats which better meet the challenges AI give to the existing take-home exams. The evaluation committee see no evident

solution to the problem with exam format descried in the self-evaluation. The committee suggests that changes in the exam format should ensure both a focus on writing, while also making sure the exam cannot be easily manipulated through the use of AI, e.g. through a greater use of oral exams.

1.6. Key recommendations

1. Formalize and professionalize administrative procedures:

- Standardize course evaluation procedures and make them mandatory for all courses.
- Develop a clear and consistent system for student feedback and use it to inform improvements to the program.
- Establish clear guidelines for teacher meetings and ensure that all relevant parties are involved.
- Formalize the role of the course coordinator and ensure that they have the necessary experience and expertise.

2. Teaching activities

- Encourage a suitable balance between involvement of senior faculty and early career researchers in courses, particularly in introductory courses.
- Strengthen the cohesion in courses taught by multiple instructors. A suggestion could be to assign a single, experienced faculty member as the "core" instructor for each course to set the overall framework, ensure coherence across modules, and coordinate with guest lecturers.
- Consider possibilities for including aspect from the current design seminar in the master thesis course (TIK4093) or to consider merging the design seminar and the methods course to free ECTS points for further activities targeting specialisation.
- Better semester planning to improve faculty well-being and create a sustainable workload. This can include minimizing ad-hoc tasks, establishing clear workload expectations and important dates in the beginning of each semester, and/or scheduling dedicated research time within the semester to avoid disruptions from teaching activities.
- Reconsideration of exam formats, taking into consideration possibilities and challenges associated with AI.

3. Relevance for future work life:

- Conduct short interviews with TIK graduates that found jobs in relevant fields and highlight how the master's degree has been relevant in their current position. Back up with statistics that shows that TIK students get relevant jobs before or shortly after their graduation in public and private sector and NGO's.
- Invite alumni to speak to students about their careers.
- Strengthen the alumni network by inviting them to yearly/semi-yearly events and set up an alumni group on LinkedIn.

4. Student recruitment

- Consider broadening the admission criteria beyond the current focus on students with a BSc in humanities, social sciences, and sustainability.

5. Academic and social environment

- Strengthen the collegiality and focus on the development of teaching and pedagogy as a collective task by implementing meeting places to discuss such matters regularly between faculty staff.
- Enhance student-faculty interaction by creating a space for the students to work at the same floor as faculty offices. This can be a dedicated study space for students, a small library with a collection of TIK literature, or a shared coffee or lunch-break room.

2. Learning objectives

The learning objectives for the TIK master programs can be assessed on different levels. There are overall learning goals per master (ESST and TIK Master). Moreover, there are individual learning objectives for the individual courses. The overall learning objectives for the master programs are not much thematized in the self-evaluation, beyond the overall reflection that "Det overordnede målet med TIKs masterprogrammer er å gi forskningsbasert utdanning som gir studentene perspektiver, ferdigheter og kvalifikasjoner som gjør dem attraktive for videre karrierer innenfor akademia eller som del av den øvrige arbeidsstyrken» (p. 2). Explicit discussions are also scarce on the objectives and outcomes of individual courses.

The overall goals for the ESST and TIK masters are made in accordance with the national qualification framework for qualifications implemented by NOKUT. This framework distinguishes between three ways of describing expected learning outcomes in terms of a) knowledge, b) skills, and c) general competence. Zooming in on individual courses this is not always the case. TIK4021 provides a list of bullet points highlighting what the course "will provide students with advanced knowledge on", while TIK4031 provides three general bullet points. The self-evaluation report (p. 7) notes that students are interested in a better understanding of how the courses prepare them for work after the master's degree. The evaluation committee suggests that perhaps a more stringent approach to learning objectives across courses, which reflects on how the courses provide knowledge, skills and general competencies for the work-life might strengthen the students experience of work-relevance? The evaluation committee also suggests the implementation of a more structured approach to revising learning objectives across courses. This also includes discussions of (revisions to) learning objectives across courses to ensure progression e.g. from the introduction to the specialisation courses as well as alignment between learning objectives at the course level and programme level.

