KANSALLINEN KOULUTUKSEN ARVIOINTIKESKUS
NATIONELLA CENTRET FÖR UTBILDNINGSUTVÄRDERING
FINNISH EDUCATION EVALUATION CENTRE

AUDIT OF HÄME UNIVERSITY OF APPLIED SCIENCES

Tekijät **Eva Werner, Mia Brzakovic, Henrik Dindas, Kaisa Lähteenmäki-Smith, Marja-Liisa Saarilammi & Karl Holm. Self-assessment of Häme University of Applied Sciences (ed.) Lotta Linko**

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Audit of Häme University of Applied Sciences

Abstract

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Audit of Häme University of Applied Sciences

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Eva Werner, Mia Brakovic, Henrik Dindas, Kaisa Lähteenmäki-Smith, Marja-Liisa Saarilammi, Karl Holm. Lotta Linko (ed.) self-assessment of Häme University of Applied Sciences

The Higher Education Evaluation Committee’s decision

Häme University of Applied Sciences passed the audit on 15 June 2022.

The Quality Label is valid until 15 June 2028.

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

I: HEI creates competence: excellent level

II: HEI promotes impact and renewal: good level

III: HEI enhances quality and well-being: excellent level

HEI as a learning organisation – evaluation area chosen by Häme University of Applied Sciences

IV: Design Factory

Theme and partner for benchlearning

Theme: Design Factory

Partners: The Porto Design Factory and inno.space Design Factory Mannheim

Key strengths and recommendations

Strengths

- HAMK uses various feedback channels to capture input from students, staff and external stakeholders and thus identify areas of further development. This constant improvement of

the quality of education creates a motivating atmosphere for studying.
- HAMK has succeeded in creating an inspiring and innovative organisational culture, which engages both staff and students, and interacts systematically with the local and regional stakeholders.
- HAMK's solid and comprehensive quality management is firmly rooted in the institutional quality culture and fostered by various forms of quality dialogue and quality measures as well as a purposefully developed quality mindset within the entire institution.
- Multi-disciplinarity and the provision of contact points between students and working life prepare students for their future professional life and well translate HAMK's vision of being the most work-place -oriented HEI.

Recommendations

- HAMK should redirect attention to the design and form of assignments with regards to the three different study methods offered, so that courses with comparable objectives and content bear a comparable workload.
- To solidify its societal relevance and impact, further development of systematically monitored and maintained relationships with regional and local actors, focusing on competence and solution-driven collaboration, is to be maintained.
- HAMK should critically reflect and review data production and distribution with a view to make the system more efficient, as well as more effective and analytical data for utilisation for improvement and enhancement activities.
- HAMK should further develop communication on the benefits of Design Factory to students and external stakeholders to gain more visibility and enhance impact.

Tiivistelmä

Julkaisun nimi

Hämeen ammattikorkeakoulun auditointi (Audit of Häme University of Applied Sciences HAMK)

Tekijät

Eva Werner, Mia Brakovic, Henrik Dindas, Kaisa Lähteenmäki-Smith, Marja-Liisa Saarilammi, Karl Holm. Lotta Linko (toim.) Hämeen ammattikorkeakoulun itsearviointi.

Korkeakoulujen arviointijaoston päätös

Hämeen ammattikorkeakoulujen auditointi on hyväksytty 15.6.2022.

Laatuleima on voimassa 15.6.2028 asti.

Auditointiryhmän arvio arviointialueista I-III

I: Osaamista luova korkeakoulu: erinomainen taso

II: Vaikuttava ja uudistava korkeakoulu: hyvä taso

III: Kehittyvä ja hyvinvoiva korkeakoulu: erinomainen taso

Oppiva korkeakoulu – Hämeen ammattikorkeakoulun valitsema arviointialue

Design Factory

Vertaisoppimisen teema ja kumppani

Design Factory

Kumppanit: The Porto Design Factory ja inno.space Design Factory Mannheim

Keskeiset vahvuudet ja kehittämissuositukset

Vahvuudet

- HAMK hyödyntää erilaisia kanavia kerätessään palautetta opiskelijoita, henkilöstöltä ja ulkoisilta sidosryhmiltä ja tunnistaa saamansa palautteen avulla osa-alueet, joissa on vielä

kehitettävää. Koulutuksen laadun jatkuva parantaminen luo motivoivan opiskeluilmapiirin.
- HAMK on onnistunut luomaan innostavan ja innovatiivisen organisaatiokulttuurin, joka edesauttaa henkilöstön ja opiskelijoiden sitoutumista korkeakouluun. Lisäksi korkeakoulu on systemaattisesti vuorovaikutuksessa paikallisten ja alueellisten sidosryhmien kanssa.
- HAMKin vankka ja kattava laadunhallinta on juurtunut vahvasti institutionaaliseen laatukulttuuriin, ja sitä edistetään erilaisten laatua käsittelevien vuoropuheluiden ja toimenpiteiden kautta sekä määrätietoisesti kehitetyn laatuajattelutavan avulla koko korkeakoulussa.
- Monialaisuus sekä opiskelijoiden ja työelämän välisten kontaktipintojen tarjoaminen valmistavat opiskelijoita tulevaan työelämään, mikä vastaa hyvin HAMKin visioon olla työelämälähtöisin korkeakoulu.

