KANSALLINEN KOULUTUKSEN ARVIOINTIKESKUS
NATIONELLA CENTRET FÖR UTBILDNINGSUTVÄRDERING
FINNISH EDUCATION EVALUATION CENTRE

AUDIT OF THE UNIVERSITY OF OULU

Tekijät **Kerstin Norén, Guðrún Geirsdóttir, Damon Mohebbi, Siamäk Naghian, Hilla Vuori & Mira Huusko, University of Oulu self-assessment (eds.) Johanna Bluemink & Johanna Flyktman**

Auditointivuosi **2024**, Karvin julkaisu **9:2024**
Kieli **Englanti**
ISBN **978-952-206-843-9**

Audit of the University of Oulu

Abstract

Title of publication

Audit of the University of Oulu

Authors

Kerstin Norén, Guðrún Geirsdóttir, Damon Mohebbi, Siamäk Naghian, Hilla Vuori & Mira Huusko

Self-assessment of the University of Oulu (eds.) Johanna Bluemink & Johanna Flyktman

The Higher Education Evaluation Committee’s decision

The University of Oulu passed the audit on 22 March 2024.

The Quality Label is valid until 22 March 2030.

The audit team’s evaluation of evaluation areas I-III

I: HEI creates competence: *good* level

II: HEI promotes impact and renewal: *excellent* level

III: HEI enhances quality and well-being: *good* level

HEI as a learning organisation – evaluation area chosen by the University of Oulu

Internationalisation of degree programme curricula and the student experience

Theme and partner for benchlearning

Theme: Enhancing quality culture in doctoral schools

Partner: Erasmus University Rotterdam

Key strengths and recommendations

Strengths

- The University of Oulu offers opportunities for interdisciplinary studies and other interdisciplinary activities, which are encouraged through various ways. This adds value to

the student experience and strengthens the relations between the degree programmes, the university community, and the university's stakeholders.
- The University of Oulu has a key role and well-established position in the regional knowledge, innovation, and competence creation ecosystem. The university contributes significantly to the renewal and strengthening of the region of North Ostrobothnia.
- Staff, students, and external partners are involved in the quality system and continuous improvement according to the PDCA cycle.
- The university is committed to robust internationalisation efforts with many initiatives to enhance the international experience of students.

Recommendations

- In enhancing education, the University of Oulu should increase the utilisation of student feedback, provide students more feed forward on their learning and emphasise feedback on feedback.
- The university should strengthen the visibility of its Arctic research activities and its role in international research networks, to highlight the research potential of the Arctic region.
- To support the proactive enhancement of its activities, the university should strengthen the identification and use of internal and external information.
- The university should promote consistent opportunities in internationalisation, by strengthening the visibility of international mobility windows and exchanges as well as enhancing the internationalisation of curricula.

Tiivistelmä

Julkaisun nimi

Oulun yliopiston auditointi

Tekijät

Kerstin Norén, Guðrún Geirsdóttir, Damon Mohebbi, Siamäk Naghian, Hilla Vuori & Mira Huusko

Oulun yliopiston itsearviointi (toim.) Johanna Bluemink & Johanna Flyktman

Korkeakoulujen arviointijaoston päätös

Oulun yliopiston auditointi on hyväksytty 22.3.2024.

Laatuleima on voimassa 22.3.2030 asti.

Auditointiryhmän arvio arviointialueista I-III

I: Osaamista luova korkeakoulu: *hyvä* taso

II: Vaikuttava ja uudistava korkeakoulu: *erinomainen* taso

III: Kehittyvä ja hyvinvoiva korkeakoulu: *hyvä* taso

Oppiva korkeakoulu – Oulun yliopiston valitsema arviointialue

Tutkinto-ohjelmien opetussuunnitelmien ja opiskelijakokemuksen kansainvälisyys

Vertaisoppimisen teema ja kumppani

Teema: Laatukulttuurin parantaminen tohtorikouluissa

Kumppani: Erasmus University Rotterdam

Keskeiset vahvuudet ja kehittämissuositukset

Vahvuudet

- Oulun yliopisto tarjoaa erilaisia mahdollisuuksia monitieteellisiin opintoihin ja muuhun monitieteelliseen toimintaan, joihin opiskelijoita myös kannustetaan. Monitieteellisyys parantaa opiskelijoiden opiskelukokemusta ja vahvistaa tutkinto-ohjelmien, yliopistoyhteisön ja yliopiston sidosryhmien välisiä suhteita.

- Oulun yliopistolla on keskeinen rooli ja alueellisesti vakiintunut asema tiedon luomisen, innovaatiotoiminnan ja osaamisen kehittymisen ekosysteemissä. Yliopisto vaikuttaa merkittävästi Pohjos-Pohjanmaan alueen uudistumiseen ja vahvistumiseen.
- Henkilöstö, opiskelijat ja ulkoiset sidosryhmät osallistuvat laatujärjestelmään ja sen kehittämiseen PDCA-syklin mukaisesti.
- Yliopisto on vahvasti sitoutunut kansainvälistymiseen ja kehittää opiskelijoiden kansainvälistymismahdollisuuksia.

Kehittämissuositukset

- Oulun yliopiston tulee koulutuksen kehittämiseksi lisätä keräämänsä opiskelijapalautteen hyödyntämistä. Lisäksi opiskelijoille tulee antaa nykyistä enemmän palautetta oppimisesta. Myös vastapalautteen antamista opiskelijoille tulee lisätä.
- Yliopiston tulee vahvistaa arktisen tutkimustoimintansa näkyvyyttä ja yliopiston roolia kansainvälisissä tutkimusverkostoissa, jotta arktisen alueen tutkimusmahdollisuudet tulisivat nykyistä paremmin esille.
- Edistääkseen ennakoivaa kehittämistä yliopiston tulee nykyistä enemmän tunnistaa ja hyödyntää sisäistä ja ulkoista ennkointitietoa.
- Yliopiston tulee edistää johdonmukaisesti kansainvälistymismahdollisuuksia vahvistamalla kansainvälisten liikkuvuusikkunoiden ja vaihtojen näkyvyyttä sekä tehostamalla opetussuunnitelmien kansainvälistämistä.

Sammandrag

Publikationens namn

Auditering av Uleåborgs universitet

Författare

Kerstin Norén, Guðrún Geirsdóttir, Damon Mohebbi, Siamäk Naghian, Hilla Vuori & Mira Huusko

Uleåborgs universitets självvärdering (red.) Johanna Bluemink & Johanna Flyktman

Beslutet av sektionen för utvärdering av högskolorna

Auditeringen av Uleåborgs universitet godkändes den 22 mars 2024.

Kvalitetsstämpeln är i kraft till och med den 22 mars 2030.

Auditeringsgruppens omdöme för utvärderingsområdena I-III

I: En kompetensskapande högskola: *god* nivå

II: En nyskapande högskola med genomslagskraft: *utmärkt* nivå

III: En utvecklingsorienterad och välmående högskola: *god* nivå

En lärande högskola, utvärderingsområdet som Uleåborgs universitet valde

Internationalisering av examensprogrammens kursplaner och studenternas erfarenheter.

Tema och partner för kollegialt lärande

Tema: Förbättrad kvalitetskultur i forskarskolor

Partner: Erasmus University Rotterdam

Centrala styrkor och rekommendationer

Styrkor

- Uleåborgs universitet erbjuder möjligheter till tvärvetenskapliga studier och andra tvärvetenskapliga aktiviteter, som uppmuntras på olika sätt. Detta ger mervärde till

studentupplevelsen och stärker relationerna mellan examensprogrammen, universitetsgemenskapen och universitetets intressenter.
- Uleåborgs universitet har en nyckelroll och en väletablerad position i det norra Österbottens regionala ekosystemet för kunskap, innovation och kompetensskapande, och har en betydande inverkan på dess förnyelse och förbättring.
- Personal, studerande och externa partners är involverade i kvalitetssystemet och kontinuerlig förbättring enligt PDCA-cykeln.
- Universitetet har omfattande internationaliseringssatsningar med många initiativ för att förbättra studenternas internationella erfarenhet.

Rekommendationer

- För att förbättra utbildningen bör Uleåborgs universitet öka användningen av studeranderespons, ge studenterna mer respons om sitt lärande och se till att studenterna får återkoppling på sin respons.
- Universitetet bör stärka synligheten för sin arktiska forskningsverksamhet och sin roll i de internationella forskningsnätverken för att lyfta fram forskningspotentialen i den arktiska regionen.
- För att stödja den proaktiva verksamhetsutvecklingen bör universitetet identifiera och bearbeta mer intern och extern information.
- Universitetet bör främja möjligheter till internationalisering genom att stärka synligheten för internationella mobilitetsfönster och internationaliseringen av studieplanerna.

Premise and implementation of the audit

The Finnish Education Evaluation Centre (FINEEC) has conducted the audit of the University of Oulu. The work of FINEEC is based on the principle of enhancement-led evaluation and producing impactful information that contributes to the enhancement of education.

The purpose of the FINEEC audit framework is:

- to evaluate whether the quality work in the HEI meets European quality assurance standards,
- to assess whether the quality system produces relevant information for the implementation of the strategy and the continuous development of the HEI's activities, and whether it results in effective enhancement activities,
- to encourage internationalisation, experimenting and a creative atmosphere at HEIs, and
- to accumulate open and transparent information on quality work at Finnish HEIs.

The principles of the audit framework are described in the audit manual.

Implementation of the audit

A four-member audit team carried out the audit. The members of the audit team were:

- Professor, rector emerita **Kerstin Norén**, Sweden
- Associate Professor **Guðrún Geirsdóttir**, University of Iceland, Iceland
- Student **Damon Mohebbi**, University of Düsseldorf, Germany
- CEO **Siamäk Naghian**, Genelec, Finland.

Hilla Vuori from the Finnish Education Evaluation Centre (FINEEC) acted as the project manager of the audit, and **Mira Huusko** was the backup project manager. **Niina Nurkka** participated in the audit visit, took notes, and helped with the practical arrangements.

The audit is based on the material submitted by the higher education institution, a self-assessment report, additional material requested by the audit team, and the audit team's visit to the institution between 12 and 14 December 2023. During the audit visit, the team conducted 16 interviews and workshops for staff, students, and external stakeholders. The audit team also had access to essential digital materials and systems. The main stages and timetable of the audit were:

Agreement negotiation	28 April 2022
Appointment of the audit team	26 May 2023
Submission of the audit material and self-assessment report	20 September 2023
Information and discussion event at the HEI	23 November 2023

Audit visit	12-14 December 2023
Higher Education Evaluation Committee’s decision on the result	22 March 2024
Publication of the report	22 March 2024
Concluding seminar	8 May 2024
Follow-up on the enhancement work	2027

Evaluation criteria

Evaluation areas I–III are each assessed as one entity using the scale *excellent, good, insufficient*.

The level *excellent* means that the HEI shows evidence of long-term and effective enhancement work. The HEI’s enhancement activities also create substantial added value for the HEI, its stakeholders, or both. The HEI presents compelling examples of successful enhancement activities.

The level *good* for evaluation areas I–III is described in appendix 1.

The level *insufficient* means that the HEI shows an absence of or major shortcomings in systematic, functioning and participatory procedures in the evaluation area (I–III). There is no clear evidence of the impact of quality management in the enhancement of activities.

In order for the HEI to pass the audit, evaluation areas I–III should reach at least the level *good*.

The organisation and strategy of the HEI

The organisation of the University of Oulu

The University of Oulu (UO) is an international science university that creates new knowledge, well-being and innovations for the future through research and education. The UO, founded in 1958, is one of the largest and most multidisciplinary universities in Finland. As one of the Northernmost international science universities the UO has a particular responsibility toward questions related to the Arctic.

The highest decision-making body in the UO is the Board (Fig. 1).

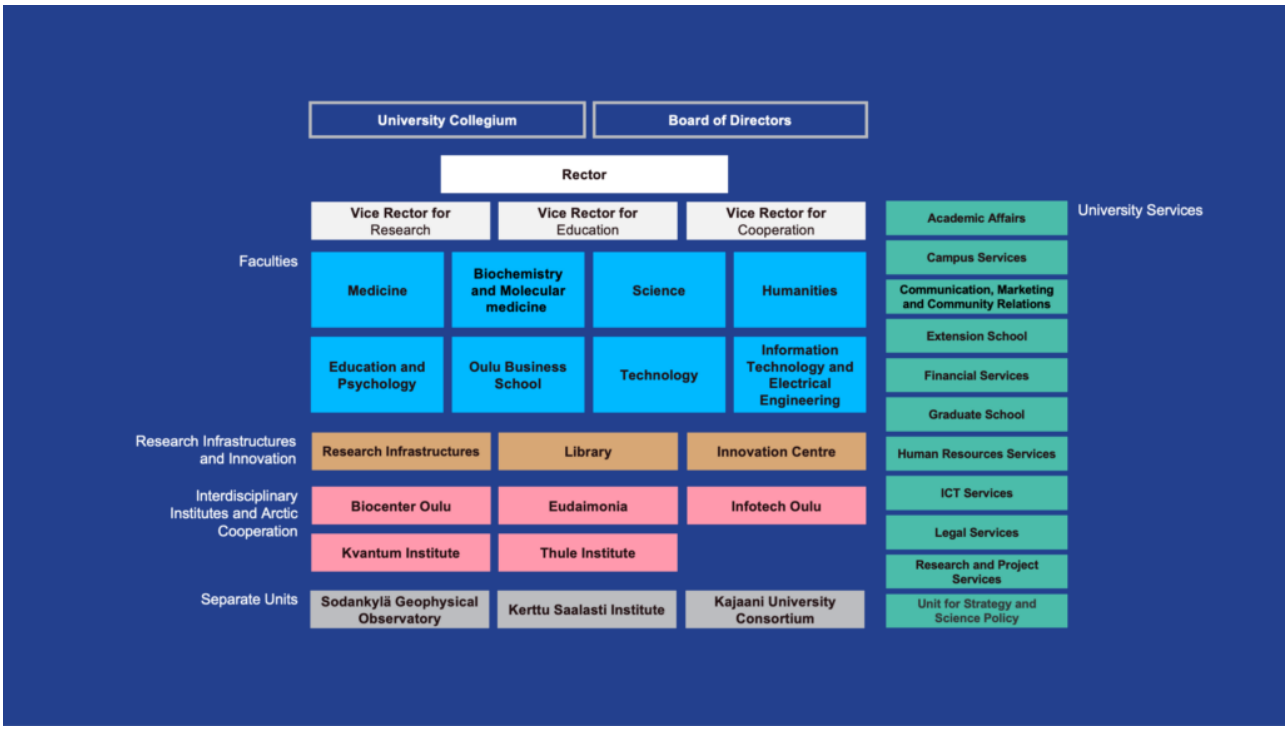


Figure 1. Organisation chart of the UO.

The Rector is in charge of directing the operations of the UO. The UO has three Vice Rectors, who are responsible for their own areas: education, research, and cooperation affairs. The Working Committee, including the rectorate and the Deans together form the Management Group of the UO. Each faculty has its own Dean. The Dean's task is to lead the faculty in accordance with the objectives defined by the University Board and the Rector.

The UO has two main campuses, Linnanmaa and Kontinkangas, both situated in the city of Oulu. Administrative and support services are provided by the Service units and functions. The UO provides part of the services also for Oulu University of Applied Sciences. In 2022 the UO had approx. 13,900 students and 3,800 employees.

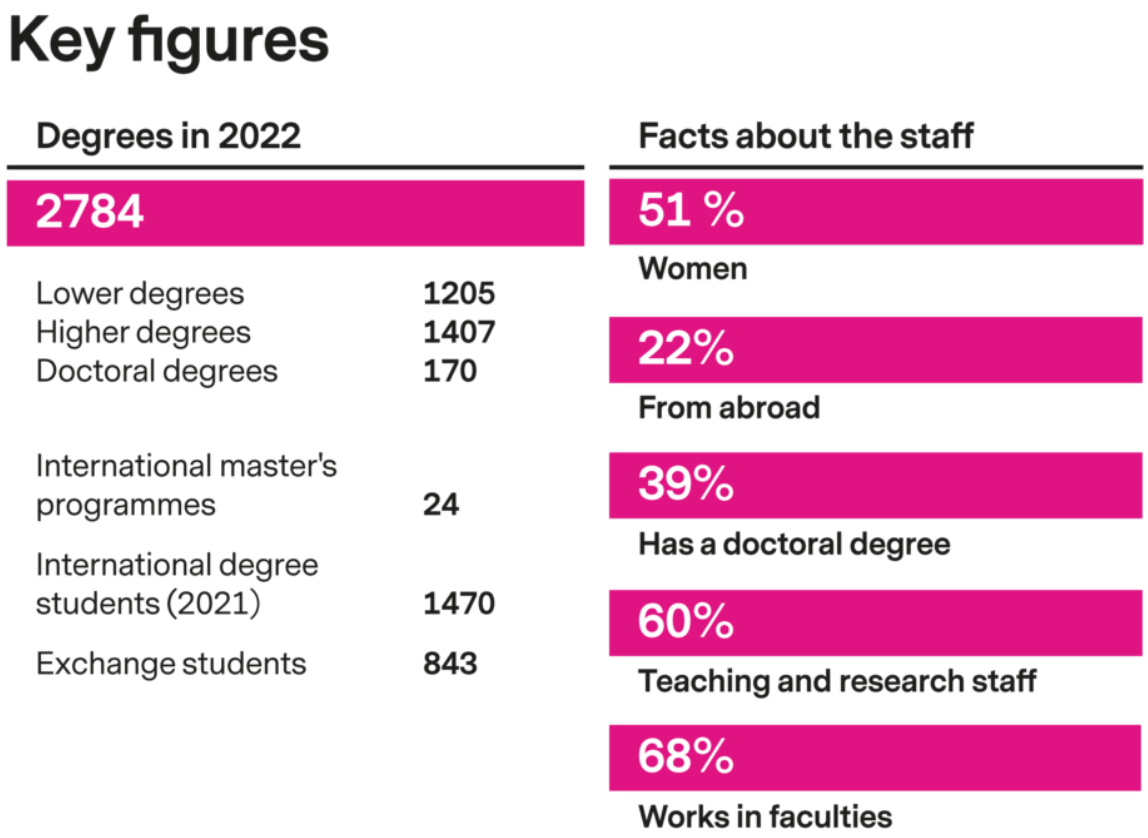


Figure 2. Key figures for education and staff 2022

Strategy

At the UO, we carry out science with an Arctic attitude. As a part of the international science community, we produce new scientific information and science-based solutions and train future pioneers to build a more sustainable, intelligent, and humane world.

The current Strategy of the UO for the 2020s was approved by the Board in 2019, and the strategy update work will be carried out in 2023. The update concerns the overall strategy of the UO, strategic development programmes and the strategies of the faculties, regional units and focus institutes. Regarding the UO's strategy work, a living strategy approach to continuous updating is being discussed.

Strategy implementation takes places across the UO, in faculties and in all the units. The UO has created its first Arctic Strategy (launching was in January 2023), and it will be an integral part of university's overall strategy. Strategic development programmes (Fig. 3) are derived from the UO's strategy.

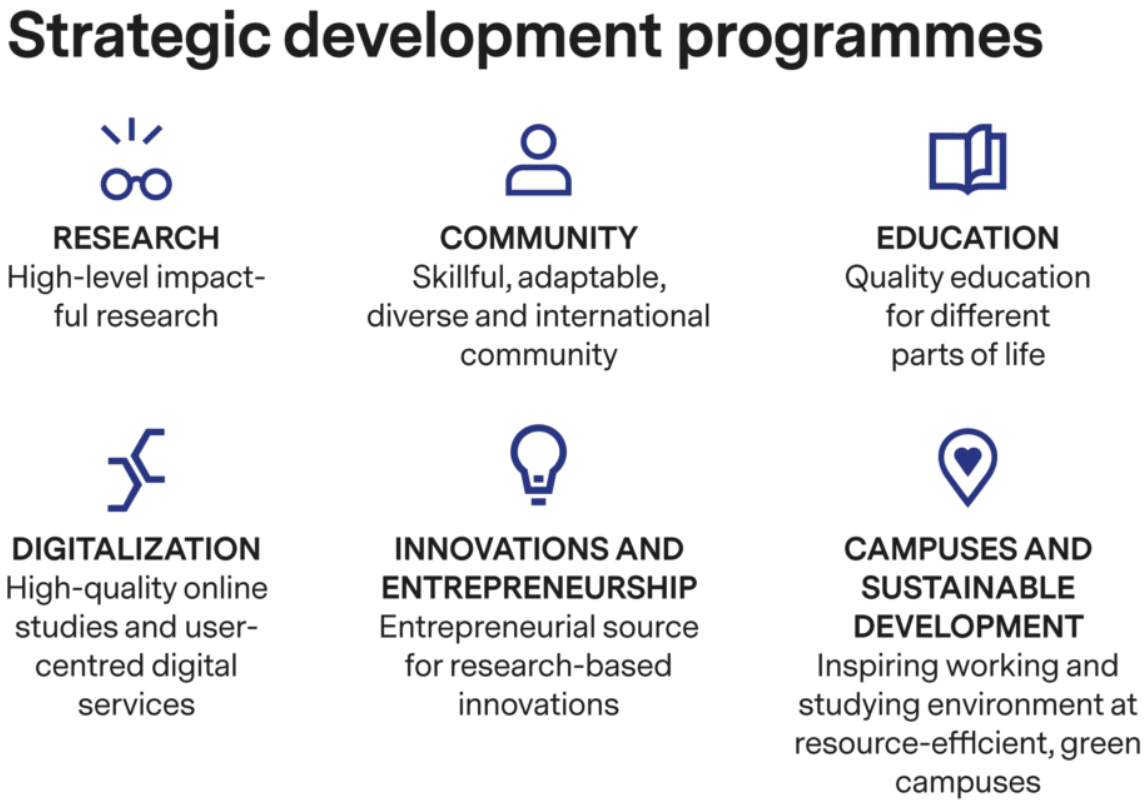


Figure 3. Strategic development programmes.