That said, these comments should not be interpreted as strong critique of the learning objectives. If one looks across the courses from TIK4001 to the master thesis there is a logical progression in the learning objectives and outcomes, which should ensure that students are able to develop across the program.

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⁵ See https://www.uio.no/studier/program/tik-master/oppbygging/

3. Coherence of the study programme

The self-evaluation of the MSc programmes demonstrate that considerable attention is already given to support and increase coordination across courses. One identified challenge is the overlap between the design seminar (TIK4040) and recently introduced methods course (TIK4031), and it is suggested to potentially merge these two 10-ECTS courses into a 15 ECTS course, to allow for more ECTS points allocated to existing specialisation courses. The evaluation committee finds that this could indeed be a good option, while also taking into consideration that students report that the establishment of TIK4031 has improved the methodelement in the education as it is specifically focused on methods relevant for research in innovation studies and STS. At the same time, the committee also finds that the structure of the programme (TIK MSc) is heavily focused on the master thesis with 60 out of 120 ECTS allocated to the thesis and an additional 10 ECTS allocated to thesis preparation. This leaves only room for 10 ECTS for a specialisation course. Consequently, the evaluation committee suggests considering the possibility for including aspect from the current design seminar in the master thesis course (TIK4093) or to consider merging the design seminar and the methods course to free ECTS points for further activities targeting specialisation. Support for the latter is provided by expressions regarding the course being considered very "light" in scope and content, compared to other courses in the programmes.

Cross-fertilisation between the two specialisations (innovation and STS) is in focus both through development of specific educational activities, but also through more foundational activities aimed at increasing the general collaboration between researchers from the two groups. The method course is developed jointly by innovation and STS scholars. In the introduction course, student now also work across innovation and STS in a two-week case-based bridge module, which students appreciate. The committee finds that the bridge module appears to be a welcomed addition to the education, even if two-weeks is also a short period. **The evaluation committee suggests** that further attention is given to developing complementing bridge-building educational activities, for example investigating possibilities for joint activities and events across the two specialisation courses.

In terms of the quality of the education activities for the entire education, the student evaluations point to a high and increasing (since 2018) level of satisfaction. In particular, supervision and discussions with the faculty are evaluated very positively by students. The detailed evaluation questions in *Studiebarometer* concerned with education and feedback do not point to a need for any specific interventions. Overall, evidence points to high-quality educational activities across the programmes, which is of course central to developing strong educational programmes.

At the course level, any assessment of the quality of the education activities is significantly compromised by a lack of systematic and structured course evaluations. To exemplify, the STS specialisation course (TIK4011) and the design seminar course (TIK4040) have not been evaluated since 2018. For the recently introduced 'Methods in science, technology and innovation studies' (TIK 4031), only a very short summary of a recently completed oral evaluation is available, which highlights positive opinions of the mix of theory and practice, but also points to a possibility for closer linkages between the methods introduced and their application in innovation and STS. The 30 ECTS point 'Introduction to Technology, innovation and knowledge' was in 2023 evaluated using a web-based survey, but simply summarised in a 1-page word document, which does not allow for a systematic comparison with other courses at

the program or faculty level. To illustrate, it is stated that "Overordnet er studentene svært fornøyd med emnet, og 63% rangerer det med karakteren 5 eller 6 på en skala fra 1-6", but is this really a success if 37% gives the course a poor or intermediate score? In summary, the evaluation committee suggests that consistent implementation of structured course evaluations should be prioritised at once. This would appear to be an extremely low-hanging fruit that could also improve the knowledge about what works and what does not work in terms of the recently introduced changes to the educational content of the program. The committee notes that efforts towards this have been initiated through the development of joint evaluation template by the programme management for all courses, and expresses some surprise that no joint evaluation system is implemented at the faculty and university level. The evaluation committee suggests that the leadership at TIK ensures that the template is used by the course teachers.