Kehittämissuositukset

- HAMKin tulee kiinnittää huomiota opintotehtävien suunnitteluun ja rakenteeseen kolmessa eri opiskelumuodossa, jotta toisiaan vastaavat kurssit olisivat tavoitteiltaan ja sisällöiltään yhtä kuormittavia.
- Yhteiskunnallisen merkityksensä ja vaikuttavuutensa vahvistamiseksi HAMKin tulee edelleen kehittää järjestelmällisesti arvioituja ja ylläpidettyjä suhteitaan alueellisten ja paikallisten toimijoiden kanssa keskittyen osaamisen vahvistamiseen ja ratkaisukeskeiseen yhteistyöhön.
- HAMKin tulee pohtia ja tarkastella kriittisesti tiedon tuottamista ja jakelua järjestelmän tehostamiseksi sekä hyödyntää ja analysoida entistä tehokkaammin tietoja kehittämistoimissaan.
- HAMKin tulee edelleen kehittää Design Factoryn hyötyjä koskevaa viestintää opiskelijoille ja ulkoisille sidosryhmille lisätäkseen näkyvyyttä ja parantaakseen vaikuttavuutta.

Sammandrag

Publikationens namn

Auditering av Hämeen ammattikorkeakoulu (Audit of Häme University of Applied Sciences)

Författare

Eva Werner, Mia Brakovic, Henrik Dindas, Kaisa Lähteenmäki-Smith, Marja-Liisa Saarilammi, Karl Holm. Lotta Linko (red.) Hämeen ammattikorkeakoulus självvärdering.

Beslutet av sektionen för utvärdering av högskolorna

Auditeringen av Hämeen ammattikorkeakoulu godkändes den 15 juni 2022.

Kvalitetsstämpeln är i kraft till och med den 15 juni 2028.

Auditeringsgruppens omdöme för utvärderingsområdena I-III

I: En kompetensskapande högskola: utmärkt nivå

II: En nyskapande högskola med genomslagskraft: god nivå

III: En utvecklingsorienterad och välmående högskola: utmärkt nivå

En lärande högskola, utvärderingsområdet som Hämeen ammattikorkeakoulu valde

Design Factory

Tema och partner för kollegialt lärande

Tema: Design Factory

Partners: The Porto Design Factory och inno.space Design Factory Mannheim

Centrala styrkor och rekommendationer

Styrkor

- HAMK använder olika kanaler för att samla in respons från studerande, personal och externa intressenter och på så sätt identifiera möjligheter till vidareutveckling. Denna

ständiga förbättring av utbildningskvaliteten skapar en motiverande studiemiljö.
- HAMK har lyckats skapa en inspirerande och innovativ organisationskultur, som sammanbinder både personal och studerande i högskolan. Därtill samverkar högskolan systematiskt med lokala och regionala intressenter.
- HAMK:s systematiska och heltäckande kvalitetshantering är fast förankrad i högskolans kvalitetskultur och främjas av olika former av kvalitetsdialog och kvalitetsåtgärder samt ett väl utvecklat kvalitetstänkande vid hela högskolan.
- Branschöverskridande verksamhet och kontaktytor mellan studerande och arbetsliv förbereder studerande inför deras framtida yrkesliv och gör verklighet av HAMK:s vision om att vara den mest arbetslivsinriktade högskolan.

Rekommendationer

- HAMK bör se över uppgifterna när det gäller de tre olika studieformerna, så att kurser som har jämförbara mål och innehåll innebär en jämförbar arbetsbörda.
- För att stärka sin betydelse och sitt genomslag i samhället bör HAMK vidareutveckla systematisk utvärdering och hantering av kontakterna till regionala och lokala aktörer. Samarbetet borde ha fokus på att hitta lösningar till utmaningar och kompetensutveckling.
- HAMK bör kritiskt reflektera över och granska hur information tas fram och sprids inom organisation för att effektivera systemet samt för att i utvecklingsarbetet mer effektivt använda och analysera data.
- HAMK bör vidareutveckla kommunikationen om fördelarna med Design Factory för studerande och externa intressenter för att öka verksamhetens synlighet och förbättra dess genomslag.