Our research focus areas (Fig. 4), profile fields and strategic development programmes (Fig. 3) will steer the University's development in the coming years. At the UO we have four focus institutes: Biocenter, Eudaimonia, Infotech and Kvantum which promote research co-operation that crosses faculty boundaries in our multidisciplinary focus areas. The focus institutes promote interdisciplinary and internationally significant research in the focus areas defined in the university's strategy. Our researchers contribute to solving global challenges in strategic spearhead research projects and in the emerging projects organized under the focus institutes. Part of the UO's strategic research funding is directed at the interdisciplinary, internationally reviewed 4-year spearhead projects.

Separate Regional units strengthen the UO's research activities and effectiveness.



Figure 4. Research focus areas.

The values of the university community: creating new, taking responsibility, and succeeding together guide all activities of the UO community.

1 HEI creates competence

- Auditointiryhmän arvio

Evaluation area I assesses the procedures which support student-centred, working-life oriented planning, implementation and enhancement of education, which is based on research or artistic activities.

Based on the audit team’s evaluation, the evaluation area I is at the level *good*.

The audit team identified the following as key strengths and recommendations:

Strengths

- The University of Oulu offers opportunities for interdisciplinary studies and other interdisciplinary activities, which are encouraged through various ways. This adds value to the student experience and strengthens the relations between the study programmes, the university community, and the university’s stakeholders.
- The Student Union and student representatives are strongly committed to the development of the university’s activities.
- Various channels of interaction are offered for students to engage with the surrounding community, such as joint projects with the labour market and the ecosystem.

Recommendations

- In enhancing education, the University of Oulu should increase the utilisation of student feedback, provide students more feed forward on their learning and emphasise feedback on feedback.
- The university should streamline support services for doctoral researchers.
- Tutor teachers should have more time reserved for tutoring.

1.1 The planning of education

- Korkeakoulun itsearviointi

Strategic guidelines steer the planning of education

The responsibilities for education are defined in the Regulations of the UO and the UO Education Regulations. The Education Council supports the rectorate in promoting education. It also initiates motions for education policy and development and evaluates the quality of education. The Education Management Group supports the Vice Rector for Education and the Education Deans in the management and development of education and the implementation of the education strategy. Education actors and their responsibilities are also described in the Quality Handbook.

The planning, delivery and development of education are guided by the strategy of the UO. MINEDU and the UO have drawn up an agreement on the goals for the university's operations for the years 2021-2024. The regulations governing the planning of education are summarised in the Principles for Curriculum Work. The university's education activities and their development are supported by allocating strategic funding that is in line with the strategic objectives. The degree programme portfolio consists of over 100 programmes.

The education planning processes are carried out in accordance with the Annual Wheel of Education planning tool. The processes are illustrated in the IMS system and the instructions for planning of education can be found on the Patio intranet platform.

Process, responsibilities, and schedule for education planning

The Programme Director, in collaboration with Degree Programme Committee, prepare degree structures and the Education Dean approves the final curricula. In the case of doctoral education, the Annual Wheel of Education is followed with the support of the graduate school. The acceptance of the curricula is divided between the Vice Rector for Education, who handles the general parts, and the Chairperson of the Doctoral Programme Committee, who approves the other parts. Degree descriptions, programme structures and timing plans with course descriptions and implementation information are prepared in the Peppi system in Finnish and English and published in the Study Guide.

Through continuous learning, the UO enables everyone to develop their skills and competences at any stage of their career and supports the competitiveness of companies and Finland. Continuous learning is planned in connection with the curriculum work in degree programmes. The Programme Director prepares this in collaboration with Degree Programme Committees, and finally the Education Dean decides which courses are carried out as open university studies or as continuing education. The continuous learning curriculum is compiled and published on the JOY—University of Continuous Learning platform (Jatkuvan Oppimisen Yliopisto). The JOY brand has been helpful in bringing together diverse types of continuous learning and making it more

visible and marketable.

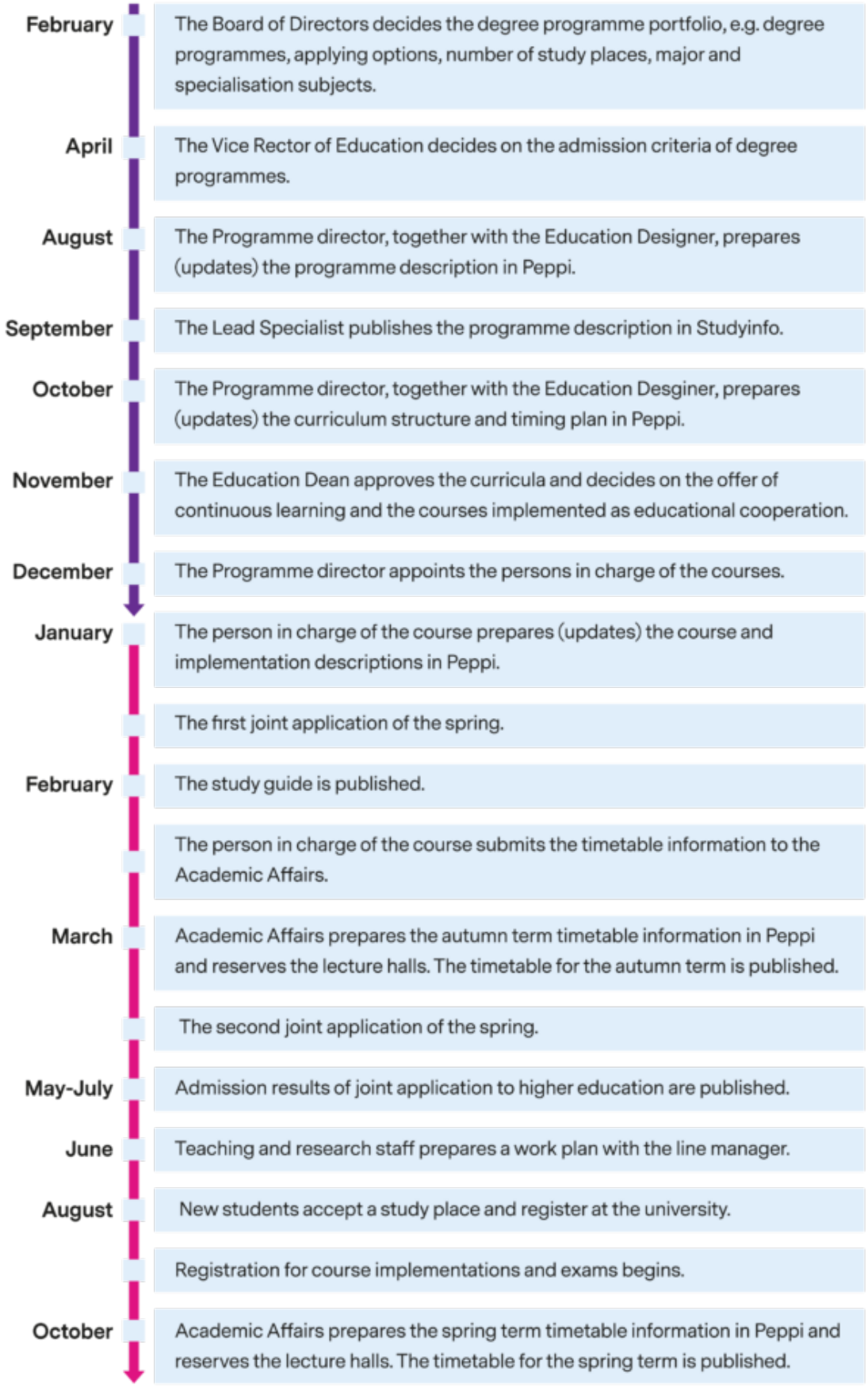

February
The Board of Directors decides the degree programme portfolio, e.g. degree programmes, applying options, number of study places, major and specialisation subjects.
April
The Vice Rector of Education decides on the admission criteria of degree programmes.
August
The Programme director, together with the Education Designer, prepares (updates) the programme description in Peppi.
September
The Lead Specialist publishes the programme description in Studyinfo.
October
The Programme director, together with the Education Desginer, prepares (updates) the curriculum structure and timing plan in Peppi.
November
The Education Dean approves the curricula and decides on the offer of continuous learning and the courses implemented as educational cooperation.
December
The Programme director appoints the persons in charge of the courses.
January
The person in charge of the course prepares (updates) the course and implementation descriptions in Peppi.
The first joint application of the spring.
February
The study guide is published.
The person in charge of the course submits the timetable information to the Academic Affairs.
March
Academic Affairs prepares the autumn term timetable information in Peppi and reserves the lecture halls. The timetable for the autumn term is published.
The second joint application of the spring.
May-July
Admission results of joint application to higher education are published.
June
Teaching and research staff prepares a work plan with the line manager.
August
New students accept a study place and register at the university.
Registration for course implementations and exams begins.
October
Academic Affairs prepares the spring term timetable information in Peppi and reserves the lecture halls. The timetable for the spring term is published.

Figure 5. The process, responsibilities and schedule for education planning.

How could we develop the planning on education?

Development in the functioning of the education procedures requires that Programme Directors should resource more working hours for managing and developing the programme. The awareness of key indicators and results among the Programme Directors could still be improved. A challenge in this respect has been the need to rebuild the reporting system since the introduction of a new information system for education. The university's study guide consists of more than 300 different curricula, and hundreds of people produce content for it. For planning the curriculum and publishing all of it on schedule, stronger support from the leaders of the university and faculties as well as line managers would be needed.

The UO has organised self-assessments that focus on how the university's strategic goals and national educational goals are realised in the degree programmes. According to the results of the latest self-assessment in 2022, 95% of respondents felt that the competence produced by the degrees matched the levels of competence set in the National Framework for Qualifications and Other Competence Modules.

Intended learning outcomes are drawn up for all degrees and courses. Programme Directors ensure that the learning outcomes of the courses are met, there are no unnecessary overlaps of learning outcomes or contents between courses, and that versatile teaching and assessment methods are used. There is still room for improvement in adding general skills to courses. According to the Finnish Bachelor's Graduate Survey 2022, students gave the weakest ratings for theme "Transferable skills", in particular entrepreneurial competencies were evaluated to have developed only a little during the studies.

During curriculum development and evaluation, it is monitored that all degrees are evenly loaded (30 credits per semester). Student feedback gives information about the true workload of courses in relation to the credits and this is used to fine-tune course workloads.

The Council for External Relations promotes the university's innovation activities, entrepreneurship, research and project cooperation, working life connections, external communication, alumni relations and fund-raising. From the Council, degree programmes receive up-to-date information for planning and developing education and improving working life connections. Workshops are organised with companies to evaluate the contents of degree programmes. Active communication with stakeholders is supported by key account management and CRM. However, there still is great variation in the participation of partners from working life in curriculum work between different degree programmes. The participation of external stakeholders in the planning of degree programmes should be wider and more systematic.

Students have representatives in Degree Programme Committees, Faculty Education Committees and Doctoral Programme Committees. Student (and doctoral researcher) feedback is used for the planning and development of education. Degree programmes communicate actively with the

boards of student guilds and organise annual feedback events. Currently, student participation varies: student participation in the curriculum planning process depends on how actively students are informed and encouraged to participate. The follow-up of how students' suggestions are implemented in curriculum planning is not systematic.

Internationalisation in the planning of education is described in chapter 4.

Strengths	Enhancement areas
The curriculum process is rigorous and well-documented.	Some roles and responsibilities need to be defined more clearly in the regulations. The processes of planning continuous learning should be more clearly integrated in the instructions for planning education, and needs-based planning should be strengthened.
Planning of language and communication studies, cross-institutional studies, minor subject studies, summer studies, and open university studies is included in the process of degree programme curriculum planning.	The involvement of external stakeholders in the planning of education could be more systematic.
Development of the continuous learning brand (JOY) and the active collaboration between continuous learning services, the open university and external stakeholders.	Sufficient resources need to be assigned to the development of education, in particular with increasing cross-institutional studies.
Strengthening entrepreneurial spirit, working life cooperation and the culture of curiosity as a strategic development area.	The procedures of the faculties and degree programmes sometimes differ even though there are common instructions.

1.1 The planning of education

- Auditointiryhmän arvio

Educational planning and provision are clearly linked to the strategy of the University of Oulu

At the University of Oulu (UO), the degree programmes and educational provision are well linked to the university's strategy. The UO has six strategic development programmes, one of which is specifically focused on quality education. The strategic programme for educational development "Noste" aims to ensure and improve the competitiveness of education at the university. Launched in 2022, the Noste programme is focused on seven strategic themes, including digitalisation, well-being, continuous learning, and internationalisation. Based on challenges identified by the university, Noste offers a selection of development actions for faculties and degree programmes to select from and adjust to the faculty's profile.

Intended learning outcomes are drawn up for all degrees and courses. The Principles for Curriculum Work provide guidance and support for Education Deans, Programme Directors, and teachers. The UO has a clear process for educational planning supported by the Annual Wheel of Education Planning tool, where Programme Directors have a leading role. In the audit interviews it was stressed that even though the responsibilities of the Programme Directors are described in a formal manner, more attention could be given to the details of Programme Directors' responsibilities and how much time they need to spend for the planning process. The audit team agrees with the self-assessment report's notion that it is important for the Programme Directors to have enough working hours and support to be successful in their role.

Good examples of curriculum practices emerged during the audit visit, where learning outcomes are systematically defined following accreditation principles (AACSB) or using specific curriculum tools (LOOOP). According to the teacher workshop, these procedures vary between faculties. It was also brought up in the workshop that constructive alignment is not always achieved in all programmes, i.e., intended learning outcomes and received competences are not always connected. Learning outcomes are specified in the course and programme descriptions as required, but the constructive alignment is not always achieved between them. Some degree programmes monitor what students have learned, while others leave it up to the individual teachers. Programme-level curriculum mapping is a current practice within many study programmes. In the workshop during the audit visit some teachers described the curriculum tool LOOOP as difficult and time-consuming to use.

Students' workload is defined according to the principles of the ECTS (European Credit Transfer and Accumulation System). Clear guidelines are provided in the Principles for Curriculum work. A university-wide effort was made 10-15 years ago to systematically define and ensure that the workload meets the ECTS principles. In 2013, the University of Oulu was awarded the ECTS Label

as the first research university in Finland. This effort has since been followed up by providing staff workshops. Students are aware of the workload and ECTS. According to the audit visit, students feel that their workload is relatively balanced throughout their studies.

According to the university's regular self-assessments that focus on the university's strategic and national goals, the educational provision is well aligned with both the university's strategic goals and the competences set by the National Framework for Qualifications. According to the self-assessment report, the university has systematic procedures for approving the plans for degree programmes or other study entities. At the time of the audit visit, an updated strategy for the University of Oulu was underway. According to the interviews, the current strategy contains many objectives and measures related to educational provision, from which the faculties choose the most strategically important ones.

Internationalisation and continuous learning should be better integrated into the planning of education

During the audit visit, internationalisation was discussed from various angles. International opportunities for students are seen as important and considered, but not systematically carried out. This was considered by interviewees as an area for improvement. Students with international experience were quite satisfied with the procedures of their exchange and the educational experience. Students in the workshop complained about lack of information and encouragement to study abroad. Examples of internationalisation at home (I@H) were mentioned during the audit visit, while some students claimed that in practice, there was no chance or mobility window for international exchange in some degree programmes. The internationalisation of degree programme curricula and the student experience were selected by the University of Oulu as evaluation area IV, further described in chapter 4.

Continuous learning is planned in connection with curriculum work in the degree programmes and published on the university of continuous learning platform JOY. Continuous learning students in the student workshop were satisfied with their experience. Open university students were happy to participate in the same courses as other university students. However, the relationship between JOY and other educational programmes was not very visible to the audit team. In the teacher workshops concerns were raised regarding continuous learning students finding it difficult to participate in scheduled group work due to their work commitments. More flexibility in schedules and modes of teaching (online/hybrid) is needed.

Stakeholder and student involvement in the planning of education is clearly visible

At the UO, educational provision is planned in cooperation with the relevant labour market stakeholders. External stakeholders' collaboration in teaching and curriculum planning is organised within many faculties and through stakeholder meetings. Many degree programmes have strong links to the industry or cultural institutions via student projects, internships, practical

courses, and work-placed learning. According to the student workshop, these activities are appreciated by the students.

Several examples of successful interaction with external stakeholders were provided during the audit visit such as advisory boards, faculty councils, specific workshops for external stakeholders, external councils in focus areas, and gathering feedback from the labour market. During the interviews, external stakeholders explained how the needs of enterprises and industry are discussed and listened to by the university and reacted upon. According to the audit visit, external collaboration in educational planning is a well spread procedure within the faculties. Based on these examples of good practices, the audit team recommends the university to ensure that such practices are more systematically implemented across faculties and areas of educational provision.

Student participation in the planning of education takes place in various ways. The Student Union (OYY) is strong and has more than 150 student representatives on various committees, often representing one third of the committee members. The audit team found that the Student Union and student representatives are strongly committed to the development of the university's activities. Students can also apply to work in different working groups and administrations as student representatives in administration ("halloped"). According to the student workshops, the students' voice should be listened to more and resources should be directed towards improvements suggested by students.

As a research university, teaching at the UO is based on high quality research, and researchers have a teaching role as well. According to the audit visit, critical thinking and research competences are important to teach to all students. The aim is to teach competences for the future, not just the competences that are needed in the labour market today. Some students work in research groups and write their first research articles during their studies. During the audit visit and in the self-assessment report, the audit team was presented with a good example of how research is integrated into teaching: the Chaperone programme, where young post-docs and PhDs present their research for new students. Different Hackathons, where students can innovate new ideas, are also an example of good practise.

Interdisciplinary opportunities appreciated by students

Students during the audit visit expressed that they appreciated the opportunity to take courses from different disciplinary fields and specialise in topics within the programme. They also gave examples of opportunities to work across disciplinary fields on research projects. These opportunities reflect the exceptionally multidisciplinary research culture of the university. Interdisciplinarity adds value to the student experience and strengthens student relationships between programmes, the university community, and stakeholders. At the UO, students have concrete opportunities to combine studies from different faculties and to work on joint projects with students from different disciplines.

The UO and the Oulu University of Applied Sciences have a shared campus and support services.

According to the student workshop, the UO students would like to have more cooperation with students from the University of Applied Sciences. So far, the cooperation has been almost invisible for the students.

1.2 The implementation of education

- Korkeakoulun itsearviointi

Many aspects of HEI functions are regulated or organised nationally, for example large aspects of student intake and selection. We have chosen to focus on those aspects under the control of the UO, where significant development has taken place and/or where there are still clear enhancement areas.

Assessment and recognition of prior learning

The importance of harmonised systems for how prior learning is recognised and assessed (RL) and appropriately credited is recognised by the UO and significant steps have been taken in the past few years to improve these processes. Harmonised processes and conditions were discussed by the Education Council (EC) and codified in Policies for Recognition of Learning. Accreditation is now done via the Peppi system. Students are responsible for applying for RL. They assess whether they possess prior learning which is compliant with the degree's learning outcomes, and this is taken into account when composing the personal study plan. Recommendations on RL are made by persons in charge of the courses (for replacement), and decisions by Programme Directors (for replacement or inclusion) or the Service Manager of Languages and Communication (for exemptions). The same process applies to doctoral education. The Education Dean may be consulted for complicated cases. RL may be applied for from prior studies at the UO, at different HEIs or from studies completed during an international exchange. Clear technical instructions are provided for students and staff and there is transparency in the system as reports on RL are available for all staff.

While clear process and technical instructions are available for staff and students, there is still a lack of clarity as to whether students are treated equally by the system. In addition, there has been training for persons in charge of the courses or student counsellors. Furthermore, the growth of small study entities (e.g. micro credentials) in the field of continuous learning should be taken into account when developing the recognition of prior learning.

Feedback to the students

The feedback students receive on their learning is a critical part of the learning process and development. Feedback on learning comes in multiple forms. These vary from oral feedback to individuals or groups of students, to written comments on graded and non-graded assignments and grades from assignments and examinations. Written feedback on assignments is often done through the Moodle system, intimately linking the assignment, grading and feedback. Staff-student feedback days are held in many units. The most common and natural feedback system in doctoral education involves discussions between the supervisor and the doctoral researcher.

While multiple routes exist to give feedback, there is a perception among students that the

amount of feedback is variable, depending in part on the nature of the evaluation of the course, and overall, it is insufficient. The degree of feedback sometimes inversely correlates with the class size as it is partly linked to the resources of the teachers. Further development in student feedback may be closely linked to the evaluation methods, which in turn are linked to arising issues such as AI-written assignments.

Student well-being

The UO has a very wide variety of systems available to support students and promote their well-being. These include university-wide systems and policies such as the teacher tutor system, student tutors, student study psychologists, follow-up groups for each doctoral researcher, special study arrangements, guidance for thesis writers (including a designated person to guide students with the working process), traineeship support, developing career services, policies to ensure coherent timetables and equal working loads (so students don't have 80 hour working weeks) and flexibility of learning (e.g. through digitisation), sports activities (UniMove) and a clear equality and non-discrimination plan with a zero-tolerance policy for bullying and inappropriate behaviour for the prevention and processing of misconduct in studies and the UO level Equality and Diversity Committee supported by working groups at the faculty level.

In addition, local support, or well-being systems such as the Chaperone programme (see 1.4) in the FBMM (Faculty of Biochemistry and Molecular Medicine) are used and getting-to-know the staff/research events are held. The university is in the process of finalising a language policy programme. At the start of BSc studies, new students are split into small groups which get a student tutor who guides them through the integration process and a teacher tutor who supports the student through their BSc degree. The Students' Union (incl. doctoral researcher section) also plays a role with its wellbeing-tutoring, events, guidance and other, more grassroot actions. One clear strength is that the University has good spaces for students to study both alone and in small groups, several of which have been developed since the last audit in response to a clear need for equality of access in both campuses.