Among the most important changes highlighted in the self-evaluation are introduction of student-led seminars, panel discussions, and collective supervision. The latter is welcomed by students, who seem to be happy to have been given an arena to meet peers and staff throughout the year of thesis writing. Overall, the committee finds that the use of all these teaching techniques is very welcomed and demonstrates a willingness to continuous improvement of the educational offer, which also ensures variation. Student participation in some of these activities is highlighted as a challenge. A more systematic use of evaluations could provide insights into the reasons for this.

Evaluation and assessment activities are generally evaluated positively by students in the *Studiebarometer*. However, the detailed variables for evaluation assessment shows a quite low score (3.2 out of 5) for the question 'Har hatt tydelige kriterier for vurdering', which points to a clear potential for improvement. Consequently, **the evaluation committee suggests** that all courses should systematically clarify evaluation and assessment throughout the course, starting from the introduction lecture. Also, **the evaluation committee suggests** that the programme management should critically reflect on the suitability of each course's evaluation criteria, given their learning objectives, as well as working on ensuring greater alignment in criteria for assessment across the courses.

In line with this, the self-evaluation highlights evaluation forms as a potential area for changes, given the increasing use of artificial intelligence (AI) and a tradition for take-home essays as the main examination form in several courses. Portfolio review is suggested as a potential future exam form, and the use of frequent – but small – written assignments has recently been introduced in the innovation specialisation course. In general, the committee finds that the MSc programmes could consider combining a greater portfolio of examination forms than what is currently used. On the one hand, a greater use of oral exams and sit-in exams on university computers disconnected from the internet could for example be considered. On the other hand, it is necessary for students to practice academic writing, given the focus of the programmes. One possibility could be to use written assignments as entry requirements for the actual exam, however, this increases the workload of the staff. In summary, there is no evident solution to the problem of ensuring both a focus on written work and ensuring that assessment activities are not easy to complete primarily through the use of AI. This is further complicated by the current rapid development of AI. Knowledge exchange and monitoring of decisions regarding assessment activities at other similar programmes will likely be important in the years to come.

Activities focused on preparing students for entering the labour market after completion of their studies are evaluated in quite different ways in the *Studiebarometer*. On the one hand, it is clear

that the students' assessment of this topic has improved considerably in recent years. The relatively positive assessment of the programmes' connection to the labour market is driven by very high scores on the level of involvement of external actors as guest lectures and the possibilities for external collaboration in relation to student projects, assignments, etc. On the other hand, the educations still score relatively low on the students' information about relevant sectors, relevance of own competencies, and ways of communicating their own competencies. In other words, the students seem to appreciate the possibilities for frequent encounters and collaboration with representatives from organisations beyond the universities, but they are unsure about the relevance of their own competencies. It should be noted that this is a general pattern across programmes on the Faculty of Social Science, and that the programmes under evaluation here are actually performing better than the average of the faculty. This may also reflect that the programmes are not educating students towards a very specific labour market (as is the case, for example, for students in a dentist education).

Still, the evaluation committee suggests that the program management pays attention to whether the students' uncertainty about the relevance of their own competencies reflects an actual (low relevance) or a perceived (high relevance, but not recognised) challenge. The most recent student program reports from 2018 are somewhat dated and do not provide a clear picture of this. On the one hand, graduates from the programs score above average (relative to both the faculty and the entire university) in terms of employment rates and share of full-time positions. On the other hand, fewer (in particular from the ESST program) use the competencies gained in the program in their work, and students (data only available for the TIK MSc) report that they experienced the job search as difficult and they had to send a greater number of applications before they actually secured a job. Again, given that the reports are somewhat dated, one should interpret these data with great caution. Therefore, it is very positive that the alumni network is now becoming mobilised to potentially provide continuous data on employment and careers, in addition to naturally supporting learning about relevance of competencies from previous to current students. Thus, the evaluation committee finds it highly likely that this is a perceived (high relevance, but not recognised) rather than an actual (low relevance) challenge, but encourages the collection of better data to actually demonstrate this. In addition, the evaluation committee suggests that the programme management considers initiating an employer panel⁶, which may assist in ensuring a continuous relevance of the programmes.