While clear policies are in place in nearly all conceivable areas, there are still some outstanding questions. These include how well separate policies integrate, how informed staff and students are of these policies and of policy change, how the policies are implemented in practice, the extent to which practice deviates from policy, and whether all students are treated equally. In a recent student wellbeing survey, around 20% of students felt that they could not find their way to get the support they required from teachers or staff when in need of it. This requires making existing support structures more visible to all students and ensuring equal accessibility. Efforts are underway to also establish a clearer and more systematic approach for handling challenging cases between doctoral researchers and supervisors, with the goal of ensuring equitable support and fair treatment for both parties. There is also a need to further help promote the integration of international and domestic student communities. In addition, there is the post pandemic global challenge that a subset of students has isolated themselves and cannot be reached by normal routes. Finally, the UO still lags behind some other European universities in providing teachers with up-to-date contact information for services available for student support in the wider

community outside the HEI.

Strengths	Enhancement areas
Comprehensive redesign and implementation of recognition of prior learning.	Ensuring all students receive appropriate feedback on their learning.
Close cooperation between the UO and the student union.	Ensuring equal accessibility to support and well-being services for all students.
Increasing the internationalisation of education and ensuring a large variety of internationalisation opportunities.	Ensuring all staff and students are equally well informed of policies and of policy change and receive appropriate support/training for new systems.
Increasing digitalisation, flexibility of study paths and mobility.	Ensuring equal availability of information regardless of language (language policy programme currently being initiated to address this).

1.2 The implementation of education

- Auditointiryhmän arvio

The University of Oulu has clear selection procedures for students. The university follows national guidelines for student selection procedures. The admission routes and selection criteria are published on the Studyinfo portal, an official website maintained by the Finnish National Agency for Education.

The UO has recently harmonised processes that are presented clearly in Policies for the Recognition of Learning at the University of Oulu, updated in 2022. According to the Policies for the Recognition of Learning, it is the student's responsibility to apply for the recognition of learning. Students are entitled to receive guidance on the process. Recognition of prior learning is done through the Peppi system and good instructions are provided for students and staff. The audit team suggests the university to consider making the reports on recognition of learning available for students as well. This would further increase transparency in the process.

A concern that came up during the audit visit was the student dropout rate in some degree programmes. The dropout rates vary greatly between degree programmes. The leadership and quality management of the university are aware of the problem and suggestions were made to further investigate the reasons for high dropout rates. The Student Union has also conducted its own survey of dropouts to find out what the university could do better to increase retention. The audit team recommends the university to look at ways to reduce the number of dropouts more efficiently for example through learning analytics.

Student-centred learning is emphasised

The University of Oulu emphasises student-centred learning and active student participation. Students in the student workshop valued flexibility of choosing courses and projects, the diversity of teaching and assessment methods as well as the accessibility of teachers. Teaching methods and approaches such as hybrid teaching, apprenticeship opportunities, group assignments, hands-on projects, field courses, discussions, feedback on learning, flipped learning, guest lectures and lab learning were discussed and appreciated.

Various teaching and learning methods were also discussed in the teacher workshop. Learning diaries are used widely to give students the opportunity to personalise their learning. In the student workshop, students were not fully satisfied with the heavy use of learning diaries or study journals as an assessment method. While many students appreciated the method, as it allowed for deeper understanding and personal approaches, it was also criticised for being overused on the account of more varied assessment. On a positive note, students appreciated the ease of communicating with their teachers, who were seen as accessible.

According to the student workshop, student feedback and feed forward on their learning is an

area that can be strengthened. Teachers in the audit workshop discussed how students are increasingly requesting more individual and personal feedback and more varied methods of assessment, a request that is difficult to adhere to due to large student numbers in courses. The audit team recommends that the UO looks at ways to enhance assessment and feed forward practices on learning.

According to the audit visit, teaching staff find the pedagogical trainings useful and instructive. Some students complained about teachers' poor pedagogical and digital pedagogical skills. The audit team recommends that as many teachers as possible attend pedagogical trainings. The university could also consider a certain number of compulsory pedagogical courses for all teachers. Teachers appreciated the co-teaching and pair-teaching practices as well as the culture of sharing at the university. They expressed a wish that these practices would be used increasingly in the future. According to teachers and students, the frequent turnover of teachers due to short employment contracts affects the development and quality of teaching. The audit team recommends the university to ensure that teachers receive relevant information and support for enhancing their teaching.

Student well-being is seen as highly important

The University of Oulu has implemented various support for students' educational progress and well-being. On the educational side, a tutor teacher system (oma opettaja) is in place to ensure that students receive personal tutoring and support. Tutor teachers are supported by faculty, with centralised training and resources. However, in the workshop, teachers complained about a lack of time to attend to their counselling role. As student services have become more centralised, tutor teachers have an increased role in advising and counselling students. The audit team considers the tutor teacher system a highly important part of student support and recommends the university to further focus on ensuring the quality of the system by allowing tutor teachers to use more working hours for tutoring.

Issues related to students' mental health were identified and discussed during the audit visit. The university emphasises the well-being of students. According to students, the OYY Wellbeing project (well-being tutors) is a good example of an effort to improve the well-being of students by providing various activities organised by students every day. Another example is a course called "The world's happiest student" organised together with the Student Union. Many study psychologists are available to students. However, more resources are needed from the YTHS (Finnish Student Health Service), university and teachers to improve student well-being.

In a recent well-being survey as well as in the student workshop, students complained about not being able to find information about the available support. The university is quite aware of this problem and various new ways are explored to address it, for example a chat service. The audit team confirms the need to find ways to increase students' knowledge of the support services available.

The equality of students is promoted throughout the student's study path, with particular

attention being paid to international students. There is an Equality and Diversity Plan, policies to ensure the equality of different learners, and a guideline for the prevention of bullying and harassment. In addition, the Student Union has contact persons for students in case of harassment. There is a university form to report bullying and harassment.

More attention should be paid to the needs of international students and doctoral researchers

In the student workshop, participants mentioned that international students felt left out of Student Union activities. Some international students felt lonely. Students in the workshop hoped that the Student Union would provide more information and activities in English. There were also some complaints about teaching material in courses being in Finnish although the course is taught in English. International students would benefit from a more detailed explanation of the requirements and assessment criteria, at least in courses at the beginning of their degree programme. Many of the learning methods used in Finnish universities are new to international students. The audit team recommends the university to ensure that international students receive enough support for their studies. The community integration efforts are discussed further in Chapter 4.

Each doctoral researcher is assigned a supervisor and an external steering group. According to the audit visit, doctoral researchers would like to have more content-centric and challenging feedback that could help them to steer and improve the quality of their research and strengthen their competences.

According to the audit visit, doctoral researchers would like to have more information about the practical arrangements at the university, such as the different platforms, visa process, guidelines to Patio, doctoral courses, and other requirements at the beginning of their studies. In addition, doctoral researchers expressed a need for faculty-specific meetings. Guidance for doctoral researchers is mainly based on peer support and help from supervisors. Offering general guidelines and a clear learning-path could help especially international doctoral researchers adapt to the new working and living environment. The audit team recommends the university to consider holding orientation events for new doctoral researchers where the structure of the university, its main systems and platforms, HR issues, support services, course offerings and other topical issues would be discussed at the beginning of each semester.

1.3 The evaluation and enhancement of education

- Korkeakoulun itsearviointi

The evaluation of education is a continuous function of people responsible for education at the faculty and university level. The Education Regulations of the UO state the roles, responsibilities and actions necessary to improve the quality of education, and to identify the possible challenges and to achieve results. Following the Plan-Do-Check-Act (PDCA) cycle and using the Annual wheel of education planning tool, the university periodically conducts internal evaluations of education, evaluates the degree programmes and monitors the progress of the students. Furthermore, in 2022 the UO launched Noste, a strategic programme for educational development. The Noste programme aims to ensure and enhance the competitiveness of education so that the UO will continue to be known as a high-quality HEI that offers research-based and attractive education with an excellent study experience.

The university collects feedback systematically based on the Annual Wheel of Education planning tool

The university collects student feedback from different groups of students at different phases of their study paths as well as after graduation. The purpose of collecting the feedback is to enhance the student experience, analyse and evaluate the quality of education, to reflect on the learning and enable cooperation with students. There is also an instant feedback channel to make quick changes according to the feedback received. Furthermore, feedback from continuous learners is collected systematically and used for the development of continuous learning.

Many of the feedback surveys are automatised and incorporated into existing information systems thus giving students equal opportunities to give feedback. Course feedback is also incorporated in the university's internal funding model. The university has taken measures to encourage the collection of student feedback. Student feedback surveys utilised by the UO include*:*

- Course feedback (university level)
- Staff-student feedback days (programme level)
- The International Student Barometer (European level)
- Finnish Bachelor's Graduate Survey (national level)
- Career monitoring (national level)
- Surveys by the students' union (university level)

In addition to surveys, students play a critical role on university education committees. There are student representatives in the university's governance ranging from the Board of Directors to Degree Programme Committees, also at the doctoral level. They provide a valuable contribution to development and decision-making by providing student perspective.

It is highly important to have students represented in these committees, as the response rates are often low on feedback questionnaires collected from students, despite teachers having been encouraged to give students counter-feedback. It is possible that the range of feedback collected by different actors (e.g. The UO, students' union, national level surveys) at different times and in various forms may affect the overall eagerness to response. Some teachers collect feedback during the course using various digital pedagogical tools, which reduces students' motivation to give feedback again with the official course feedback system.

Programme evaluation is essential for all the programmes

The main goal for establishing and evaluating a degree programme is to improve the quality of the education offering of the UO. The set instructions must be followed in setting up new degree programmes. An evaluation team evaluates the proposal and gives a statement on whether the new degree or master's programme is ready to be launched.

Programmes evaluate themselves systematically on a yearly basis. Each programme is expected to evaluate the implementation of education and develop it further by involving all stakeholders. In addition, programmes conduct self-assessment reports, whose purpose is to provide information on the quality of education. Latest self-evaluation reports can be seen in Figure 6.

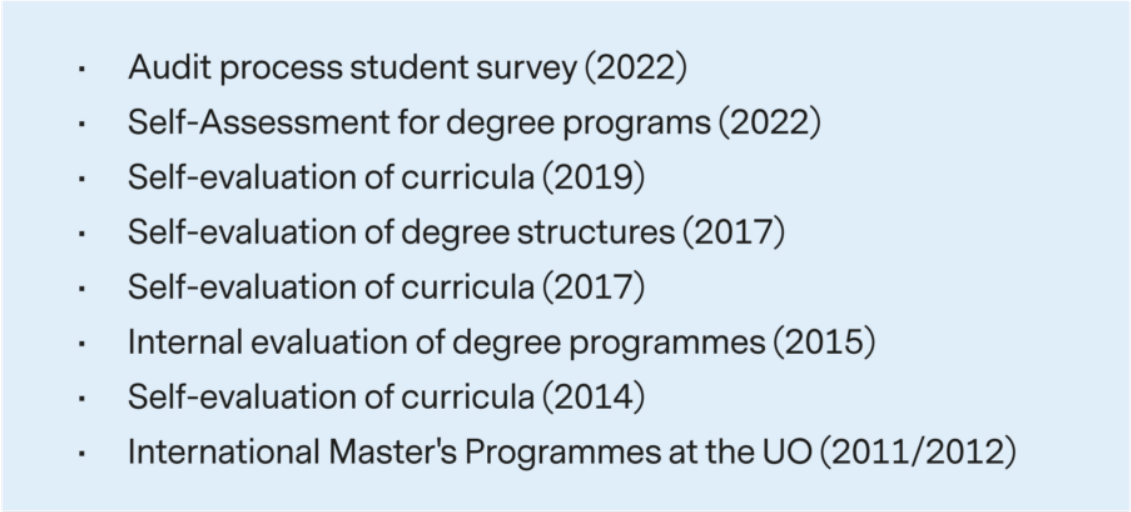


Figure 6. Latest self-evaluations of the UO.

It is worth noting that separate self-assessment processes have not yet been implemented within doctoral degree programmes. This can be attributed to the nature of doctoral education as well as the centralised structure of the university-wide graduate school, which facilitates transparent curriculum development. However, according to the Internal Education Evaluation Plan doctoral degree programmes are planned to be evaluated in 2026.

The evaluation of learning outcomes creates a basis for self-evaluation. It is highly important for

degree programmes to recognise if the learning outcomes are in line with the profile and objectives, and if they are following the current development in the field. The characteristics of every programme need to be clear and goal oriented.

It is notable, that regarding evaluation it is highly important to set targets which allow programmes to evaluate if they have taken the right actions to reach the targets. In addition to the rather strong self-evaluation culture the UO already has, it could take the next step further and compare its programme-level activities and competencies to other players both internally and externally. While benchmarking activities are done they could be a more systematic and visible process. Such comparisons would help to learn from others and set goals even further and in that way improve education.

Utilisation of external stakeholders' views on education quality

The UO actively promotes the development and deployment of research-driven education to different actors in society. Hence it is only natural that external stakeholders are represented on all the Faculty Boards, as well as in the University Board of Directors. External stakeholders are also invited to give their input to curriculum development and quality evaluation. All the faculties and units have also various other ways of maintaining contact with external stakeholders, companies, and employer representatives also in the context of education. For example, they conduct surveys and organise stakeholder events to discuss the development needs of education with labour market and alumni community representatives. In addition, University of Oulu Career Centre promotes employability skills to build students' future careers and has strong collaboration with companies to support networking. Trade unions do a lot of collaboration with the university and for the education quality as well.

The perceptions of external stakeholders can differ compared to students and teachers and it would be interesting to analyse what causes the differences. JOY, the university of continuous learning and open university, builds on the idea of stakeholder involvement in developing the education offer, and it remains critical that stakeholders contribute with their experiences and expectations. Stakeholder engagement will certainly become even more important in the area of quality assurance and the UO should think even more thoroughly about the role of all stakeholders in shaping the education quality assurance processes.

Strengths	Enhancement areas
Systematic feedback and processes available to evaluate and develop programmes.	Student feedback rate and feed forward are low.
Utilisation of both internal (students, staff) and external feedback from stakeholders (employers, labour unions etc.)	Interrelatedness and comparison of programmes with other programmes within and outside the university.
External stakeholders have increased their share of contribution to education development.	External stakeholders' role in education quality assurance process.

1.3 The evaluation and enhancement of education

- Auditointiryhmän arvio

The university collects extensive feedback for enhancement

The University of Oulu collects extensive feedback on different levels and through different methods to evaluate and enhance programmes. At the course level, student feedback is collected through Peppi. The student response rate tends to be low. Continuous feedback is collected during each course. Some student societies and faculties organise feedback days or other events to discuss the received feedback. Both staff members and students participate in these events. Faculties also organise other events and Dean's Coffees to discuss the received feedback. The International Student Barometer and the Finnish Bachelor's Graduate Survey also provide the university feedback data. In addition, the Student Union carries out surveys on students' needs. Student representatives participate in various committees to ensure that their voices are heard. There is close cooperation between the Student Union and the university management.

Feedback data is formally analysed at different levels and action is taken to find ways to utilise the feedback. Students reported that they were encouraged to give feedback and that there were various mechanisms to provide feedback in their courses. Students expressed that they would like to give more feedback on degree programmes, not just on individual courses.

Students in the audit visit complained of not seeing the impact of their feedback and they were not sure how teachers utilise the feedback given. Feedback on feedback to students (i.e., information about changes carried out because of student feedback) could be improved. Although feedback is acted upon, the consequences are not always sufficiently discussed with the students. Students feel that the feedback culture at the UO had improved but needed yet to find ways to measure the improvement. Ideas to enhance feedback on feedback were raised by the students, for example, changes made by teachers to their courses or teaching based on student feedback could be broadcasted on public screens.

Degree programmes are evaluated using various methods

As stated in the self-assessment report, the university regularly monitors and evaluates degree programmes offered. Clear instructions need to be followed when new degree programmes are established and all programmes carry out an annual self-evaluation process, except at the doctoral level. The basis for the self-evaluation of programmes are the defined intended learning outcomes.

Various methods and metrics are used to gather data, such as the number of graduates and employment. Feedback from the labour market and stakeholders is sought through various formal channels. Stakeholders have representatives on the faculty councils and are consulted within different programmes. Stakeholder meetings are conducted, and data is gathered from

industry associations. External stakeholder collaboration in the planning of education is a well-spread procedure in the faculties. During the audit visit, external stakeholders indicated that graduates have good professional competences.

The UO has developed and utilises a strong system of collecting data that is used extensively by Deans and Deans for Education to discuss, analyse, and valuate the quality of degree programmes. The Programme Directors hold a central role in ensuring the quality of degree programmes and gathering developmental ideas from different sources. The audit team recommends that the UO addresses the role of Programme Directors in the university's evaluation loop.

The audit team confirms the following enhancement idea: that the university should check the existing interrelatedness of study programmes inside and outside the university. The results could lead to, among other things, unique and innovative study programmes and to new research ideas. JOY, the university of continuous learning, and the open university might function as a basis for such a project.

The university's support services develop their activities from the perspective of continuous improvement. Feedback is collected extensively on a regular basis and discussed with appropriate bodies for improvement. The support services provide support directly to students and support the teacher tutors, who are the prime support providers for students. The UO offers a wide variety of support for students, but there is room for improvement in ensuring that information on the support available reaches students in general and especially vulnerable student groups. In the student workshop, complaints were raised that feedback provided to educational designers was not acted upon. The audit team recommends the university to ensure that every student knows who to contact when they have a question or want to provide feedback.

1.4 The HEI’s examples of successful enhancement activities

- Korkeakoulun itsearviointi

UNIC Opened Courses—virtual courses offered in the Faculty of Humanities and Faculty of Biochemistry and Molecular Medicine

The UO offers some of its virtual courses taught in English to the UNIC European University Alliance through the Opened Courses initiative. The idea of the initiative is to smoothen cross-institutional studying and mobility by allowing students to take courses also from other UNIC partner universities’ offer. During the Academic Year 2022–23, the UO is providing altogether 29 courses on the common Opened Courses list.

In autumn 2022, two faculties stood out by offering such popular courses that they were quickly “sold out” and not all willing students could be accommodated. Two courses were organised by the Faculty of Humanities: Saami Culture and Nordic Mythology. In the Faculty of Biochemistry and Molecular Medicine the best-selling course was called Molecular, cell biological and genetic aspects of diseases. Both faculties traditionally do not receive nor send that many physical exchange students, so the new virtual mobility component has been seen as a great way to boost mobility and internationalise the curriculum.

The Worlds Happiest Student course

The “Worlds Happiest Student” course is made by students for students in close cooperation with figures in working life as well as people with expertise in the fields of interest. The course consisted of 10 live lectures that took place on the Linnanmaa campus. The lecturers were divided into two groups: celebrities or well-known people with interesting stories from their life and experts who knitted these experiences together with theory. The overall aim of the course was to help students learn about and develop their self-knowledge and self-management. In the bigger picture, these skills have been noted to have a large impact on students’ day-to-day life and help strengthen their well-being. Along with the full course and its credits the lectures were also open to the public. This made it possible for students to take part in some of the lectures if the course otherwise would not fit their schedules. The course had its first run in the autumn of 2022 and received widespread interest from working-life actors and the student population. Based on these results the working group aims to make the course a reoccurring theme in the study year in Oulu.

The Chaperone Programme in the Faculty of Biochemistry and Molecular

Medicine

The Chaperone Programme is a part of orientation studies offered to first-year biochemistry students. The chaperones are researchers, who voluntarily present their scientific know-how through organised hands-on and demonstration sessions of research work for biochemistry bachelor's degree freshmen students. This way the new students can see very early in their studies what research work is and what they will learn and do later during their studies and working life. This is the time when freshmen can have a peak in the laboratory environment, get a passionate introduction to research work by early-stage researchers, and discover the topics for their future scientific interests. Simultaneously the chaperone programme provides an opportunity for doctoral and post-doctoral researchers to communicate their research for yet not a professional audience which is a critical skill in academic training. Students enjoy the chaperone programme and even several years later they refer to it as one of the most memorable experiences during their first year of studies.

Curriculum mapping and the use of Learning Opportunities, Objectives, and Outcomes (LOOOP) platform

The Degree Programme of Medicine uses a curriculum mapping tool LOOOP, designed and provided by Charité University in Berlin. The objective of curriculum mapping is to add transparency to the curriculum and link together the following aspects: what is being taught (contents, competencies, objectives), how it is being taught (teaching methods and resources), when it is taught (in relation to other studies), and how learning is measured (evaluation). LOOOP can be accessed by 4 different parties, teachers, education designers, administration, and students, who all use and benefit from curriculum mapping differently. In addition, LOOOP can be used as a tool for accreditation, education research and recognition of studies. A curriculum mapping tool differs from other education related information systems in that it is the only place where all information is available for all parties. In addition, the information includes the level of individual teaching events as well as the national level, which is not gathered anywhere else. The LOOOP tool also allows exploring the relations between the different levels (teaching event, course, year, degree programme, the national level).

The Oulu Business School Assurance of Learning (AoL) process

At the Oulu Business School (OBS), the Assurance of Learning (AoL) process is a normal element of the continuous development of curricula, utilising the AACSB Business Accreditation guidelines. The learning goals have been defined for each degree programme based on the school's mission, professional requirements, and work life expectations. These goals are used as the starting points for programme development and are systematically and continuously assessed and revised.

Within the AoL process, programme management is defined explicitly. The Dean of Education and the B.Sc., M.Sc., D.Sc. and EMBA Programme Directors have a central role in the AoL process. The programme Directors oversee the implementation of the AoL process with the help of the

Programme Committees. The Programme Committees' work is based on collected and analysed AoL data, as well as related data (work life feedback and surveys, university-level surveys for graduates, and student surveys and course feedback, etc.). Based on this, the annual AoL system and curriculum development plans are formulated by the Programme Committee. These plans are further approved by the OBS Education Committee that is ultimately responsible for the AoL process and curriculum development. The OBS Education Committee meets monthly and is chaired by the Dean of Education, with Programme Directors and two student representatives as members.

The curricula at OBS are renewed in two-year cycles, allowing for major structural changes every second year and other improvements to courses, teaching methods and the AoL system on an annual basis. The OBS curriculum management process is organised in steps starting from the definition of the OBS mission and proceeding towards programme portfolio planning, the definition of learning goals, aligning the curricula, defining the assessment methods, collecting, and analysing the evidence and determining the appropriate actions for improvement.

Cooperation with working life in Faculty of Education and Psychology

Cooperation with working life is essential in every teacher education programme. During their bachelor's and master's studies, students have several teacher training periods starting from their first year, and these periods form a continuum where the student teachers get more responsibility and strengthen their identity. Training periods are carried out, for instance, in teacher training schools, early childhood education and care (ECEC) centres, special schools, different educational and training organisations and enterprises. Cooperation with working life is integrated also in other studies and programmes, not only teacher education or courses that include teacher training. The faculty communicates on a regular basis with its stakeholders to improve students' opportunities to conduct their study projects and master's theses in cooperation with working life. In recent years, the faculty has organised meetings where students have had chances to meet the school principals and administrators of ECEC centres.

2 HEI promotes impact and renewal

- Auditointiryhmän arvio

Evaluation area II assesses the procedures used to manage and improve societal engagement, strengthen the impact of the HEI's research, development and innovation as well as artistic activities, and support an innovative organisational culture.

Based on the audit team's evaluation, the evaluation area II is at the level *excellent*.

The audit team identified the following as key strengths and recommendations:

Strengths

- The University of Oulu has a key role and well-established position in the regional knowledge, innovation, and competence creation ecosystem. The university contributes significantly to the renewal and strengthening of the region of North Ostrobothnia.
- The university's Arctic strategy and strong research focus on sustainable development strengthen the societal impact of the university.
- The University of Oulu offers multidisciplinary research and networks that help create an innovative organisation culture.

Recommendations

- The university should strengthen the visibility of its Arctic research activities and its role in international research networks, to highlight the research potential of the Arctic region.
- The university should develop further the long-term metrics for systematically following up and leading its efforts in societal and research impact.
- The university should monitor and ensure the achievement of its institution-wide sustainability objectives.

2.1 Managing societal engagement and impact

- Korkeakoulun itsearviointi

Societal engagement and impact derive from the strategy

The strategy of the University of Oulu (UO) outlines the objectives for societal engagement and impact. The UO is committed to promoting the UN's goals of sustainable development with research and education. Societal impact is included in the strategic development programmes and in the faculty strategies to ensure full societal impact of research and education. The strategic development programmes have key roles in developing societal engagement and impact.

Management of societal engagement and impact

The management of societal engagement and impact is built into the UO organisation and management system. There have been remarkable organisational updates after the last audit, e.g., the Vice Rector for Co-Operation, the University Innovation Centre, the Career Centre, and Key Account Manager activities are all new to the UO.

The rectorate has the main responsibility for directing the operational societal activities while the University Board steers the strategic level. The Vice Rector for Co-operation oversees the relationships with companies, other universities, and research institutions, both nationally and internationally. Key responsibilities also include strengthening research-based innovation activities, promotion of international partnerships and EU influencing.

The Cooperation Management Group led by the Vice Rector for Co-Operation supports the rectorate in managing societal impact. All the Faculty Deans are represented together with directors of appropriate service units. The Cooperation Management Group regularly discusses and guides the UO's activities on company and stakeholder collaboration, key account management, and innovation activities. Each Dean also reports the collaboration activities within their faculties. The Council for External Relations is also under the responsibility of the Vice Rector for Cooperation. The Council for External Relations consists of five working groups, one for every focus area of the UO strategy. Each working group has several members from external organisations. The Council promotes the UO's innovation activities, research, and company cooperation, working life relevance of education, alumni relations, and fundraising.

At the operative level, the University Innovation Centre (UIC) coordinates company collaboration according to the Operational Model for Business and Stakeholder Collaboration. The model offers guidelines also to researchers about collaboration with companies and other organisations. The UIC acts as an interface between stakeholder needs and university solutions focusing on research needs whereas directing other requests to appropriate internal units. The UIC also coordinates Key Account Manager (KAM) activities of the university. There are several full-time KAMs in the

UIC and Extension School, and each faculty has part-time KAMs taking care of the most important customers of the university. Altogether twenty employees are closely involved in key customer and sales activities. The actions of the UIC and KAMs make sure that customer companies and stakeholders know the service portfolio and can find wanted solutions. The systematic approach has gained a rise in business activities of the university.

The UO has several ICT tools to manage relationships and societal impact. The UO has a CRM team and uses Microsoft Dynamics as a CRM tool. The CRM is used to store information regarding collaborations between the UO and its partners and will act as organisation's shared memory once in university-wide use. Strategic goals and actions including activities for societal impact are tracked frequently by the management. Power BI visualises information from the accounting and shows how external relations provide additional funding and which research units conduct such collaboration. The UO uses the Overton tool to follow impact on public authorities, e.g. how research results are adapted by the authorities. Additionally, the UO monitors the visibility of research, the number of open access and self-archived publications and the openness of research infrastructures and metadata of the datasets.

Monitoring the operational environment

The UO has defined a set of strategic indicators to monitor the progression of societal engagement and impact. The state of strategic development programmes is reported to the University Board in accordance with the Board's annual plan. The university administration contains outside members in the Board and Faculty Boards, and in the Council for External Relations. External members help understand the relevance of societal trends in education and research. Specific environmental scanning and foresight work is carried out in profile areas, focus institutes and Separate university units.

The inter-sectoral collaboration in research includes largely EU and Business Finland funding in addition to Research Council of Finland funded flagships and strategic research projects. The research agenda arises from the need to solve global challenges, from EU funding strategies but also from the needs of industries due to their changing operational environment. The UO facilitates interdisciplinary research collaboration aiming to establish consortia with complementary skills to solve societal challenges and create innovations. UIC and KAM persons also analyse operational environment when proposing research collaboration for companies. Daily societal monitoring is done by employees being in constant interaction with society.

In education, the career monitoring surveys for bachelor's, master's and doctorate graduates are the most important feedback channels for alumni. The information on graduate employment is analysed for insights into how the UO is responding to demands concerning working-life competences. The results are presented to Faculty Educational Development Committees and used to enhance their courses to be in line with career and professional needs. As an essential part of JOY (Jatkuvan Oppimisen Yliopisto – University of Continuous Learning), the Open University of the UO also collects the feedback on its activities twice a year and the analysed feedback is used to develop continuous learning offerings and studying experience.

The Unit for Strategy and Science Policy produces information and visions to support the university’s decision-making and operations management. The unit is responsible for knowledge-based management and information production, operations management, assessment of responsible science, internationalisation and sustainable development policies. Though there are several service functions to foster and monitor societal impact, more emphasis should be placed on encouraging the creation of impact in the faculties considering the full range of societal impact. Impact is not yet seen as a common goal.

Strengths	**Enhancement areas**
Societal impact driven by strategy.	Consistent implementation of the strategy through the organisation.
Council for external relations.	Building of impact capacity at the faculties and units.
Operational model for business and stakeholder collaboration.	Challenges of information-based management.

2.1 Managing the societal engagement and impact

- Auditointiryhmän arvio

Strong track-record in regional cooperation

The University of Oulu has an essential role in creating, promoting, maintaining, and enhancing the regional innovation ecosystem. The audit team found that external partners are highly contented to cooperate with the university and there is a long history of cooperation. The University of Oulu works together with its many external partners on long-term projects to bring about sustainable societal change. The ecosystem includes several excellent collaboration networks, such as the Oulu Innovation Alliance established in 2009. The Oulu Innovation Alliance is a strategic consortium of significant research, development, and innovation operators in the Oulu region. Its goal is to strengthen the innovation capability in the region along with the global competitiveness of Northern Finland. The audit team recognises a strong linkage between the university's strategy and the regional networks through research focus areas and strategic development programmes. These were well noticeable to the audit team during the audit visit.

The audit team recognises several excellent practices at the UO for managing the university's societal engagement and impact. Societal engagement is led by the Vice Rector for Cooperation and supported through the work of the Key Account Managers, University Innovation Centre, the Career Centre, and network of faculties. These provide a comprehensive and multidisciplinary basis for internal and external collaboration.

According to the self-assessment report, the Unit for Strategy and Science Policy produces information and visions about the University of Oulu's operating environment, and this information is used in decision-making and operational enhancement. The University of Oulu ensures that societal engagement supports the implementation of the overall strategy.

Societal engagement is reflected through varieties of cooperation areas connected to the university's strategy, including the Arctic research and cooperation, industry cooperation as well as social and cultural cooperation with schools and institutes. The regional research and cooperation activities such as work related to the Sámi culture are distinctive. The university also has a working environment for digital manufacturing and design called FabLab, which is open to all.

The objectives for societal engagement are well defined

The University of Oulu has defined goals for societal engagement. The university's strategy includes objectives for societal engagement and impact, and social interaction is integrated into strategic development programmes. Strategic development programmes have a key role in enhancing social engagement and impact.

The university has also defined a set of strategic indicators to monitor the progress of societal engagement and impact. According to the audit visit, the indicators include both quantitative and qualitative indicators like number of publications, white papers and events, cooperation initiatives, participation in different boards, visibility in media, number of Intellectual Property Rights (IPRs) granted as well as number of initiatives which lead to new start-ups. In addition, the university uses surveys for reputation and liability.

The university has well integrated sustainable development into its strategy and activities based on the United Nations (UN) Sustainable Development Goals (SDGs), linking its goals and efforts for sustainability to the global framework. The university's Action Plan for Sustainability and Responsibility outlines the objectives for sustainability and responsibility in relation to its core duties: research, education, and societal impact and cooperation. It also describes the actions taken and still to be taken to achieve these objectives. The audit team encourages the university to regularly review the sustainability objectives and monitor the achievement of these objectives. The audit team also commends the university's actions towards carbon neutrality and encourages the university to consider making the carbon footprint calculation automated and real time.

2.2 Research, development and innovation activities as well as artistic activities with impact

- Korkeakoulun itsearviointi

Open and responsible science

Open and responsible science is promoted as an integral part of all research activities. Responsible science in the UO covers and combines the perspectives of good scientific practice, research integrity, sustainable development, diversity, responsible science communication and open science. The UO's Declaration and policies of open and responsible science are presented on the website for responsible research. According to the UO policies, research outputs of publicly funded and published research are open and available for joint use, while the UO research infrastructures promote openness and sharing of resources. The UO has signed the Agreement on Reforming Research Assessment and joined the CoARA coalition.

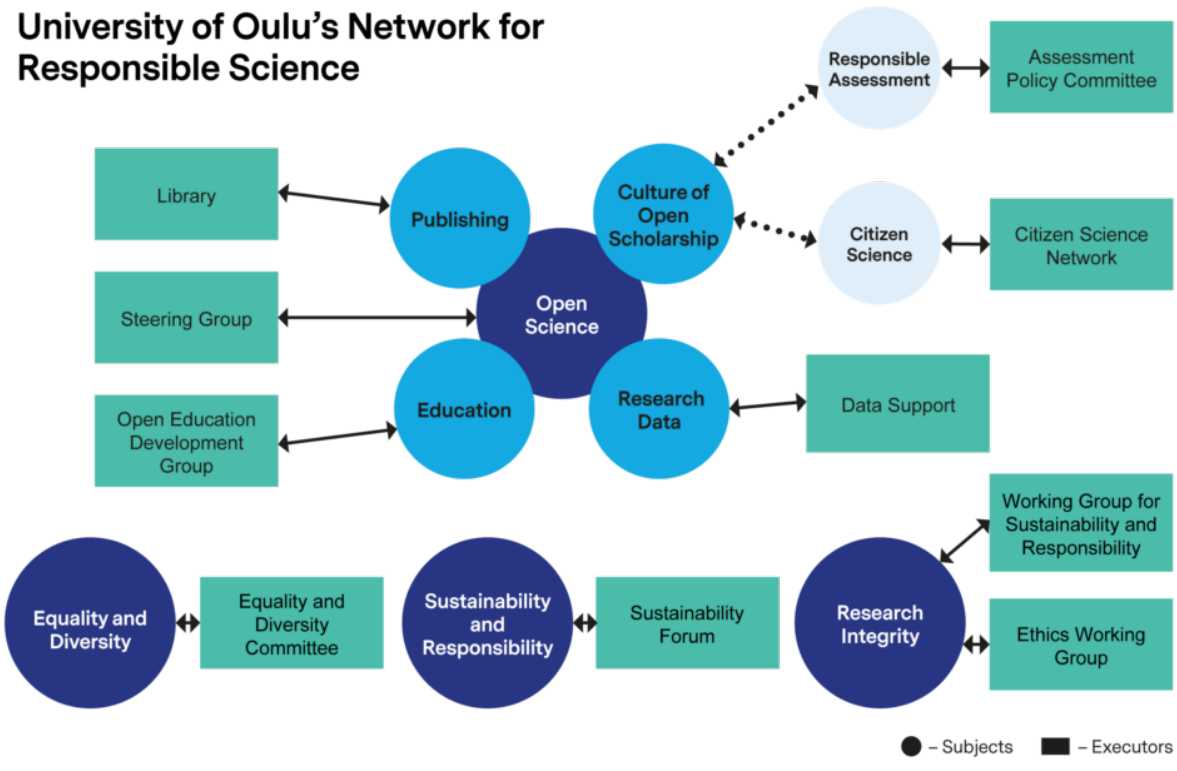


Figure 7. The UO's Network for Responsible Science.

The UO's open and responsible science policies, practices, services and network (Fig. 7) are coordinated by a steering group led by the Vice Rector of Research. The UO offers support for open access publishing, research data management, open education, responsible assessment, and use of publication metrics. Multidisciplinary Data steward team provides support for data

management and engages in national and international cooperation. In 2022 the UO was ranked at the highest level in all sub-areas of the national open science monitoring model. This highlights the fact that the university's policies, guidelines, and foresight work have been highly successful. In the follow-up of 2024, the role of support services will be greater and there is a risk that the current resources are not enough to keep the UO at a top level.

The UO has an active citizen science network to promote citizen participation and societal engagement. The UO will host the ECSA 2026 conference (European Citizen Science Association) and has established the Finnish Citizen Science Association. The UO is one of the ten European University UNIC partner universities which promote community engagement and the popularisation of science.

The UO's Research Council supports the rectorate in promoting research, assesses the quality of research activities and is also partly responsible for guiding the quality work of research. The UO has committed to follow the guidelines of the Finnish National Board on Research Integrity (TENK) and the European Code of Conduct for Research Integrity. Researchers' commitment to the principles of research integrity and ethics is part of the UO's quality assurance. The UO personnel and students are familiarised with the responsible conduct of research guidelines via extensive education.



Figure 8. Key research results, 2021.

The societal impact of research

The OU's multidisciplinary scientific community is generating impressive research results (Fig. 8) on tackling global challenges. Multidisciplinarity is purposefully advanced in the UO's strategic decisions of profile areas and by focus institutes to increase the quality of research and societal impact. Thematic ensembles are coordinated by the focus institutes that support networking between disciplines and faculties, interdisciplinary projects, and doctoral education. The Thule Institute coordinates Arctic activities, including cooperation with the Arctic University Network.

The actual and future impact of the research is assessed regularly by an international panel in the RAE process. One of the key findings in RAE2021 was that all research units are aware of the importance of societal impact, and they have special efforts directed towards regional benefits. An example of impactful research is the recent nomination of Prof. Heli Jantunen as one of the Academicians of Science.

The UO has a unique scientific profile linked to the UN's global Sustainable Development Goals. The UO is committed to acting responsibly towards society and environment, to seek solutions to the sustainable use of resources, and to make ecologically responsible choices in its own operations. The Sustainable Development Working Group has prepared an Action Plan on Sustainability and Responsibility. The UO is actively influencing regulation at different forums sending statements to ministries and national agencies, EC offices and UN organisations.

Research and project services offer impact workshops and an online Impact Helper guide with a concrete Impact Planner tool. Special emphasis is placed on support for young coordinators of Horizon Europe pillar II proposals, especially for the impact section. This has led to excellent results and the number of coordinated HE consortium projects has risen from 9% in H2020 to 18% in HE.

The UO has a vital role in the R&D activities of the Oulu region. The UO supports the ICT sector of the area through its globally strong 6G research. Additionally, the metal and forest industries as well as the health and wellbeing sectors are scientifically supported through constant productive interaction with the sectors.

The UO co-leads together with University College Cork, and Malmö University UNIC Centre for City Futures, that integrates education and research, and service to society. It is a One-Stop-Shop infrastructure for systemic cooperation with 10 UNIC cities, to develop collective regional capacity and capabilities beyond boundaries, by enabling 10 UNIC universities engage with cities, communities, and stakeholders for transformative innovation and societal impact. The UO as part of the European University UNIC is committed to the European Declaration on Engaged Research. According to its definition, Engaged Research is an overarching term that describes a wide range of comprehensive research approaches and methodologies that share a common interest in collaborative engagement *with* and *within* society.

The societal impact of innovation activities

Besides coordinating company collaboration the UIC is an internal service unit for researchers in inventions, patenting, and research-based business development. The UIC manages the university patents and technologies, and other IP portfolio, and negotiates all the technology and material transfer agreements. UIC also helps faculties and research units to make NDAs and collaboration agreements with customer organisations.

The UIC has internal instructions concerning inventions and patenting before publishing if the invention has the potential for commercialisation. The UIC also provides business development support for researchers with research-based business ideas and plans for startup companies. The procedures for technology and IP transfer to companies are in place and transparent. The innovation activities and results are monitored (Fig. 9) and the UIC activities are tuned if needed.

Place-based innovation ecosystems' capacities are increased through radically expanded mobility and diversity of participants by UNIC CityLabs.

Innovation activities	2019	2020	2021	2022
Meetings with researchers	637	875	1253	**1379**
Invention disclosures	63	36	46	**56**
New patent applications	6	10	10	**9**
Patent approvals (first approval)	4	4	6	**7**
Active patent families	37	39	45	**52**
Technology transfer	17	24	13	**21**
Reseach-based startup companies	2	2	3	**2**

Figure 9. Innovation activities.

Communicating scientific activities and the impact of the university

The public, sponsors, influencers, and various professional groups are interested in knowledge, as well as novel scientific research and partnership opportunities provided by the university. Through media outlets, the university can reach out to large audiences, participate in social debate, influence, and raise the profile of the UO's scientific community. Communications specialists at each faculty help the media to find information and experts. Some service units also have their own communication activities and channels for stakeholders. The university has several regular newsletters for external recipients. The university's monthly newsletter focuses on science and research, and the recipients include alumni, partners, and other stakeholders.

The UO has official social media accounts on Facebook, Twitter, Instagram, LinkedIn, YouTube,

Snapchat and TikTok managed by the Communications unit. The channels highlight the university's results and impact. The UO encourages employees to participate in societal discussions according to their role as scientists or teachers. Social media is used by the university for marketing and communications, recruitment, teaching and interacting with stakeholders. UO Communications constantly follow and analyse the media presence of the UO and the UO's research in the national and international media, including social media.

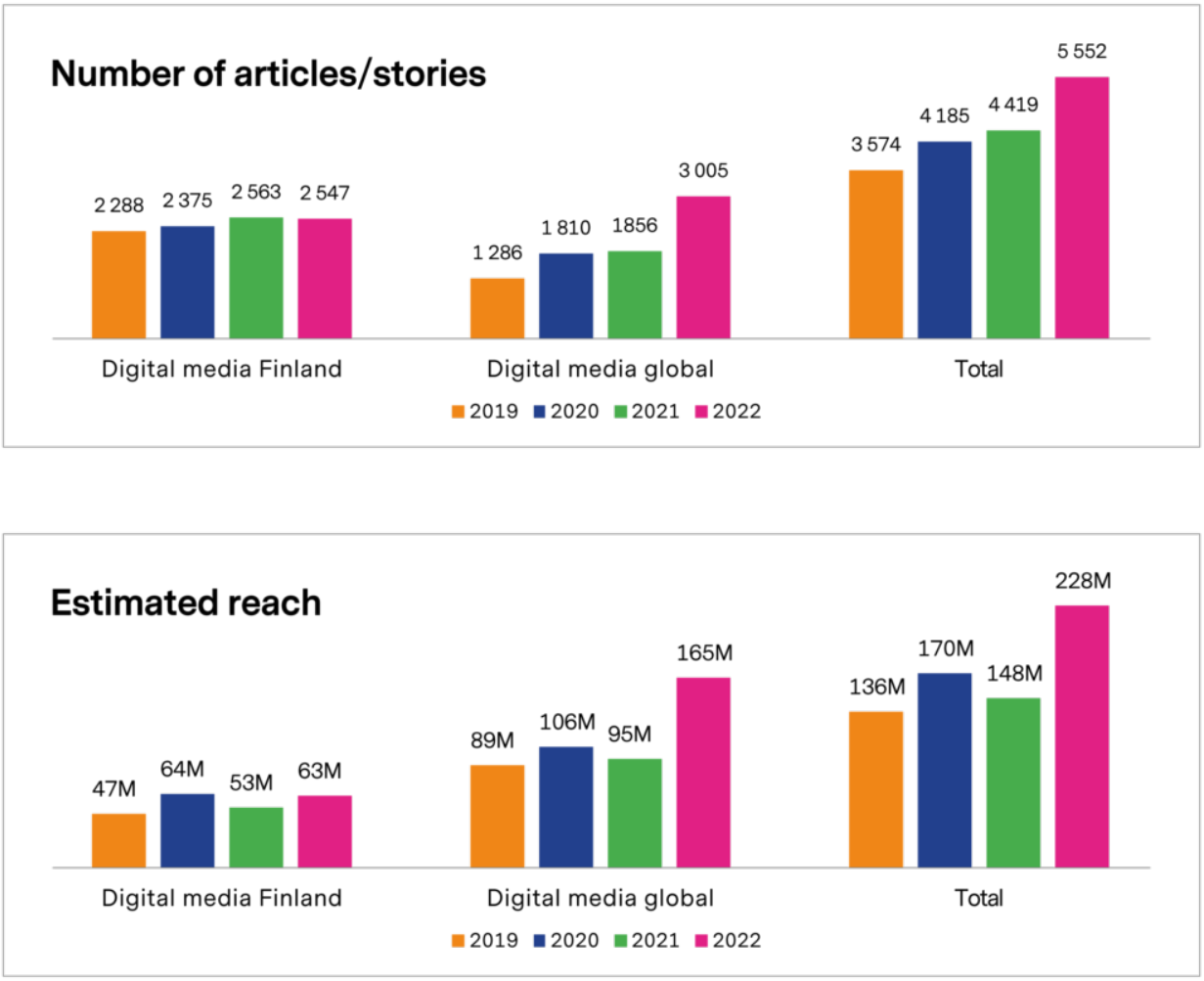


Figure 10. Digital media coverage 2019–2022

Strengths

Citizen science.