Internationalisation activities are a strength of the two programmes, in particular following from the participation in the international ESST network. Students have the possibility to study abroad at relevant institutions and there are also incoming students that contribute with complementary perspectives from their home universities. That being said, the ESST exchange program has by some been experienced as lacking in communication and cooperation between the different collaborating universities. Students have experienced their application not being received by their preferred host university, preferred specialization not being lectured although presented and a mismatch in ECTS from home university. **The evaluation committee suggests** that these challenges are prioritised and brought up in the board of ESST.

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⁶ See e.g. <u>https://science.ku.dk/fakultetet/organisation/raad-udvalg-og-naevn/aftagerpaneler/</u>

4. Resources and infrastructure

Over the last years, there has been a solid mix of seasoned and more junior scholars involved in teaching. The situation differs a bit across courses. The joint introductory course (TIK4001) has been given by a range of experienced scholars (Thune, Castellacci, Normann, Delgado Alleman, Druglitrø, Bugge, Bauer). The relatively intensive and dense courses specializing in innovation and STS (TIK4011, TIK4021) have had experienced scholars (Asdal/Bauer for TIK4011; Bugge/Andersen for TIK4021) working alongside PhD candidates (Engen/Stilling, TIK4011) for the last few years. In 2024, there has been a shift in the organization of teaching: only Stilling is listed for TIK4011, while post doc. Phirouzabadi is listed as the sole teacher for TIK4021. The detailed schedule, however, reveals that several scholars are involved in the teaching of these courses, most of them at PhD-student or post doc level. The background for this is a conscious choice in terms of providing teaching opportunities for early career researchers (ECR) as well as a significant overtime issue among the tenured staff. At the end of the day, this is linked to the few possibilities for employing staff in tenured positions at TIK.

While there can be good reasons and strong benefits of giving teaching experience to ECRs, the committee considers that there are also benefits to a strong involvement of senior and permanent staff in central courses. Students reported that the involvement of multiple teachers was experienced as a challenge, particularly in courses like STS (TIK4011) due to the subject's complexity. Here, students experienced the frequent shift in teachers as disruptive, somewhat hampering an overall narrative and socialization into the field of STS. This should not in any way be read as a critique of the ECRs currently involved in organising courses, in fact, all information received pointed to these ECRs doing an excellent job. However, course organisation of core courses in an MSc programme is an important and difficult task, in particular when courses are large and involving many lecturers, which requires significant coordination efforts.

Further, some stability in terms of course organisation responsibility is valuable for maintaining some institutional memory. This stability may be compromised by PhD students graduating or a postdoc moving on to a tenure track position with short notice. In summary, **the evaluation committee suggests** that a better balance is strived for in terms of involvement of tenured staff and ECRs in the courses. The committee notes that the feasibility of achieving such a balance might be conditioned by a greater allocation of resources to employment of tenured staff, in particular in the current situation where TIK is expanding its educational activities to also cover involvement in BSc courses.

The self-evaluation notes that the MA-programs are overseen by a program coordinator and that changes are decided upon by the TIK program board (Bugge, Brønstad, Delgado and two student representatives. The self-evaluation further notes that there have been some challenges concerning information flow, planning of the education, and conducting exams, which were identified during 2022/2023. These challenges are likely reflected in the study barometer, where the programs in 2020 and 2023 scored considerably lower on "organization" than on other parameters. Students report the same, saying the organisation of the programs has been experienced as insufficient, lacking in communication and clear guidelines from centre to students. This includes information from the administration and lecturers/academic staff. As a response, the program has established an education "task force", under the leadership of the TIK centre director. Beyond this there appears to be little collective collegial work to share experiences across courses and across teachers when it comes to matters of course organization, pedagogy and development. Recent efforts to establish a "teachers meeting" have

stopped. **The evaluation committee suggests** that these efforts are re-booted to increase the robustness of both administrative and academic aspects of the coursework.