Multidisciplinarity within research focus areas.

UIC to coordinate company collaboration and innovation activities.

Enhancement areas

External website for collaboration needs content.

Future resources for support of open and responsible science.

Societal engagement in terms of international employees.

2.2 Research, development, and innovation activities and artistic activities with impact

- Auditointiryhmän arvio

UO’s multidisciplinary research reforms society

The University of Oulu takes part in multidisciplinary research and many research networks. The project portfolio covers a variety of topics in sustainability and climate, biodiversity, technology, society, and human subjects. The cross-networking and interaction as well as multidisciplinary research work is a unique advantage for the UO in terms of creating new innovations and contributing to transformation in the society. The existing multidisciplinary focus institutes support the strategic development of research activities.

At the University of Oulu, multidisciplinary research is conducted in five focus areas. The basis for multidisciplinary research is created by long-term basic research. Research is structured as a matrix organisation. In addition to faculties, disciplines and research groups, there are focus areas and focus groups for cross-faculty interdisciplinary research. In addition, the university has strategic programmes and strategic funding. According to the audit visit, researchers were appreciative of the structure.

Long-term view of research impact could be emphasised

The university has linked its scientific profile to the UN SDGs. The targets of research impact at the university are to act responsibly towards society and environment, to seek solutions for the sustainable use of resources, and to make ecologically responsible choices in its own operations. There are excellent metrics such as the number of start-ups created through the joint projects. According to the audit visit, research impact is also measured by the number of patents, research and innovation projects, and meetings with partners. The metrics are mainly quantitative. The university also obtains important information on research impact from the Research Assessment Exercise (RAE), last carried out in 2019-2020. According to the RAE2020, there is a strong link between the scientific activities of the UO research units and the SDGs.

The audit team notes that the university could benefit from additional long-term metrics for research impact. For example, following the number of new start-ups is important, but the university could also benefit from following the impact of such start-ups in the long term. This information could be critical in terms of deciding future initiatives. Long-term metrics are particularly useful and necessary for enhancing future-oriented research activities. The university could also gain useful information by adding qualitative measures of research impact in areas that are not easily measured by quantitative measures. Examples include an increase in awareness, well-being, or policy changes that are influenced by or based on research findings.

According to the audit visit, the UO researchers' aim is to reform society. Reform starts with defining existing reform needs in the society. After that, researchers can start the research. To help researchers, the university has developed the Impact helper guide. It covers the concept of research impact, impact pathways, possible stakeholders, and ways to maximise and measure impact. The guide assists researchers in finding links between their research and the UN SDGs. In addition, the university offers customised research impact workshops which are organised for research groups. The audit team recognises the Impact Helper as an excellent initiative to support and engage researchers to evaluate and consider the impact of their research from a global perspective.

The University of Oulu's Arctic Strategy is an important opening for joint research

During the audit visit, the audit team was impressed by the Arctic strategy of the University of Oulu. The strategy focuses on addressing the challenges and opportunities in the changing Arctic region, driven by factors such as climate change, globalisation, and demographic shifts. The strategy aims to integrate Arctic research into the university's overall objectives. The audit team finds the university's emphasis on building a sustainable Arctic through collaboration with various stakeholders and multidisciplinary research commendable.

The university's Arctic strategy highlights key topics including resilience, One Health, and sustainable governance of natural resources and business in the Arctic. At the core of Arctic research, the university emphasises the creation of new knowledge, taking responsibility, and succeeding together through inclusive and diverse networks. Arctic research has been selected as a key strategic area and a strong basis for the future.

Strengthening the visibility of international research and cooperation

Focusing the university's profile strategically is necessary to help it reach its goals of world class research and collaboration. The audit team suggests strengthening the visibility of the university's strong collaborations with international organisations such as the Arctic Network and the European University of Cities in Post-Industrial Transition network (UNIC). Through active communication, the university could draw attention to the concrete effects and advantages of these partnerships for researchers, students, faculty members, and the public. The university's communication unit and communication specialists at each faculty play a key role in this. Their role should be highlighted among the research staff.

The audit team notes the importance of communicating research results at both local, national, and international levels. According to the audit visit, research communication has been invested in for many years at the UO. There are several common practices at the university which support communication and interaction related to research, like involving external stakeholders in research programme meetings, events, and different working groups.

The university enhances open science

The audit team found evidence that open and responsible science characterises the policies, practices, services, and networks at the University of Oulu. The UO is committed to open science as a signatory of the national Agreement on Reforming Research Assessment. The UO has also joined the International Agreement on Reforming Research Assessment (CoARA) and signed the International Dora Declaration. In addition, the university has its own Declaration and policies of open and responsible science. Researchers and doctoral researchers are encouraged to publish in open access journals with the highest possible JUFO classification. The university library and network of open science play a major role in promoting and supporting open science at the university. The university has also an active citizen science network to promote citizen participation and societal engagement.

The University of Oulu is committed to the Finnish code of conduct for research integrity and procedures for handling alleged violations of research integrity in Finland 2023 guidelines. The UO is also committed to the European code of conduct for research integrity. The university has an ethics working group, and its tasks include discussions about the university's values and ethical questions. Ethical review of medical research in advance is a statutory process managed by the regional medical research ethics committee of the Wellbeing services county of North Ostrobothnia. In addition, the ethics committee of human sciences at the UO gives statements on non-medical research projects of human sciences and process related ethical issues.

The University of Oulu provides general training in responsible conduct of research. Otherwise, research ethics are considered in daily research and monitoring. Supervisors play a big role as role models for conducting ethical research. Research ethics training is compulsory for all doctoral researchers and later for all new researchers. The researchers described research ethics as being integrated in ordinary research.

2.3 Promoting renewal through the organisational culture

- Korkeakoulun itsearviointi

Innovative organisational culture

The UO strategy and values *creating new, taking responsibility, and succeeding together*, guide work at the university by encouraging people to collaborate widely and develop actions together. Different space related solutions enable an innovative working atmosphere by offering versatile opportunities for creating new in a multidisciplinary setting.

The UO has recently approved a new language policy to serve the university community, which is becoming more and more diverse. Equal opportunities to participate in the university decision making increases the sense of belonging and helps to understand different backgrounds and the needs of the whole university community. As an example, the UO has carried out visionary work for a future campus with a process that involved all the university stakeholders.

The UO is a founder and leading member of the Oulu Innovation Alliance (OIA), which is a strategic consortium of eight contractual partners that focuses research, development, and innovation in Oulu on three strategic areas and one cross-cutting theme. The development of innovations is based on co-creation and collaboration.

Competence and collaboration opportunities

The Career Centre acts as a facilitator between university units, students, and employers. It arranges recruitment and other events for companies and students to meet. Career Centre facilities can be rented to employers for their recruitment events.

The continuous learning services in the UO are actively progressing to enable the development of skills and competences in any stage of a career and to support the competitiveness of companies. The UO's continuous learning platform is branded as JOY (Jatkuvan Oppimisen Yliopisto – University of Continuous Learning).

The Academic Affairs counselling services caters for students, faculty members and external stakeholders. There are regular *Faculty Meets the Employers* workshops which are organised for regional, national, and international organisations to meet the teaching and research staff. The discussion agenda includes what the graduates can offer to the employers and their needs regarding the working-life relevance of curricula. UIC and KAM representatives help industries to utilise research results and competences in developing their businesses. The university is involved in several joint education development activities including the European UNIC collaboration network, which opens competence opportunities. There is also a Talent Boost project which aims to enhance the recruitment opportunities of foreign students.

Fundraising and donations to the UO are important instruments in funding new research and competencies. Donations make it possible to recruit top scientists, to invest in long-term scientific research and new research areas. The revenue from donation capital is used to strengthen focus areas as strategic funding. Many professorships have been established at the university with donation funds, and several tenure recruitments have been made. The most recent examples are the professorships in Brand Marketing, in Business Ethics and in Micro Entrepreneurship.

Cooperation with alumni

The UO's alumni body is over 62,000 strong. Alumni are an important stakeholder group when communicating about research, university activities, continuous learning services and for invitations to key events. New masters and doctoral alumni can join the Alumni Community, which is a free-of-charge online service for all alumni to stay connected with the university and each other. A member can subscribe to newsletters, event invitations, continuous education, and other communications. Different alumni activities are coordinated by Alumni Relations and the faculties are encouraged to invite alumni actively to their events. An Alumni of the Year is nominated at the University Gala in November.

The Alumni Coordinator and Academic Affairs collaborate with a Mentoring Programme that started already in 1999. Alumni volunteers act as mentors, offer support and insight for the students in finding their own career path. In feedback sessions, mentors claim they benefited from networking with younger generations and learning while the mentees gain clarity on their future plans. This has proved to be an important incubator of the UO societal interaction, bonding both Finnish and international alumni.

Management of networks

UO research is characterised by its strong connection to the surrounding society and questions that are essential to northern regions. The university has an Arctic strategy and the UO is one of the founding members of the University of the Arctic (UArctic). The UO has a vital role in both the leadership of UArctic and in developing joint activities and networks. Other important networks include the Arctic Five, Allied ICT Finland, European UNIC University, and the Ministry of Education Global Programme networks. The UO is an active partner in numerous local, national, and international networks in research, education, and innovations.

The UO 2020 Action Plan for Internationalisation concerns education, research, and collaboration. The UO also increases global partnerships through the MinEdu Global Programme and participates in seven international networks set up to build collaborative projects. In the national network, the UO is involved in twelve high-quality research infrastructures, including the coordination of Finnish participation in four international infrastructures.

Diverse international cooperation and extensive networks contribute to the UO's high-quality research and education and create opportunities for building a responsible and sustainable future. The strategic collaboration networks are centrally coordinated, like UNIC network and

international 6G research network. Some networks arise from the research and education activities within the units. The UO is involved in several cross-institutional networks where students can take studies from other universities.

Strengths

Career Centre recruiting services.
JOY platform for continuous learning.
Constant regional dialogue through the OIA.

Enhancement areas

Improvement of experimental culture.
Management of strategic networks.
Stronger alumni engagement.

2.3 Promoting renewal through the organisational culture

- Auditointiryhmän arvio

Innovation and creativity are encouraged in the UO community

The university has developed and maintains an open working atmosphere. The audit team found several examples of efforts that help strengthen a creative atmosphere, such as in-person working environments, digital platforms, and applications to encourage innovation and creativity. The University Innovation Centre (UIC), Vice Rector for Cooperation, Cooperation Management Group and Council for External Relations of the university are essential for ensuring renewal.

A certain atmosphere of creativity and spirit of inspiration was tangible both in the interior design work of the university environment but also throughout the audit visit. The Tellus collaboration environment supports the operationalisation of the strategy and the building of an interactive operational culture. Using interior design to support group working and interaction is an excellent approach by the university.

The organisational culture of the university encourages experimental activities with partners. During the audit visit, the audit team was convinced that continuous interaction between the university and its external partners is at an impressive level. Collaboration is an integrated part of the university's organisational culture. The audit team also found that the university staff highly appreciate their colleagues, the creativity, academic freedom, autonomy, and transparency in their work. On the other hand, it came out during the audit visit that some staff experience the organisational culture as traditional, bureaucratic, and led from the top down. The audit team recommends the university to ensure that the voice of the staff is heard at the highest levels of decision-making.

Well-functioning procedures are used to manage collaboration in networks

International networks of the university are essential to the renewal as well as societal engagement and impact of the university. The University of Oulu is involved in several local, national, and international networks. The Oulu Innovation Alliance is the most important local and regional network, involving all key stakeholders in the area, such as the city of Oulu, the Oulu University of Applied Sciences, Business Oulu, and local companies. The alliance monitors and evaluates the ecosystem. Important international networks of the university include UNIC, University of the Arctic (UArctic) and the Arctic Five, as well as discipline-specific networks. Horizon and Flagship projects and CityLab events and festival are also important for enhancing activities. According to the audit visit, University of Oulu researchers are trying to influence funding agency plans at EU level and Business Finland at the national level.

According to the audit visit, Key Account Managers are in contact with key partners and monitor the collaboration. The university has several tools to manage relationships and societal impact

such as CRM, Power BI, and Overton. The CRM is used to store information regarding collaborations between the university and its partners. The audit team recognises that there are excellent practices for managing partner relations.

According to the self-assessment report and audit visit, the university has target-oriented cooperation with its alumni, and it utilises them in enhancement activities. The university is aware that it could work even more systematically in the area. The audit team recommends that the university could deepen and expand the alumni network with the international alumni who work abroad. For example, their workplaces and current contacts could be interesting as future partners.

2.4 The HEI’s examples of successful enhancement activities

- Korkeakoulun itsearviointi

Researcher support

Research funding support for researchers at the UO is organised by the Research and Project Services with a dedicated research funding specialist for each faculty and special unit. A central unit of the services organises targeted support for researchers applying for ERC grants and coordinating consortium proposals for EU funding. These activities have contributed to an increase in competitive research funding at the UO.

Impact Helper and Planner

Describing potential impacts of research projects has become increasingly important for funding applications. This has led to the development of the Impact Helper, an online guide created by research funding specialists at the University of Oulu. This resource aims to educate researchers on the concept of impact, providing guidance on how to identify impact pathways, potential stakeholders, and ways to maximise and measure impact. The guide also covers various approaches to sustainability as this is an essential part of research impact. With the guide comes an Impact Planner, which can be used to make an impact plan for an individual research project.

EU Advocacy

EU advocacy enhances the university’s role as a significant and well-known actor at the EU level. The UO goal is to be a sought-after partner in EU funded research projects and an active participant in EU level networks. Researchers and experts from the UO actively participate in the preparation processes of the EU’s research and innovation policies and funding programmes, particularly Horizon Europe, in respective EU and national expert groups and networks. Concrete actions supporting the UO advocacy include: stakeholder cooperation and EU advocacy in networks; preparing national and EU level position papers and consultations; increasing visibility and participation in EU events; as well as support services, training and communication on EU funding and advocacy.

Fundraising impact: A Career Counsellor

Donations to the University of Oulu make new initiatives possible in both research and education. One important benefit from the donations is that the university can establish new positions. As a result of the university’s 60th anniversary fund-raising campaign ‘For the Next Generation’, especially a contribution from LähiTapiola Pohjoinen, a Career Counsellor was appointed to support career paths and develop the employability of international students.

Every year there are more than a thousand international students studying on master's programmes at the University of Oulu. The hope is that these talented, budding professionals will remain permanently in Oulu. The Career Counsellor was appointed so that the university can provide guidance to our international students. Now, many efforts are being made to lower the threshold for employing foreigners through collaboration with regional companies.

The Career Centre

The Career Centre acts as a facilitator between university units and faculties, and potential employers. In addition to organising recruitment events and fairs, the Career Centre offers facilities for individual companies for their recruitment efforts. The services of the Career Centre include recruitment help, enhancing employer branding, and the finding of placements and interns.

Key activities of the Career Centre are giving student counselling, consulting, and offering courses and workshops on employability and career path development. It has developed a 2-credit Employability and Working life Skills course which is now part of the curriculum for doctoral students and part of the cross-institutional studies of the Finnish Universities network. A popular workshop series 'Ready for Work' is held throughout the academic, practical tools and hands-on services which increase the employability of the students and their transition to working life.

Key Account Managers (KAMs)

KAM activities have strengthened the company collaboration. University has now a more comprehensive picture of different collaborations going on, new actions are based on strategy and the actions are systematic, frequent, and organised. The results are monitored at the university and faculty level. Strategic partnerships and focused stakeholder collaboration are coordinated by the UIC.

KAM activities support business cooperation in faculties and degree programmes. For example, faculty specific KAMs report their activities to their faculty managers. KAMs also take care of business ecosystems. Contact persons have been appointed for each leading Business Finland company, and partnership funding calls and the activities of leading companies are closely followed.

Communication, Marketing, and Community Relations Unit

In recent years, the UO has invested in the development of communication and marketing as well as social relations. The reorganised and resourced Communication, Marketing and Community Relations Unit supports the university in achieving its goals through the strategic planning of communications, high-quality content and channels that reach people. The unit has played an important role in increasing the recognition of the UO and in developing an attractive brand. This has increased the attractiveness of the University of Oulu among applicants and stakeholders, increased engagement and opened new opportunities for cooperation and donations.

Researcher’s Night

Researchers’ Night is a multidisciplinary event for the whole family to highlight scientists and their work, as well as the importance of science in our everyday life and society. The diverse programme has attracted around 3,000 participants of all ages annually.

3 HEI enhances quality and well-being

- Auditointiryhmän arvio

Evaluation area III assesses the functioning and development of the quality system and how the system is used in strategic management. The procedures used to support the competence development and well-being of the staff are also assessed.

Based on the audit team's evaluation, the evaluation area III is at the level *good*.

The audit team identified the following as key strengths and recommendations:

Strengths

- Staff, students, and external partners are involved in the quality system and continuous improvement according to the PDCA cycle.
- The quality system is clearly connected with the university's strategy and profile. The information generated by the quality system is used in the management of the university.
- The quality policy supports the multidisciplinary profile of the university and cooperation with external stakeholders.

Recommendations

- To support the proactive enhancement of its activities, the university should strengthen the identification and use of internal and external information.
- The university should ensure the well-being of all its staff through various ways and keep staff workloads reasonable.
- The development of teaching competences and completion of pedagogical studies should be more closely monitored.

3.1 Using the quality system in strategic management

- Korkeakoulun itsearviointi

The UO’s strategic management, operations management and quality system form an integral entity. The quality system supports the attainment of the objectives set for the UO’s operation and enables strategic management and strategy-based operations management in keeping with the principle of continuous improvement. The principles of the quality system are applied in the strategic management as a part of planning, steering and follow-up processes according to the division of responsibilities.

Division of Responsibilities and Organisational Structures

The effective functioning of the UO’s strategic management is ensured by defining managerial responsibilities. As regards the UO’s strategic management, the central responsibilities are manifested as responsibilities in strategic planning, strategy implementation and the follow-up of the strategic activities. The roles and responsibilities for strategic management are described in the university regulations and the principles of operations management.

The administrative bodies of the UO also have certain responsibilities, duties, and roles in enhancing the UO’s strategic management. For example, the management groups and councils led by Vice-Rectors connect the university-level and unit-level strategic management, and thus have a key role in supporting strategic management throughout the organisation. Besides the roles and responsibilities based on the UO’s management system, the strategic management of the UO is also supported by the organisational structures which transcend the faculty-based organisational boundaries enhancing the planning and implementation of activities and evaluation-based development. The multidisciplinary focus institutes have a key role in supporting the strategic development of research activities in this respect.

Implementation of the Strategy and Operational Planning

The connection between the quality system and strategic management is fulfilled considerably through the practices of internal planning and steering. The UO’s strategy is implemented through the strategic development programmes which are prepared for the UO’s core activities and other priority areas selected by the Board for each strategy period. The implementation is conducted by predefined processes and practices of annual planning defined in the principles of operations management. The implementation of the strategy is also supported by the annual faculty-specific target and performance negotiations as part of the annual planning cycle. Furthermore, the strategic planning process is backed up by kick-off events for annual planning and other types of communication between the UO management and the units.

A broader background to the annual planning of strategy implementation is provided in the long-range planning process, which focuses on the results, resources, and risks of the core activities

with five-year scope. Both the practices for the annual planning of strategy implementation and long-range planning are put in place to support the effectiveness and coherence of the strategic management. In general, the UO's quality system has predefined process for strategic planning and implementation in place. However, strategic planning could be still improved by making the unit-level strategy process more consistent throughout the organisation.

Applying follow-up information to strategic management

One of the quality system's key tasks is to produce information for the needs of strategic and operations management. The follow-up information is utilised in several ways in the UO. From the perspective of strategic management, the core of the follow-up information lies in the indicators defined for each of the strategic key areas. The follow-up information on strategic focus areas is monitored according to the UO's management system and managerial responsibilities. The University Board is provided regularly with the indicator data describing the core activities of the UO development. Furthermore, a broader review of the results and key activities in the UO's strategic key areas is conducted by the Board as a part of the annual cycle of strategic management. Tailored indicator data on the operation is also produced for the needs of strategic and operations management. For instance, the UO management is regularly provided with different analyses and reports related to topical issues in strategic management. The information produced by the UO's quality system has also been utilised in the strategy workshops of the University Board and the UO management.

Besides the follow-up indicators of the core strategic areas, there are also several follow-up reports which are utilised in strategic management. For instance, an indicator set has been developed and deployed for the profiling areas of the UO's research and the research projects included in the areas to follow the overall performance of the areas and projects. Similarly, the performance of the research projects supported by strategic funding under the focus institutes is followed regularly by the indicator set developed for this specific purpose. The follow-up of these projects and activities consists of final reporting covering the whole four-year project period and yearly reporting focusing on the key performance indicators defined for this follow-up purpose. Furthermore, the follow-up data on the usage of the UO's research infrastructures are utilised in strategic management, for example, by incorporating the information provided in this follow-up to the analysis of research activities at the unit-level.

The key indicators following the performance of core activities and attainment of strategic objectives are presented in the UO's reporting portal for the actors with managerial responsibilities. Besides the information presented in the UO's reporting portal, part of the strategic follow-up information is also distributed in separate reports and documents. The information provided in the reporting portal and by other channels is utilised in the management of daily activities.

The UO's strategic management is also bolstered by applying evaluative information. For instance, the UO has established procedures for conducting a research assessment exercise (RAE) and applying the results of this evaluation in both strategic and operational development of

activities. Research evaluations are used also as a tool for directing strategic funding to research focus areas and areas in need of development. This is carried out under the multidisciplinary focus institutes that coordinate the focus areas of the UO’s research. This evaluative practice has also an established role in developing research activities and supporting both strategic spearhead projects and emerging research themes in the UO.

The UO has developed its capability to respond to the changes in operation environment by conducting foresight projects both at the university and at the faculty level. For example, the ongoing strategic development programme for education was preceded by a foresight project focusing on the digitalisation of education. Furthermore, the strategic management and strategic awareness of the UO have been enhanced by incorporating environment analysis approaches to management practices.

Strengths	**Enhancement areas**
The organisational structure supports the implementation of the strategy.	Strategic planning could be more consistent.
Planning and implementation of multidisciplinary research in focus institutes and through projects in profiling research areas.	Coverage of follow-up reporting could still be developed.
The university-wide graduate school supports the development of doctoral education.	The utilisation of follow-up information could still be improved.

3.1 Using the quality system in strategic management

- Auditointiryhmän arvio

The quality policy supports the multidisciplinary profile and collaboration of the University of Oulu

The current quality system of the university has been updated in the spring of 2023, and it is connected to the university's strategy. It includes an annual planning cycle at both university and faculty levels. The quality system includes a quality policy, which is open to the public. According to the audit visit, specific targets and performances are then negotiated between management and staff. The system also includes a five-year long-range planning process which focuses on the resources, risks, and results of the core activities. The quality policy supports the multidisciplinary profile of the university and its cooperation with external partners. According to the audit visit, the profile of the University of Oulu is high and well-known.

According to the audit visit and self-assessment report, the university has a Quality work steering group, headed by the Development Director, and a quality network. A Quality Specialist coordinates the implementation of quality management principles and procedures. The quality system covers educational provision, research, and societal engagement including the quality system itself. Systematic feedback and processes are available for evaluating and developing study programmes. Utilisation of both internal and external feedback has increased the contribution impact of the university activities in this area, but there remain differences between faculties.

According to the audit visit, the staff can find information about the quality system including news and current topics on the university's intranet Patio. They can also comment on posts on the site, use a discussion platform, share good practices, and send ideas and feedback to the management. Instructions, news, and events for students can be found on the student page.

The PDCA cycle is included in the quality system. The first part of the PDCA cycle, creating plans (P) is much more advanced than doing (D), checking up of doing (C) and acting (A) throughout the university. In the audit workshop, teachers also pointed out the importance of closing the loop, i.e., doing a quality check in every working group and meeting. The audit team recommends the university to make sure that the whole PDCA cycle is used to develop its activities.

The audit team found evidence during the audit visit that information generated by the quality system is used in the management of the university. One example is that Board members are well informed during Board meetings about how the indicators for strategic goals are met in the university's core activities. Before each meeting of the University Board, they are provided with indicator data describing the developments in all core activities at the university, especially

targeted at the strategic objectives. At the executive level, the strategy follow-up is linked closely to the management group activities.

Connection between quality system and strategic management could be strengthened

According to evidence gathered during the audit visit, the quality system could be more integrated into the strategic management at the university. This would increase internal connections and enhancement possibilities in the daily work of educational provision, research, and cooperation across the university. It would also facilitate the work with follow-ups and analyses of the strategy implementation both in short and long-term development.

According to the audit visit, staff are aware of and pleased with the overall strategic goals of the university. Most staff know what is expected from them. Strategic goals are discussed in the faculty council, regular meetings with staff, and in annual development discussions between staff and their line managers.

According to the audit interviews, the UO strategy contains too many strategic objectives. Some faculties prioritised the most important objectives in their own strategies. The university’s strategy update was approved during the audit visit. The audit team recommends that in the implementation of the updated strategy special consideration is given to the seamless and easy to communicate linkage between the strategy and its execution.

3.2 Supporting the competence development and well-being of the staff

- Korkeakoulun itsearviointi

A skilful, renewing, diverse and international community

The development of personnel skills and well-being is led by the UO strategy and its development programmes. The goal is to achieve well-being and an actively developing personnel with the best possible professional and work community capabilities to perform their duties. With personnel planning, we anticipate longer-term renewal needs. The orientation and internal training courses aim to consider the changing needs of work community.

The personnel's individual competence needs are identified as part of performance, well-being, and competence management in connection with the annual development discussion round. In addition to planning at the individual level, the UO's units create competence development and well-being development plans annually in connection with financial and operational planning. These are also used in the planning of the UO personnel training package as part of the development plan for the working community.

The focus of multidisciplinary competence development in the UO is on needs-based training and on the development of discipline-independent readiness skills, leadership, management, and pedagogical competence.

At the individual level, the development of competence is largely dependent on a person's own initiative. As a result, the challenge of competence development is inequality. In addition to individual responsibility, we strive to develop more effective mechanisms to support the identification of needed skills. According to the well-being survey, the staff's experience in utilising their own skills is very high. High-quality leadership plays an extremely important role in this. In addition, HR services are organised to support the development of skills and well-being through specialised teams.

Work well-being

At the UO, well-being is viewed holistically, so that work supports well-being when it only burdens you appropriately, and recovery is possible both at work and in your free time. Work must also contain restorative elements and it should be a source of resources, for example, in situations that challenge mental health.

The well-being and good everyday life of the personnel are also promoted with solutions that support the reconciliation of work and other life and by building a family-friendly operating culture together. By supporting the well-being of the personnel, we aim to maintain and support

the ability to work, considering the different stages of the life cycle of the employment relationship. In well-being support, the focus is on prevention. The employee's ability to work is supported both proactively and reactively in situations where there is a possibility of a decrease in the ability to work.

Well-being is monitored with well-being surveys, development discussions and focused workplace assessments. The UO uses a three-step support model for handling results from a well-being survey, where the line manager analyses the results of the survey and draws up a development plan together with the unit staff. The unit implements agreed measures, if necessary, utilising HR and external support services. The line manager's responsibility also includes monitoring the implementation and effectiveness of the measures and communicating the needs of the unit to the HR manager to develop services. With the help of the results of the surveys and the measures derived from them, the units and the UO operate more systematically and effectively.

The status of grant researchers has been developed as part of the UO community. The UO has been awarded HR Excellence in Research by the European Commission for the development of personnel practices for researchers.

High-quality leadership is seen as a key factor in promoting the well-being of the personnel. Common practices and operating principles help to solve career-related challenges. Through competence development, the personnel have a better ability to take care of their own well-being even in a changing environment. The entire work community participates in supporting work ability and well-being through its activities and practices.

Versatile well-being services and benefits are available to the UO personnel and line managers, which has been promoted by assembling them into a well-being toolkit for line managers.

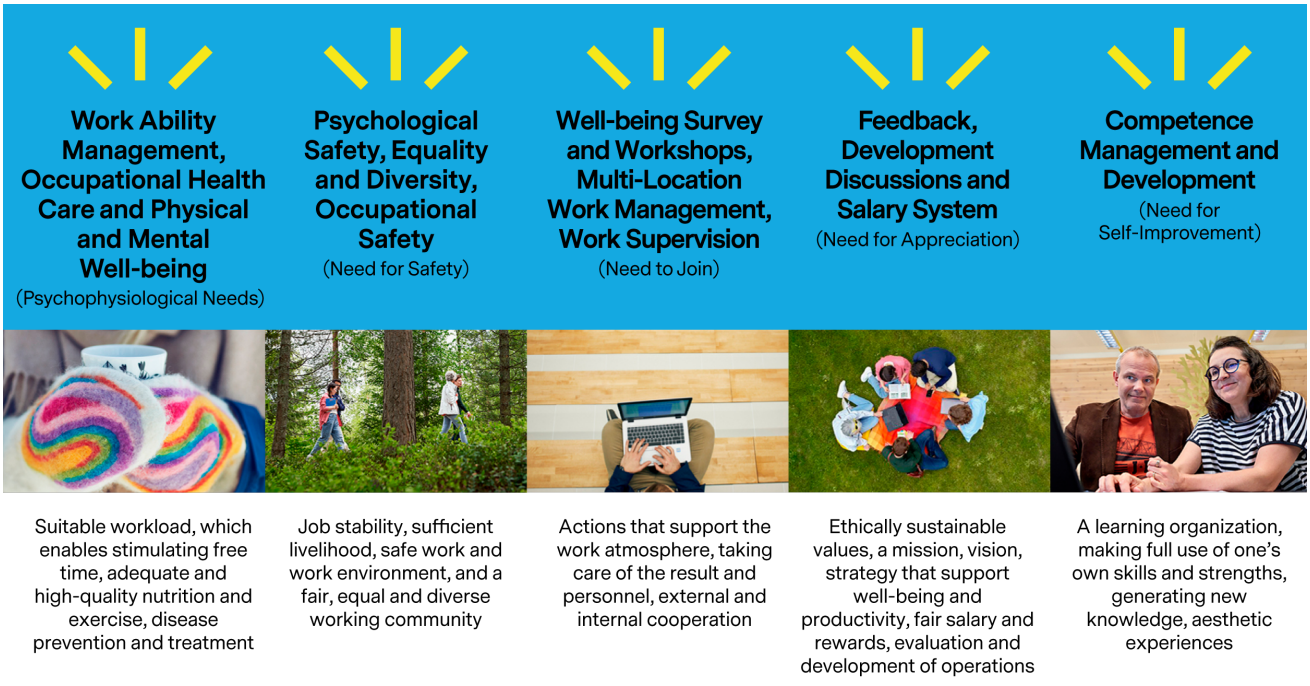


Figure 11. Service and support themes for line managers to manage work ability and well-being.

Staff well-being is challenged by insufficient overall understanding of the elements that support well-being and work ability, as well as the knowledge of the tools and services that support them. In particular, the insufficient management of workloads and other psychosocial factors is reflected in the number of absences due to mental health reasons. The goal is to increase both awareness of mental health and services that support mental health.

High-quality leadership and management

Currently, the personnel's well-being is supported by paying attention to high-quality management and managing psychosocial stress. Expectations for good management and leadership are defined in the UO leadership principles, which are in line with the UO values. Leadership principles are included also in leadership training as well as in evaluations. Leadership and line management training (including the science leadership training) are implemented annually.

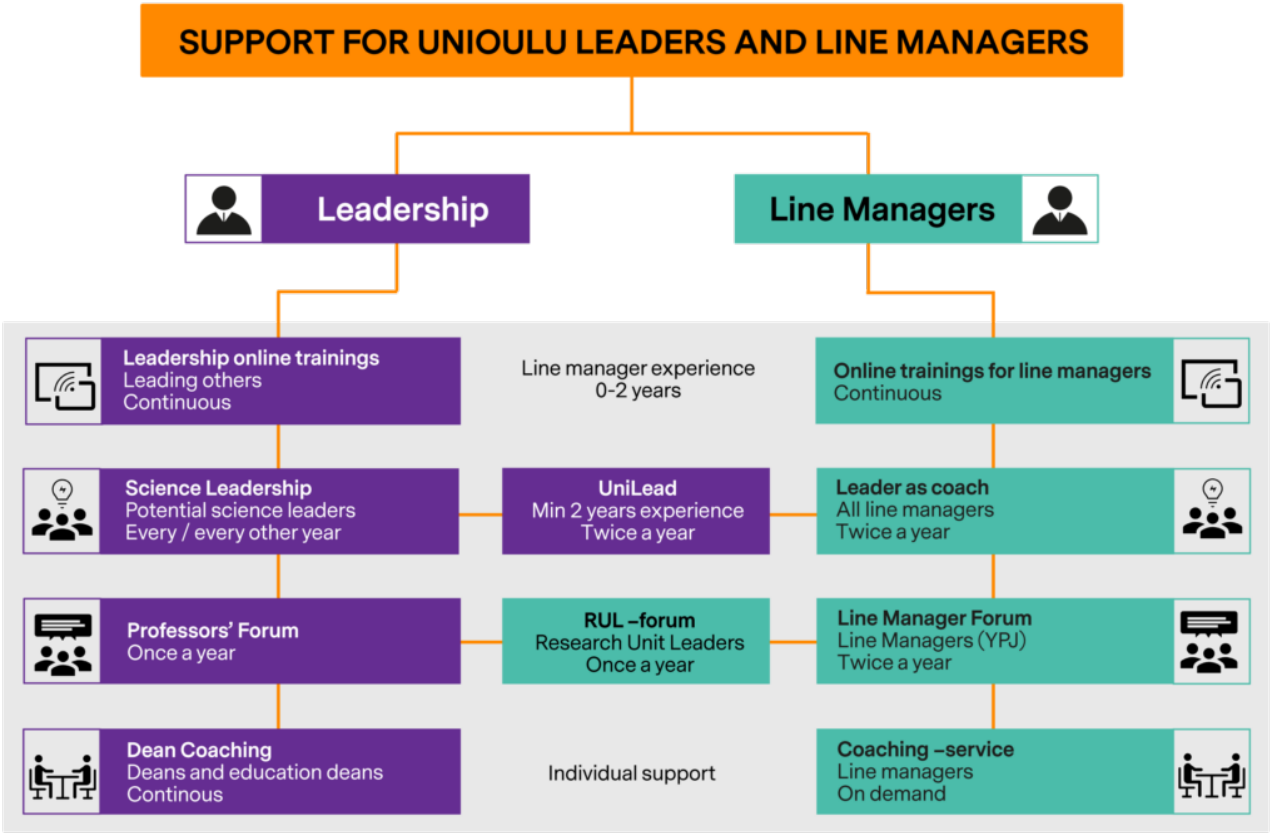


Figure 12. Coaching programmes for line managers and leaders.

The line managers are supported actively in different ways. The aim is to promote the effectiveness and utilisation of diverse forms of support. In addition to the entire staff, the UO supports the well-being of management teams, leaders, and managers in particular, so that the well-being of the entire organisation improves through high-quality leadership. The readiness and know-how of change management has also been increased at the UO.

Equality and non-discrimination

The UO fosters diversity and works resolutely to promote equality. The objective of the work on equality and diversity carried out in the UO is to promote the equal and non-discriminative treatment of employees and students as well as to prevent discrimination and address any flaws. Every member of the UO community is encouraged to promote equality and non-discrimination through their own activities.

In the UO strategy, we are committed to promoting the UN's sustainable development goals through research, education, social interaction, and campus development. The UN's sustainable development goals also include the goals of personnel equality and equity. The measures in the Equality and Diversity Plan also guide our work in promoting an equal and non-discriminative working life. An accessibility plan has been added as an appendix to the Equality and Diversity Plan at the end of 2022. Equality, non-discrimination, and accessibility aspects are taken into account in all activities related to personnel, such as leadership, management, decision-making and work community activities. This is the goal that the UO is working towards, and to achieve this the UO staff awareness of digital accessibility must be further increased. The UO is one of the first HEI's in Finland to hire a DEI expert.

Bullying and harassment are not accepted in the UO community, and work to promote equality and non-discrimination is done determinedly.

Strengths	**Enhancement areas**
Leadership programmes and line manager support.	The aim is to develop the entirety of management feedback and evaluation practices into a quality system.
Skills development opportunities.	Developing the identification of skills development needs and reducing information fragmentation.
Unit-specific competence development and well-being plans are drawn up in operational planning.	Understanding work ability management in the organisation and monitoring its effectiveness.
Operating model for utilising the results of occupational health and well-being surveys.	Workload and its management.
An open and transparent recruitment process and guidelines, as well as HR support staff appointed for recruitment, the new recruitment system supports good practices.	Further development in the new system regarding the transparency of direct recruitment.

3.2 Supporting the competence development and well-being of the staff

- Auditointiryhmän arvio

Long-term development of line management is evident

According to the audit visit, the Community well-being concept is taken seriously all over the university. Staff members are proud to work at the university with their colleagues, students, and external partners. There are a lot of well-being benefits for staff and practices that promote well-being, for example wide occupational health care including several mental health services, an early support model, employee bicycle benefit, sport and culture benefits. In every faculty, there is an HR manager who supports well-being leadership, and in some faculties there are additional well-being committees or promoters who organise well-being workshops, activities, sports events and activities for families and children. One faculty has established a well-being committee and decided to be the happiest faculty in the world.

A staff well-being survey is carried out at the University of Oulu every other year. Based on the results of the survey, university-level measures are incorporated in the action plan for work-ability management. About two thirds of the staff answer these surveys. Comparing the results from 2021 and 2023, the audit team found that the work ability of the staff had decreased. The audit team recommends that the management and the HR unit keep an extra eye on the well-being of staff, also the third of them who did not answer the well-being survey. There are also signs in the well-being survey results from 2021-2023 that contacts between management and staff have diminished during these past two years. The audit team recommends paying attention to this. The audit team also recommends the university to ensure that the guidelines and forms for development discussions on Patio are used across the university. In addition to the yearly development discussion between members of staff and their line managers, there could be more contact between management and staff in connection with the updated strategy’s goals.

According to the interviews and teacher workshops, line management work at the university has developed remarkably during the last 20 years, with roles and responsibilities clarified. HR supports line managers and training is offered for them. The audit team also notes that the Oulu Science Leadership programme earns to grow and be spread also nationally and internationally.

According to the self-assessment report and the teacher workshop, a heavy workload is a problem recognised at the university. To recommend a solution to this is far beyond the realm of the audit team, but it should become a theme for national and international discussions with other universities. As a member of the European University Association (EUA) the university can lead the way in this huge well-being issue.

Recruitment and equality procedures are in place

The University of Oulu uses a clear procedure for staff recruitment. The procedure has recently been strengthened with a new recruitment system. The recruitment guidelines are aligned with the EU Commission's Open, transparent, and merit-based recruitment principles (OTM-R). In the recruitment of senior positions and tenure track positions there are always external evaluators involved. The university has an ambition to recruit more international staff. However, 21 % of staff are already international. There is a special guide for international staff on practical issues. According to the audit visit, many of the applicants are internal candidates from the UO. The audit team encourages the university to continue its efforts to attract more national and international talent. One aspect of this is making job descriptions broad enough.

According to the university's website, the university has put in place systematic procedures to address diversity, inclusion, and equality. The university has an Equality and Diversity Committee, which among other things organises morning coffees to discuss these issues. The university has started to work even harder on undesirable power structures. In addition, a Diversity, Equity, and Inclusion (DEI) expert was recruited and began work at the UO in the beginning of 2023. Actions to promote equality and diversity are publicly outlined and highlighted by the university. The university's Equality and diversity plan is based on the National Equality Act and the Non-Discrimination Act. The university specifies that people must be treated equally to support well-being in the community, create a sense of inclusion for staff and students, and take care of the social and physical environment. The Equality and diversity plan includes development actions for a two-year period at a time. According to the audit visit, the UNIC cooperation has considered acting on diversity beyond nationality, language, religion, or sexual orientation.

Competence development needs should be further explored

According to the audit visit, the University of Oulu has plans and systematic processes for the competence development of staff in place. The trainings are available in the OSKU system. The Faculty of Education and Psychology provides pedagogical training for all university staff. There is an overarching pedagogical strategy, a Moodle platform, digital pedagogical training, and tutor training for tutors. Recruited teachers need to have pedagogical training completed within two years and completion of these studies is monitored in annual development discussions. According to the audit visit, the University of Oulu does not require their staff to have pedagogical training in the tenure track process.

According to the self-assessment report and the audit visit, it is up to the individual staff member to decide how actively they participate in the development of competence. Individual development discussions between members of staff and their line managers once a year should not be the only way to ensure the competence development needs either for the staff member or for the university and its activities. The audit team recommends that more attention should also be paid to the staff's internationalisation competences, multicultural competences, and language

awareness. The audit team recommends that the competence development needs of the staff should be more closely examined. For example, competence development should be organised in strategic areas where more staff are interested to participate and where development needs exist.

3.3 Functionality and development of the quality system

- Korkeakoulun itsearviointi

Quality system to support operational development

The UO’s quality management activities are guided by the quality policy. The most important goals of the UO’s quality system are to guarantee effectiveness, efficiency, and smoothness of the core functions in accordance with the UO’s strategy. With the help of the quality system, by describing and measuring the activities, we respond to the development needs of the UO.

The UO’s quality system is based on the PDCA (Plan-Do-Check-Act) cycle (Fig.13), i.e. the principle of continuous development. The PDCA cycle is monitored at the level of each unit and operation. Differences between units and functions lie in how precisely the individual quality system procedures and principles are incorporated into the operations. The PDCA cycle is combined with the planning and development of the operations but putting it into practice at the level of each operation poses challenges, which we strive to tackle.

Data collection, monitoring and analysis are key elements of quality management for the core functions. Based on the UO’s strategy, action plans concerning education, research, innovation activities and their operating conditions have been defined, in which the key concrete development targets of the planning period are presented.

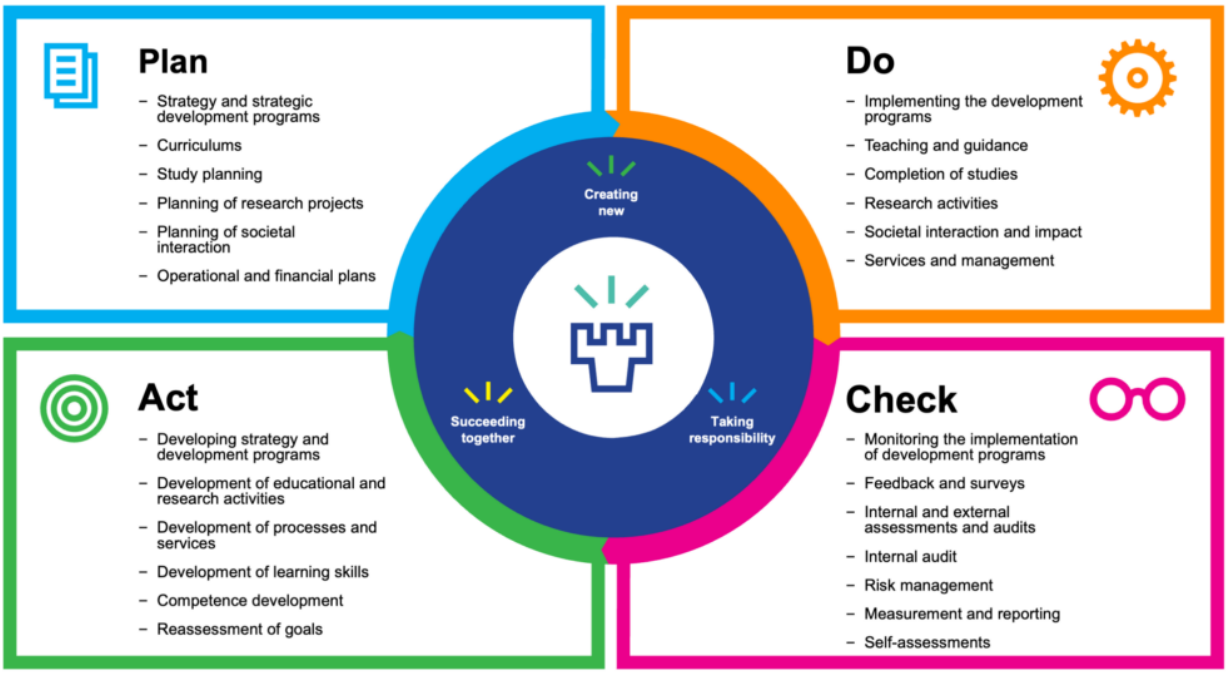


Figure 13. The UO’s quality system.