The self-evaluation notes that there was considerable need to strengthen the governance of the MSc programmes, and to formalize what was as series of less fortunate informal structures around the program – including practices of not conducting formal evaluations of courses. Established routines of providing the correct information at the correct time to students have been established, and the work to strengthen the program council continues in 2024 e.g. through establishing new routines and a culture of written work within he programme council. **The evaluation committee suggests** that the current efforts towards professionalisation of the programme administration are continued. In particular, it is important that this development is not hampered by the future involvement in BSc courses, which also requires commitment of administrative resources.

5. Student recruitment and results

5.1. Student recruitment

Numbers from the last five years show that there is still a high number of applicants per available spot in both master's programs, although there has been a slight decline in recent years, including a decrease in the proportion of first-priority applicants. This decline is attributed to several factors, including an increase in available study places, a record-high number of applicants across the sector during the pandemic, and increased competition from other programs offering similar courses. However, the latest figures for this year show an upward trend, particularly in first-priority applicants.

The self-evaluation from *Studiebarometeret* shows that students at the TIK centre report a high level of personal engagement tied to lectures and personal participation. Additionally, the students report a high level of satisfaction with the academic and administrative organization at the TIK centre. However, there are ongoing discussions about the admission requirements. Some suggest broadening the criteria to not only include humanities, social sciences, and sustainability backgrounds, but also be open for applications from bachelor-students from science and mathematics, engineering and life sciences (who already today constitutes a significant share of applications, see 5.2). The main challenge with broader criteria will be how to assess if the applying students have the necessary writing- and analytical skills that is recommended for a master's degree in social science. On the other hand, the new suggested backgrounds are often much closer to an empirical field that is highly relevant for the research profile at TIK.

5.2. Background of students

In 2022, the TIK program received applications from students with a variety of backgrounds. The majority, 58.11% (172 students), came from humanities and social sciences backgrounds, while 16.22% (48 students) came from mathematics and natural sciences backgrounds. Interestingly, a significant number of applicants, 91, had their bachelor's degree from the University of Oslo (UiO).

The ESST program also saw a similar trend in applicant backgrounds. In 2022, 68.10% (79 students) came from humanities and social sciences, and 13.79% (16 students) came from

mathematics and natural sciences. Likewise, 45 of the ESST applicants had their bachelor's degree from UiO.

5.3. Student completion

Since January 1, 2012, 182 candidates have completed their master's degree in the TIK program, and 99 candidates in the ESST program. The completion rates for TIK's master's programs are comparable to other institutes at the Faculty of Social Sciences. From 2012 to 2023, the average credit production was 23.6 per student per semester. The challenge of unfilled study places might be addressed by increasing overbooking slightly, as early dropout often occurs when students receive offers from multiple institutions (see also the self-evaluation).

Positively, dropout rates at both TIK and ESST have decreased significantly in the past two years, with more students completing within the expected period. However, there has been a high number of requests for extended deadlines in TIK4093, although this has decreased slightly this year. In one instance, students even requested a collective extension because another department had granted this. **The evaluation committee suggests** to address this issue in different ways, including prioritizing the supervisor-student relationship, and ensuring that supervisors are not encouraging students to request extensions. Additionally, a requirement for revising problem formulations for extensions to the next semester could be considered.

5.4. Assessment of the social environment

The "Academic and Social Environment" index at TIK has fluctuated, with a dip to 3.5 in 2019 and 2020 due to the COVID-19 pandemic's impact, before rebounding to 4.2 in 2023 (see *Studiebarometer*). The close proximity between students and faculty at the small TIK centre has traditionally been a significant advantage, fostering a sense of community and support. However, the loss of a dedicated study space for students near faculty offices due to sharing with social economists has been identified as a vulnerability, making the centre feel more exposed.

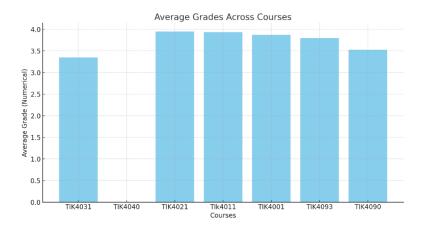
To maintain and strengthen the relationship between students and staff, several suggestions have emerged which **the evaluation committee suggests** to consider. These include reintroducing dedicated study spaces for students near faculty offices, increasing faculty participation in existing events rather than creating new ones, clearly communicating expectations to students about social events and interactions, and potentially revisiting the "Coffee with Students" initiative or finding alternative ways to engage students with faculty. There seems to be a tension between students wanting more interaction and staff feeling that they already deliver substantially on this point.

5.5. Results

TIK students generally exhibit a high attendance rate for exams (over 90%), with slightly lower attendance observed in TIK4093 (78%) and TIK4031 (87%). The pass rate among students who attended the exams is also high and satisfactory. However, two courses, TIK4040 (88%) and TIK4011 (94%), have slightly lower pass rates compared to the others. Overall, TIK students' grade results are consistently high, with an average grade around 3.73. TIK4031 has the lowest average grade of around 3.3, while the ESST project course (TIK4090) has an average of 3.5, compared to the TIK4093 master's thesis with an average grade of 3.75. The ESST project course follows a different timeline than the TIK project course. It is worth investigating whether the earlier start of the ESST project course might lead to less preparation or support, and whether the assessment criteria for both projects are similar despite the difference in duration.

Course	Signed up	Showed up	Passed	% that showed up	% that passed of the showed up
TIK4031	23	20	20	86,96%	100,00%
TIK4040	163	154	136	94,48%	88,31%
TIK4021	103	93	92	90,29%	98,92%
TIK4011	49	47	44	95,92%	93,62%
TIK4001	187	171	169	91,44%	98,83%
TIK4093	99	77	77	77,78%	100,00%
TIK4090	50	45	44	90,00%	97,78%

[Karakterstatistikk 18H-23H TIK4040, TIK4021, TIK4011, TIK4001, TIK4090; 23V for TIK4031; 18H-24V TIK4093]



[Karakterstatistikk 18H-23H TIK4040, TIK4021, TIK4011, TIK4001, TIK4090; 23V for TIK4031; 18H-24V TIK4093]

6. Conclusion

The TIK master's programmes thrive on their strong connection between high-quality education and pioneering research, fostering a highly satisfied student body that graduates quickly into relevant careers through what is also an academically and intellectually ambitious program. The program's popularity is evident in its competitive applicant pool and a recent increase in student capacity. TIK's success is deeply rooted in its unique culture, characterized by a fluidity that fosters adaptation and keeps the program at the forefront of the ever-evolving fields of innovation and STS. The challenge lies in nurturing this culture while embracing the necessary formalization for further growth. Here, there may also be some tensions between the centre's ambition of growing though expanding external research funding and the need for a stable work force to engage in teaching. Ultimately, the same people will often be forced to stretch very far in order to keep all aspects of the centre operating at a satisfactory level.

While some of the challenging issues we have discussed in this report can be attributed to such systemic factors, there are also examples of low-hanging fruits, which might also help in mitigating some of the systemic challenges. Moving forward, it will be important to handle the inevitable increase in administrative tasks through more effective formal systems and maintaining a sustainable workload for the faculty members while ensuring quality and coherence in the courses, that can be comprised by using too many instructors and less experienced postdocs as course responsible. The TIK MSc programmes have an important role

to play in UiO's portfolio over the next decades. It serves an important societal role, promoting styles of research and knowledge that is needed to address both contemporary and future grand challenges. Institutionalizing some aspects that have previously been in the hands of pioneer individuals also strikes us as an important strategic move in order to enable TIK as a collective to grasp the many opportunities that might emerge with this profile over the coming years.