Participatory quality culture and sharing good practices

The UO's quality culture is strategy-oriented, and all activities are linked to the goals set in the strategy.

The UO's operating culture emphasizes cooperation and enabling broad participation through various means. The members of the UO's various institutions represent their own communities. Staff and student representatives and external stakeholders are widely involved, e.g. on the Board, in the UO Collegium and several working groups. The interaction between the UO and the student union is close, also considering the subject organisations.

In addition to representative institutions and working groups, the participation of the UO community is facilitated through various events, surveys, and workshops. The Tellus collaboration environment also supports the operationalisation of the strategy and the building of an interactive operating culture. The forms of strategy work are participatory; for example, the preparation process of the UO's Arctic Strategy implemented in 2022 was the result of the cooperation of a wide network.

Information about the UO's quality system has been compiled for the staff on the Patio intranet system. Information is also conveyed about the operation and goals of the UO to the personnel via news on current topics. The personnel can comment on the Patio intranet news and hold discussions on the discussion platform found in Patio. Ideaposti serves as an open feedback channel for the UO's personnel, where you can send ideas and feedback to the management to implement the UO's strategy and develop operations.

The students' instructions, news and events are gathered on the Student page in the oulu.fi service, from which the news and event feeds are also published in the Tuudo mobile application. According to a survey about communication for students in 2023, e-mail and Tuudo reached the students the best. The student page will be developed based on the feedback given by the students in the survey. Based on the survey, a need for monthly student newsletters emerged, which we are starting to develop.

As part of the quality culture, good practices are shared in different ways in the community. Faculties and units organise joint meetings of the key members of the teaching staff (e.g. degree programme committees), monthly or weekly unit meetings, teacher meetings and Teams coffee moments. Joint meetings are organised for the Degree Programme Heads a couple of times a year.

At the university level, good practices are shared in Patio. For example, the weekly Digipedavinkit have been developed to make the teacher's work easier.

Development of the quality system

The UO has invested in the development of operational models and resourcing of quality work during the past four years. A quality specialist has been recruited for the UO, a steering group for

quality work has been appointed, a quality network has been put together, and a quality team of the Unit for Strategy and Science Policy (STY) has been established. In addition to this, the UO's organisation has been supplemented with the roles of Development Director and Director of Services, both of whom have a strong role in quality work. Risk management has also been developed at the university level as part of quality work. During 2022, a joint project with KPMG was implemented, which defined university-level risks and their management methods. Thanks to the development measures taken, quality work is now carried out more systematically than before. The next step is to deepen our operations and bring the practical quality work closer to the faculties and units.

The development of the UO's quality work has also been supported by the systematic development of service process descriptions created in the IMS software since 2021. The challenge is to get the personnel to utilise the process descriptions more widely. Informing the faculty and unit levels about IMS is still in progress.

The quality of the core functions is regularly developed through external and internal evaluations, but more systematicity is needed especially for internal evaluations. A 4-year plan for internal evaluations of education has been created, and implementation is currently being planned. Regarding external accreditations, the UO's School of Economics has an international AACSB quality label, and the Production Economics Degree Programme has been awarded ASIIN and EUR-ACE accreditations and quality labels. Cooperation in the European University Alliance at UNIC has also supported quality work, e.g. through UNIC's internal diversity peer review. Research Assessment Exercises (RAE) are carried out regularly, and the previous one was done in 2021.

An Internal Auditor has been recruited for the UO at the end of 2019. Internal audit processes have been created and established in 2020. Follow-up audits have been carried out since 2021, if significant deviations have been detected in the audit target that require immediate corrective measures. Prior to 2019, the corrective measures implemented based on inspections obtained from external consultants have not been followed up accordingly. Based on the findings of the follow-up inspections, the corrective measures related to the inspections have generally been completed.

Strengths	**Enhancement areas**
Strong development ability and efficiency.	Consolidation of quality management practices throughout the organisation.
Intense cooperation with external stakeholders.	The process of internal evaluations of education.
Participatory quality culture.	Establishing the operation of the quality network.

3.3 Functionality and development of the quality system

- Auditointiryhmän arvio

The quality system enhances the core duties of the university

The university has recently updated its quality system, including the quality manual, procedures, and processes as well as its internal audits and risk management. According to the audit visit, there is widespread awareness among management and staff of the need to further enhance the quality system, in particular its implementation. Enhancement is ongoing in several areas.

The audit team found evidence that the quality system improves the performance of core duties of the university. The university's management and administration work intensively to include all staff from core activities and support services, students, and external stakeholders in the overall implementation of the updated quality system and its continuous enhancement.

The quality system is regularly checked and changed when needed. During the audit visit, some staff expressed complaints about the updated quality system and the velocity of its implementation. The audit team recommends that the UO works towards enhancing and synchronising the use of the quality system at the university level and across faculties.

International staff and students could be more involved in quality work

The quality culture of the UO is participatory and open, especially at the top management level. Staff, students, and external stakeholders participate in the enhancement of activities at the university. However, student representatives who were involved in shaping the new structures of the quality work expressed that they would like to be engaged even more in enhancing activities in the Quality work steering group. The audit team encourages the idea to ensure the engagement of students in the enhancement of the university's activities. In addition, the audit team recommends involving more international staff and students in the enhancement activities to bring in diversity and new perspectives.

It was evident to the audit team that the university could collect and analyse data in an even more systematic and ongoing manner to ensure the strategic enhancement of its activities. The university's quality system can provide a lot of information from within the university. However, the use of that information for the management of the university could be strengthened. Thorough and well-analysed information from national and international sources, debates and decisions should be considered when steering the direction of the university. Strategic and quality plans should be based on internal results from the quality system as well as collection and analysis of signals from the surrounding world. The audit team recommends that the university strengthens the identification and use of relevant external information to support the proactive enhancement of its activities.

3.4 The HEI’s examples of successful enhancement activities

- Korkeakoulun itsearviointi

Promotion of multi- and interdisciplinarity

The decisive promotion of multi- and interdisciplinarity has supported new research initiatives and increased funding as well as enhanced dialogue between researchers from different fields and added to the scientific competence of researchers. Strategic alignment of for example the profiling of the university and the research of focus institutes have produced excellent multi- and interdisciplinary research themes and projects that have succeeded in both funding calls and top international recruitments. Multidisciplinary events, such as the Brown Bag Lunch seminars and UniOulu Science Day, have brought together researchers across disciplinary borders and facilitated discussions thematically, for example, so that all researchers interested in similar topics have been welcome to join and bring forth their own expertise. This has created new connections and started new research ideas between researchers coming from fields that would not normally come together in their everyday work. The scientific competence of doctoral researchers as well as doctors has been increased on courses, where they have had the opportunity to learn skills and knowledge that multi- and interdisciplinary research and collaboration require. Improved competence supports multi- and interdisciplinary research in the future and improves its quality. The action to promote multi- and interdisciplinarity have also created bridges between different projects and institutes, which supports the collaboration of multidisciplinary actors of our university, thus making the use of resources more efficient.

Strengthening of internationalisation

Talent Boost—an internationalisation programme for Finnish higher education institutions—provides an unprecedented opportunity for the University of Oulu to implement an ambitious action plan in 2021–2024 focusing on the attraction, retention and employment of international talent and their family members. Within the Talent Boost programme, the development of increasingly seamless support services for international students and recruited experts is being explored through paths which allow the consideration of customer experience and bring added value to standard services across the largely process-driven university. The paths begin with attraction and recruitment the lead to application and admission and continue with orientation and onboarding. Integration and guidance are then followed by networking and career services and finally retention and life in Oulu. Importantly, during the latest development work, stakeholders’ perspectives and concerns have been identified and mapped in workshops and through surveys leading to prioritised development initiatives and pilots. In parallel, the concept of the university community has been expanded to also include family members of international staff as well as visiting researchers thus strengthening inclusiveness and the sense

of belonging. Integration and wellbeing have also been bolstered with new types of advisory and guidance services, new community events, new training supporting integration in Finland and in working life, and for instance with the launching of the University of Oulu Spouse Network. The composition of the Talent Boost team, including 26 experts from five services units (Unit for Strategy and Science Policy, Academic Affairs, HR, Extension School, and Communications, Marketing and Public Affairs) is a key to the successful creation and upscaling of services for an increasingly international community.

Leadership development

The University of Oulu Science Leadership programme was developed based on the idea that post doc researchers could benefit from leadership training in the career phase, when they are developing from being individual researchers to becoming young group leaders. The pilot programme was implemented in 2018. After the pilot, programmes have been implemented annually and by now altogether more than 70 post doc researchers have participated in the programme. The most recent programme started in April 2023. The year-long programme is unique in the context of higher education in Finland and includes three main pillars 1) science leadership, 2) impactful research communication and 3) interdisciplinary collaboration. The main goal of the programme is to strengthen the participants' knowledge, abilities, and skills in all these pillars, which are considered important areas for academic leaders. The programme prepares the participants for their future role as science leaders: the participants are better prepared to take over the role and seek support to succeed in this role later as well. In the long term, the programme will improve the quality of leadership and the leadership culture at the University of Oulu, as more researchers will find the leadership role attractive and are better equipped to succeed in this role.

UNIC—European University of Post-Industrial Cities

The UO is a member of European University of Post-Industrial Cities (UNIC) network that started its operations in October 2020. UNIC is one of the main strategic cooperation networks for the University of Oulu. Within the UNIC network the partner universities and cities are aiming towards +10 years of strong collaboration and development in education, research, and societal impact. During first three years of UNIC the universities have started to build two joint degree programmes, a MOOC course, arranged spring and summer schools, opened over 300 virtual course offering platform, published a handbook on physical and virtual mobility, arranged several teacher training courses and seminars, created a joint research strategy and roadmaps and organised multiple CityLab events where students, researchers, city representatives and other stakeholders collaboratively identify the challenges of the post-industrial cities and co-create solutions to these challenges. UNIC has brought new ways of achieving mobility and networking opportunities not only to students but to teachers, researchers, and staff. In addition to the education collaboration and CityLab activities superdiversity and the enhancement of diversity are core concepts and goals within UNIC. The partners have conducted a state-of-the-art report on superdiversity in higher education and a peer review on superdiversity practices in the partner

universities. After the first peer review conducted in spring 2021 the UO learnt about the strengths and development areas in diversity practices, and it was noted that all the partner universities have diversity officers or specialists. The first diversity, equity and inclusion specialist started working at the UO at the beginning of the year 2023. The role is to develop the university's operations so that students and staff can feel equal and be a part of the community. UNIC collaboration accelerates the strategic development of the UO and can be seen as one of the flagships and launchpad to pilot new ideas and to reach out the development goals of the university.

University Innovation Centre, UIC

The UIC was established at the beginning of 2019 to strengthen the processes and organisational structure for the commercialisation of research and the interaction of external stakeholders. The center now has ten experts working in the areas of IPR, business development and company collaboration. The UIC is responsible for the coordination of innovation activities (from inventions to patents, licensing, and startups) and business collaboration (incl. Business Finland funding) of the university. The UIC has improved in many KPIs: the number of inventions and patent application has grown, and both company and Business Finland funding has grown. Innovation activities and company collaboration are managed systematically, and results and activities are reported regularly to the Vice Rector of Cooperation and to the Cooperation Management Group.

4 HEI as a learning organisation

- Auditointiryhmän arvio

Evaluation area IV assesses an area selected by the HEI where it wishes to receive feedback for the enhancement of its activities.

The audit team identified the following as key strengths and recommendations:

Strengths

- The university is committed to robust internationalisation efforts with many initiatives to enhance the international experience of students.
- The UO is a member of the UNIC, which provides excellent internationalisation opportunities for students.
- The university has a holistic approach to internationalisation and offers family-friendly support to international students and staff.

Recommendations

- The university should promote consistent opportunities in internationalisation, by strengthening the visibility of international mobility windows and exchanges as well as enhancing the internationalisation of curricula.
- The university should work to ensure that students and staff have the skills and confidence necessary to thrive in a globalised setting.
- The university and the different programmes should optimise the impact of international mobility, by integrating the insight of students with international experience into classroom instruction.

4.1 An evaluation area selected by the HEI

- Korkeakoulun itsearviointi

The internationalisation of degree programme curricula and student experience

Internationalisation is strategically important for the UO. Our approach to internationalisation enhances the quality and impact of our education and R&I. The recently updated International Action Plan aims to systematically implement and promote internationalisation within the university culture, structures, and services.

In relation to the internationalisation of degree programmes and student experience, the university commits to the following ambitions:

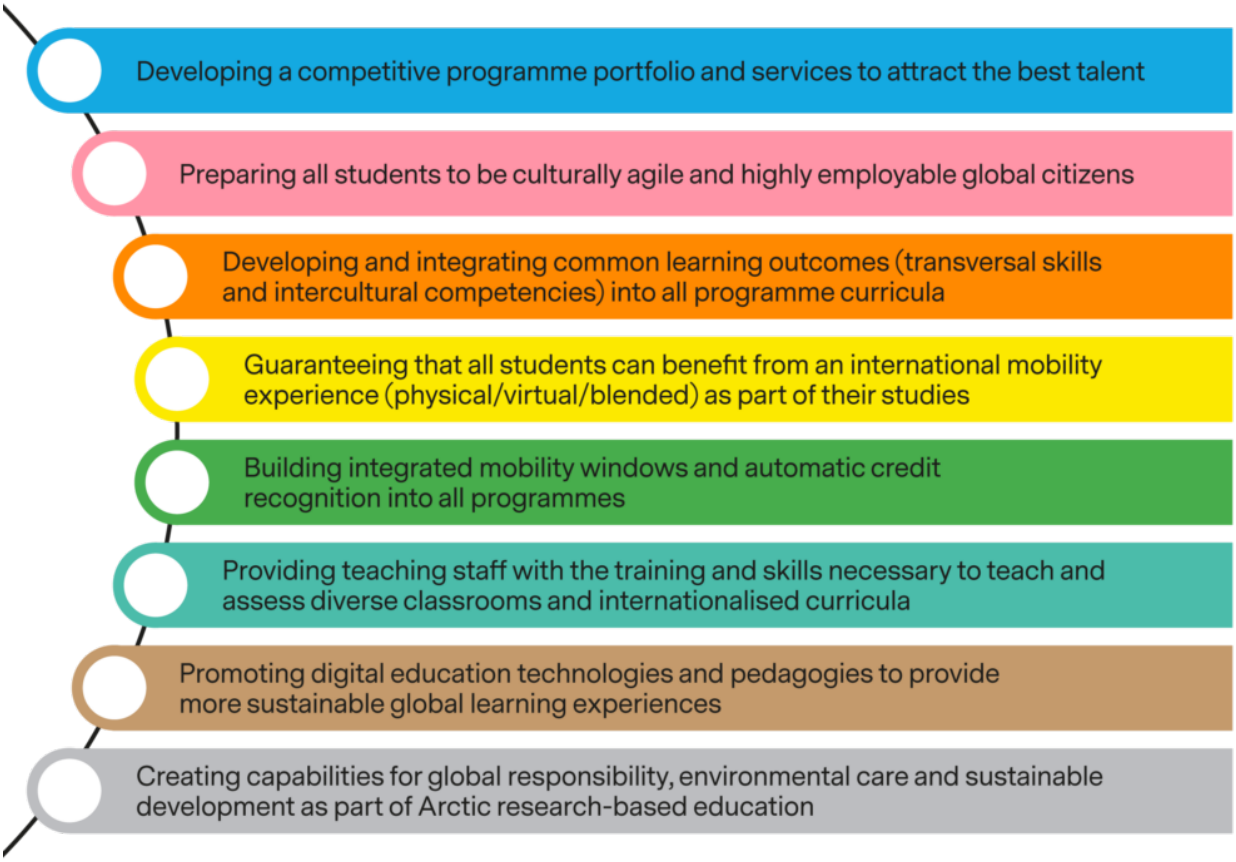


Figure 14. The UO strategic ambitions for internationalisation of degree programmes and student experience.

These align with national policy, the University Strategy, our new strategic education development programme (Noste) and the Arctic Strategy.

The UO has almost 14,000 students, of which approximately 10% are international. The Finnish

national target, and our internal target is to triple the number of international students by 2030.

2021	Bachelor	Masters	Doctoral	Licentiate	Total
Home (Finnish) students	7047	5139	1395	9	**13590**
International students	417	432	420	9	**1278**
Exchange students					**447**

Figure 15. Total number of home and international students at the UO.

Our current portfolio includes a total of 100 programmes, of which 21 master's (2 yrs.) and three combined bachelor's and master's programmes (3 + 2 yr) are taught in English. Forty-one study options are fully taught in English and most home and international students are taught together.

In the context of curriculum planning, internationalisation of degree programmes and student experience happens via international mobility (studying, traineeship, and work), language learning, and a variety of internationalisation activities at home (I@H) and via the internationalisation of curriculum (IoC) practices.

International mobility

The UO is part of the European University UNIC, which has ambitious goals to increase mobility, inclusion and to create a common virtual campus. UNIC's shared aim is to provide a mobility experience (physical, virtual or blended) to 50% of students and 25% of staff.

UNIC's new virtual mobility pilots have been successful. The first-ever Blended Intensive Programme was organised with the Oulu Business School and 91 students from UNIC partners have enrolled on the UO virtual courses since the introduction of a common virtual course tray.

The demand for outbound student mobility at the UO has been satisfactory but has still not returned to pre-Covid levels. Incoming exchange is robust, and a better balance is desired.

Student exchange		
Year	Incoming	Outgoing
2018	834	381
2019	798	351
2020	402	132
2021	447	153
2022*	603	249

*Numbers for 2022 are not official.

Figure 16. The number of incoming and outgoing exchange students per year (2018-2022).

Mobility opportunities are promoted via the study abroad fair, drop-in sessions, faculty-specific information sessions and mobility ambassadors.

The university supports three types of internships abroad: Erasmus+ traineeships, embassy internships, and internally funded internships outside Europe. Grants are directed to bachelor and master students, but as of 2023 doctoral students may also apply.

Language and communication

Language and communication studies play an important role in the internationalisation of degree programmes and cultural competency development.

The University offers studies in 8 languages: Finnish, Swedish, English, German, French, Russian, Ukrainian, and Japanese. In some faculties, students can collect completed language and communication studies into the Languages, Culture and Communication Studies package. At the Oulu Business School, students can complete a 25-credit International Business Communication Skills minor.

An increasing number of English taught programmes include compulsory Finnish as a second language studies. The UO has invested in a Finnish language offering and offers a study path starting from A1 up to C2. In addition, students can gain language and multilingual mediation skills by participating in credit-bearing Café Lingua events or Tandem language learning. The University's new language policy supports the development of a multicultural and multilingual campus community.

Internationalisation at home and of curriculum

The UO community represents more than 100 nationalities and creates excellent conditions for the development of multicultural skills.

Current I@H and IoC practices include visiting lectures, multicultural campus events, virtual exchanges, and joint projects with partners. However, the level of interest, capacity and participation varies hugely between faculties and programmes.

All students have an opportunity to tutor new international degree seeking and exchange students as part of a long-running I@H practice: the Kummi student activity. This provides an excellent opportunity to practice intercultural communication skills and connect with students from various backgrounds.

A similar programme is offered to the local community. The Kummi Family programme connects our international degree seeking students with local families. It enriches students' experience and facilitates better integration into Finnish society.

Student feedback on internationalisation

The national Bachelor's Graduate Survey contains one question that specifically addresses international competency development. In 2022, the UO scored slightly below the national average.

In preparation for this audit, the Students' Union collected student views on internationalisation. One challenge is two-way integration: whilst there are opportunities for interaction between home and international students, participation is low due to highly separated communities. This may be partly due to lack of information, e.g. student guilds are unable to invite incoming exchange students to events with no access to contact details (GDPR). Faculties that run both English and Finnish taught programmes should make more effort to bring students together and integrate courses more effectively. These everyday encounters would provide the best foundation for improved integration. The key message is that students would like to see stronger integration of internationalisation into current teaching practices.

We regularly collect feedback from international students (via the International Student Barometer) and enhance services to facilitate smooth integration into Finnish society and working life. International students are actively encouraged to participate in university decision making and contribute to the enhancement of internationalisation. In the 2021 ISB survey 86% felt that their study experience offered value for money, which is 11% higher than the world average, and 1 in 4 the UO students were very satisfied with their learning experience compared to 1 in 5 at European level.

In 2022, the UO started a project to develop a transparent and joined up approach to support all stages of the international student journey and to ensure a high-quality user experience for everyone involved.

Key challenges

The key challenges in the internationalisation of degree programmes and student experience are detailed below. These focus on issues around degree programme structures, the

internationalisation offering, and the need for a cultural change and systematic approach.

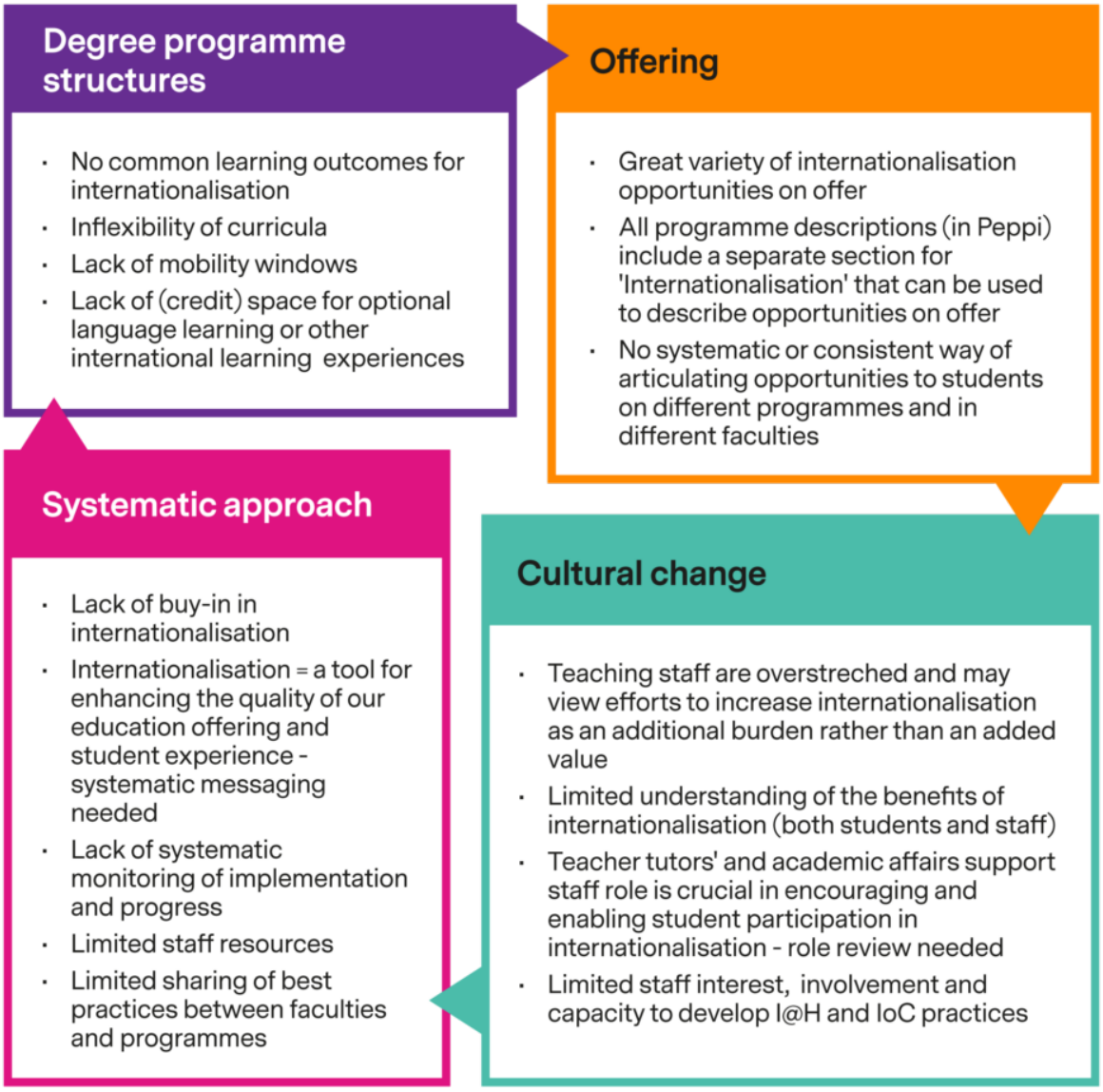


Figure 17. Key challenges in the internationalisation of degree programmes and student experience.

Strengths	**Enhancement areas**
A diverse & intercultural student and staff population.	Improved two-way integration and campus community building, and using classroom diversity as an asset in T&L.
A variety of internationalisation opportunities and guidance available. Some excellent practices already exist.	Low number of outgoing mobile students. Systematic articulation of offering and better awareness on the benefits of internationalisation to student outcomes & employability.
Inclusion of internationalisation is facilitated in the curriculum planning process.	Systematic integration of internationalisation into programme structures and current teaching and tutoring practices.
UNIC = an excellent platform for piloting new collaborative T&L and mobility models.	Capacity development and training in IoC and I@H practices.

The university wide Internationalisation Action Plan has recently been updated and linked to wider university strategic ambitions and development programmes.	Institutional role and responsibility mapping on different aspects of internationalisation. Systematic implementation, monitoring of progress and impact, and sharing of good practice in internationalisation.

4.1 Internationalisation of degree programme curricula and the student experience

- Auditointiryhmän arvio

The University of Oulu has a holistic approach to internationalisation

The University of Oulu has adopted a holistic approach to internationalisation, encompassing both outgoing and incoming mobility, as describehttps://auditoinnit.karvi.fi/luvut/4-hei-as-a-learning-organisation-12/4-1-an-evaluatio...ted-by-the-hei-2/d in its Internationalisation Policy. The University of Oulu impressed the audit team with its well-integrated approach to internationalisation during the audit visit. For the increased internationalisation of degrees and student experience, a comprehensive International Action Plan has been adopted by the university. To lead its efforts in internationalisation, the university has hired an internationalisation manager. The university has however identified the systematic implementation, monitoring of progress, and impact and sharing good practice in internationalisation as an area for enhancement. The audit team recommends the university to build indicators for following up on the progress towards the goals stated in the International Action Plan.

The university's proactive approach to fostering international exposure and collaboration is seen in the ongoing incorporation of mobility windows into degree programmes. According to the audit visit, the university’s policy is that all degree programmes should have room for exchange or international internships. This flexible approach acknowledges the changing nature of learning and the university's commitment to giving students a globalised educational experience. However, students pointed out during the audit visit that in some degree programmes there was no chance or mobility window for international exchange. Systematic integration of internationalisation in programme structures was also recognised in the self-assessment report as an enhancement area. The audit team recommends the university to continue working towards ensuring that all students can benefit from international mobility.

Furthermore, the audit team found at UO a variety of activities regarding internationalisation at home (I@H) and internationalisation of curriculum (IoC). Initiatives include virtual courses, intensive language learning opportunities, and joint programmes with other institutions, enhancing internationalisation without extensive travel. One such programme is the master’s degree Programme in Sustainable Mining by four universities in different countries. The project is funded by the European Union’s Erasmus+ Mundus programme.

The visibility of internationalisation opportunities should be improved

While the university's internationalisation efforts have been commendable, gaps in the level of internationalisation are found between the different programmes and faculties. The university

should promote the sharing of internationalisation best practices between different faculties and programmes to promote a more unified approach. The audit team recommends the university to provide a platform for faculties to share good practices in internationalisation, to help identify and adopt successful internationalisation practices.

The audit team also recommends that the university strengthens the opportunities of Finnish staff to obtain more international experience and intercultural competence. This could happen through increased interaction with international students and international staff, or through mechanisms like staff mobility.

Discussions with students highlighted the diverse internationalisation initiatives at the University of Oulu. However, there is room for improvement in the marketing and communication of these efforts and opportunities. The audit team recommends the university to increase the visibility of international exchange programmes and scholarships, especially for undergraduate students, through targeted campaigns, emails, and robust social media engagement. The university could thus ensure more transparent, inclusive, and effective internationalisation throughout the university.

Making use of international competences acquired abroad

During the audit visit, the audit team was presented with evidence of the transforming effect of international experiences by the UO students. Acquiring global awareness, attitude, language, and cross-cultural skills is especially important for a global outlook and career. The University of Oulu has the chance to maximise the impact of these abilities when students return from abroad. Students saw international exchange as so beneficial to learning new skills that they suggested exchanges should be compulsory for all students.

According to the audit visit, feedback is collected from exchange students who have returned to Oulu, but it was unclear how and where this feedback is used. Implementing a system to smoothly incorporate global experiences acquired by outgoing students into all facets of academic life would be a strategic improvement. This might involve developing cross-cultural understanding, bringing insights into research initiatives, and integrating global experiences into classroom instruction. The university could promote inclusivity and cross-cultural collaboration by advising teachers to intentionally integrate and mix international students, students with international experience and domestic students in the same study groups. The university not only acknowledges the importance of outward mobility but also enhances the overall learning environment for all students by more deliberately integrating these experiences into the curricula, fostering a more internationally aware and connected academic community.

Creating new culture with internationalisation

The University of Oulu continues to seek a substantial rise in the number of international students enrolled, with the goal of tripling the existing 10 % by 2030. The UO has significant numbers of international students in multidisciplinary programmes, and it offers English courses almost in all

educational areas. The apparent success in drawing in international students and staff for a wide range of programmes highlights a deliberate and comprehensive approach to global education.

According to the audit visit, offering family-friendly support to international students and staff is a significant feature of the university's approach, demonstrating a comprehensive dedication to diversity. By prioritising a family-friendly environment, the university extends its reach outside the classroom to guarantee the welfare of its global community members.

The University of Oulu could benefit from considering ways to improve community building and labour market integration for its international staff and students to maintain its appeal and draw in top talent. Enhancing activities like mentoring programmes, cross-cultural exchanges, and networking events could build an even more welcoming and encouraging campus community and further support international students and staff to find employment and build connections in the region. For instance, integration could be strengthened through tailor-made Finnish language courses.

The concept of internationalisation includes also attracting and retaining international talent in the city and region. Establishing an atmosphere of reciprocal education and equitable research opportunities is crucial to develop self-assurance and the capacity for international participation. The audit team recommends the university to strengthen the networks of international members of the university with local businesses and firms to increase long-term employment opportunities. In addition, the audit team suggests that the university could better utilise the networks that international staff and students bring to Oulu.

The audit team considers the university ready for the next step in internationalisation: to regard international students and staff as integrated into the university community. According to the audit visit, the university is focused on how to integrate international staff and students into the existing university community. A more productive view could be that those in the university community gain and learn from the international staff and students and build a joint, hybrid culture that is neither wholly Finnish nor wholly international. International staff and students who come to the university should be welcomed as individuals who influence the university and who, through becoming involved in the community also change the university. The expectations of Finnish students regarding internationalisation should also not be forgotten.

The potential of the University of Oulu in the UNIC alliance

The audit team was convinced that the University of Oulu is a globally recognised and valued partner. This is especially visible by the university's aims to maximise the potential of the European University alliance UNIC. Recently, the UNIC alliance has secured follow-up funding from the European Commission for a four-year period. This funding will sustain the collaboration among its ten partner universities, including the University of Oulu. The new funding period aims to enhance cooperation between the partner universities' cities and advance educational and research collaboration.

The audit team was presented with the various opportunities that the UNIC alliance offers, such as increased mobility in higher education, a joint master's programme in urban planning, and funding for research cooperation projects. The alliance's long-term goal is to offer diverse opportunities to its members across all partner universities, emphasising increased mobility for students, researchers, and teaching staff. The University of Oulu can make use of its strategic importance in the alliance by shaping the thematic lines of the UNIC alliance, including health, sustainability, digitalisation, and entrepreneurship.

5 Benchlearning

- Korkeakoulun itsearviointi

Enhancing quality culture in doctoral schools (University of Oulu and Erasmus University Rotterdam)

Benchlearning partner and goals

The target for benchlearning was decided in autumn 2021. At the time, the Graduate School was in the middle of structural change and as the doctoral training was one of the strategic development areas at the University of Oulu, it was likely that UniOGS would benefit from the benchlearning process. The partner was chosen to be Erasmus University Rotterdam (EUR), from the European strategic alliance UNIC of the UO. The idea was to learn from the respected university but also to foster a partnership. Where the UO has one university level graduate school, EUR has different graduate schools (Law, Erim for economics and the business school ESGH, as well as social sciences and humanities. The theme of enhancing the qualitative culture of doctoral training was central to EUR, as they were about to renew their PhD policies.

The goal of the benchlearning was to enhance the quality culture in the doctoral schools. The main objective was specified in five sub-themes, namely 1) principles and policy support, 2) support for doctoral researchers and supervisors, 3) research support, 4) educational support, and 5) support for career development, which were used as guiding themes for discussion in online meetings. The idea was to learn from the good practices of quality culture in the respective doctoral schools and to find out what was currently perceived as important actions and services supporting doctoral researchers.

Implementation of benchlearning

The benchlearning process started in February 2022. The plan was to have several online meetings, and mutual visits to Rotterdam and Oulu. Following the plans, five online meetings were conducted in 2022. What was noteworthy already from the beginning, was that in addition to the graduate school people, also representatives of HR and STY were committed to this process. For EUR this was natural as they do not have a centralised graduate school, however, for the UO this process was already valuable, as it tightened the cooperation of different units in the context of doctoral education.

While our discussions were not limited to pre-planned topics, the conversation focused on subjects that were of mutual interest. On-site meeting visits, included a wide range of people related to doctoral education from the faculties, support staff and doctoral researchers. Our visits to both Rotterdam and Oulu were highly successful, as they provided us with the opportunity to

meet with colleagues, go on campus tours, and engage in discussions about the current state and future direction of doctoral training and learn from each other's practices.

The visit to Rotterdam took place in November 2022, where meetings with the graduate school were included discussions on drivers and challenges concerning evolving doctoral education. However, particularly interesting was the PhD-policy project start-up session arranged by the HR of EUR in Rotterdam. We had the possibility to share thoughts on the following topics which were important for both partners: the services and support for PhDs in the areas of (1) career support, (2) onboarding, (3) wellbeing, (4) supervision, and (5) information providence and governance. The workshop was conducted successfully, as it provided a structured way to exchange practices and knowledge from different graduate schools but also innovate new practices together.

In March 2023 a delegation from EUR visited the University of Oulu. Several meetings were arranged for the EUR representatives to meet the representatives of the focus institute, HR, STY, Career Center, and people from academia to discuss themes related to joint programmes, RAE, Finnish education system and quality, social safety, HR policies, well-being and career support.

Evaluation and results of benchlearning

The process was considered useful, not least because following the partner university's example, we immediately took along our HR to the benchlearning process, which had immediate effects on the practices of the UO (e.g. targeted welfare survey including doctoral researchers), but also changed the way the different doctoral researcher segments and the services are identified.

Both parties expressed satisfaction with the benchlearning process, which enabled us to compare our doctoral training environments and practices. There is a possibility to build on our shared insights and experiences and work towards creating even more effective and high-quality environments and structures for doctoral training. While the benchlearning discussions were initially focused on rather broad themes, we found that the process allowed us to explore a range of related topics in greater depth. One of the most rewarding aspects of the process was the participation of both academics and support services, who were all working towards the common goal of enhancing the quality of doctoral training. We believe that this collaborative approach is essential for ensuring the sustainability of doctoral training programmes in the future.

In conclusion, we believe that this has been a fruitful process for both parties, it has been transparent and it has fostered collaboration. It seems likely that cooperation will continue also within other units in the future. We would not have achieved these positive results without being able to rely on the valuable staff of both universities who participated in the process. We have a valid reason to feel satisfied with the accomplished benchlearning process.

Good practices of the UO	**Good practices of the EUR**
Follow up groups	Close relationship with HR when developing policies for doctoral training
One graduate school for all fields: common processes for all doctoral researchers	Policies/practices are well documented

Admission process same for all, with committee evaluation and student register system	Onboarding programme for new employees/ PhD students Focus on career development for those who are close to graduation

Inspired by the EUR, the UO has already started to further develop the following:

- Planning the different doctoral paths (e.g. a doctoral path for doctoral researchers working elsewhere than academia, including a structured programme, tailored for their needs and work life challenges)
- Onboarding activities
- Study requirements and the number of obligatory studies; doctoral degree programmes have been requested to evaluate the current requirements vs work life relevance and industry needs
- Well-being and social safety of doctoral researchers, ESR project application submitted to further develop these aspects. At EUR, the culture seems to guide doctoral researchers to choose studies that are important to them.
- HR cooperation with the graduate school
  - HR considers doctoral researchers in its operations
  - UniOGS involved in orientation for new employees

Audit team's comments

The University of Oulu’s partner in the benchlearning project 2022-23 was Erasmus University of Rotterdam (EUR). The process started in February 2022 and consisted of five online meetings and mutual on-site visits to Rotterdam and Oulu. The focus was to enhance the quality culture of doctoral education in both universities. In Oulu, the Graduate School was going through of structural change. The goal of the University of Oulu was to learn from the Erasmus University of Rotterdam and to create a partnership for the future. The HR unit at the UO was included in the benchlearning process.

The first results from the benchlearning are described in the self-assessment report. The delegates from the UO were impressed and inspired by the fact that EUR's partners included both people from the graduate schools, support staff and doctoral researchers. This led to changes in the composition of relevant structures at the UO. *One* concrete step taken at the UO was that doctoral researchers were included as a new group in the staff well-being survey of 2023. Another change that took place was the way that the different segments of doctoral researchers and their needs for services were identified. At the same time, there are common processes for doctoral researchers in place. Follow-up groups for doctoral education have also been created.

Overall, the benchlearning project seems to have been successful in several ways. It seems to the audit team that it was especially important to being more important and renewing discussions with a broader spectrum of relevant staff. The audit team wishes all the best for the partnership between UO and EUR and their continuous enhancement work.

Appendix 1. Evaluation criteria for the level good

1 Evaluation area I: HEI creates competence

1.1 The planning of education

The degree programmes and other provision are planned with clearly defined learning outcomes. The planning process ensures that the educational provision is in line with the HEI's strategy and relevant for working life. Aspects concerning internationalisation and continuous learning needs are ensured in the planning process. In terms of degrees, it is ensured that they correspond with the National Framework for Qualifications and Other Competence Modules. The education is planned so that the teaching methods, assessment of learning, and learning environments support the achievement of the learning outcomes. Students and external stakeholders participate in the planning of education in a purposeful manner. Research, development, innovation and artistic activities are integrated in the education in a way that links research-based information to the education in a relevant way. The students' workload is defined according to the principles of the ECTS (European Credit Transfer and Accumulation System). The HEI has systematic procedures for approving the plans for degree programmes or other study entities.

1.2 The implementation of education

The HEI applies the provisions and regulations concerning student admission, the recognition of prior learning, progress of studies and completion of degrees consistently and transparently. The education is implemented in a manner that supports target-oriented learning and the active role of students in their own learning process. Students receive feedback on their learning which helps them achieve the learning outcomes. The procedures connected with the implementation of education support the efficient progress and completion of studies as well as the integration of students with professional life. The well-being and equality of students are promoted throughout the student's study path. The HEI provides adequate resources, counselling and other services to support the progress of studies and learning.

1.3 The evaluation and enhancement of education

The HEI systematically collects and uses feedback data on the needs of students, the implementation of the education and the progress of studies in order to enhance the education. Feedback-on-feedback, i.e., information on changes introduced based on student feedback is provided to students in an appropriate manner. The HEI monitors and evaluates the degree programmes and other provision to ensure that they are up to date with regard to the latest research findings as well as the changing needs of the society and working life. Opportunities for continuous learning are ensured in the educational provision. In the degree programmes and other provision, how well the intended learning outcomes are achieved is analysed. Feedback and

evaluation data is used systematically in the enhancement of education. The needs of staff and students are considered in the development of support services.

1.4 The HEI’s examples of successful enhancement activities

The HEI is able to present examples of successful enhancement activities.

2 Evaluation area II: HEI promotes impact and renewal

2.1 Managing societal engagement and impact

The HEI enhances its societal engagement and impact, and this is also supported by its management system. The HEI has defined goals for its societal engagement and ways in which it attempts to reach those goals. Information produced by the HEI’s analysis of its operational environment is used to set the direction for its activities. Appropriate procedures help to ensure that societal engagement supports the implementation of the HEI’s overall strategy.

2.2 Research, development and innovation activities as well as artistic activities with impact

The HEI’s research, development and innovation activities as well as artistic activities contribute to reforming society. Targets have been set for the impact of the HEI’s research, development, innovation and artistic activities. The HEI collects relevant information regarding the societal impact of research, development, innovation and artistic activities, and the information is used in the enhancement of these activities. The HEI has systematic procedures for ensuring the responsible conduct of research. The HEI enhances open science.

2.3 Promoting renewal through the organisational culture

The organisational culture of the HEI encourages experimental activities with partners and strengthens the conditions for a creative atmosphere. The HEI seeks opportunities to engage with stakeholders in activities which enable renewal and enhancement. The HEI has functioning procedures that support the use of the competences possessed by its staff and students. The HEI has target-oriented cooperation with its alumni and it utilises the alumni in enhancement activities. Collaboration with both national and international networks supports the enhancement of the HEI’s activities. The HEI has well-functioning procedures for managing and updating its stakeholder relations and collaboration networks.

2.4 The HEI’s examples of successful enhancement activities

The HEI is able to present examples of successful enhancement activities.

3 Evaluation area III: HEI enhances quality and well-being

3.1 Using the quality system in strategic management

The principles, objectives and responsibilities of the quality system constitute the HEI's quality policy, which is public. The quality policy forms a common basis for the quality work. The information generated by the quality system is used in the management of the HEI. The system supports the profile of the HEI, the achievement of its objectives related to the core duties and the implementation of its strategy. The HEI ensures that the staff recognise the connection between their own work and the goals of the HEI.

3.2 Supporting the competence development and well-being of the staff

The HEI has functioning procedures to identify development needs concerning staff competence and to support the development of staff competence. The HEI has transparent procedures for staff recruitment. The HEI has systematic procedures to support the well-being, equality and non-discrimination of staff.

3.3 Functionality and development of the quality system

The HEI has a functioning quality system which covers its core duties. The quality system helps the HEI to recognise development needs and to enhance its activities in a goal-oriented manner. There is evidence of the functionality and impact of the quality system on the enhancement of the core duties. The system is developed in a systematic manner.

The quality culture of the HEI is participatory and open. Staff, students and external stakeholders participate in the enhancement of the HEI's activities in a purposeful manner.

3.4 The HEI's examples of successful enhancement activities

The HEI is able to present examples of successful enhancement activities.