The premise and implementation of the audit

The Finnish Education Evaluation Centre (FINEEC) has conducted the audit of the Häme University of Applied Sciences. 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

The implementation of the audit

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

- Professor emerita **Eva Werner**, Austria (chair)
- Student **Mia Brzakovic**, Trinity College Dublin, Ireland
- Professor **Henrik Dindas**, FOM University of Applied Sciences, Germany (vice-chair)
- Leading expert Dr. **Kaisa Lähteenmäki**, MDI Ltd., Finland

Marja-Liisa Saarilammi from the Finnish Education Evaluation Centre acted as project manager of the audit and Karl Holm as back-up project manager. 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 online visit to the institution between 5 and 6 April 2022. The audit team also had access to essential digital materials and systems. The main stages and timetable of the audit were:

Agreement negotiation	31 March 2021
Appointment of the audit team	11 January 2022
Submission of the audit material and self-assessment report	11 January 2022
Information and discussion event at the HEI	14 March 2022
Audit visit	5-6 April 2022
Higher Education Evaluation Committee’s decision on the result	15 June 2022

Publication of the report	16 June 2022
Concluding seminar	20 June 2022
Follow-up on the enhancement work	2025

Evaluation criteria

The 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, stakeholders, or both. The HEI presents compelling examples of successful enhancement activities.

The level *good* for the 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.

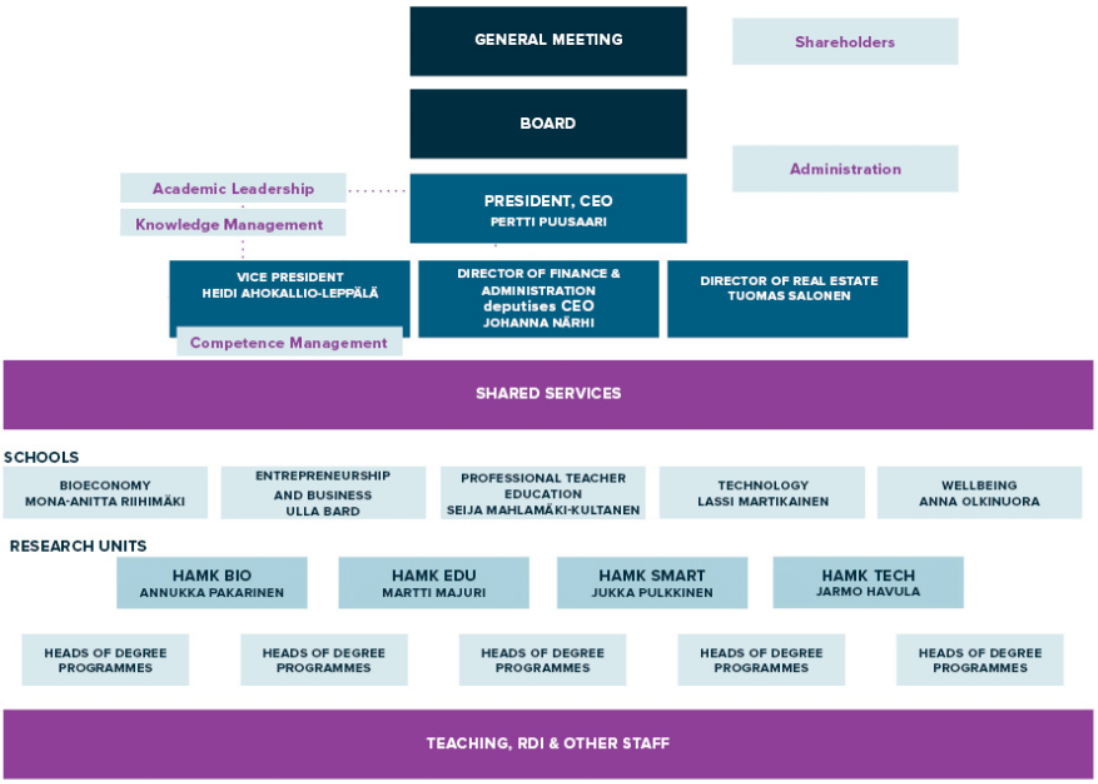
In order for the HEI to pass the audit, the evaluation areas I–III should reach at least the level *good*.

The organisation and strategy of the HEI

HAMK is a multidisciplinary, workplace-orientated HEI offering 29 Bachelor's and 13 Master's degree programmes, professional teacher education and continuing education. Eleven of the degree programmes are taught in English. HAMK's seven campuses are situated centrally in southern Finland.

HAMK's roots stretch back to 1840, when agricultural education began at the Mustiala Campus. The Evo Campus is Finland's oldest school of forestry (1862). At the end of the 19th century, Fredrika Wetterhoff founded in Hämeenlinna a handicrafts school. Horticulture education began in the manor surroundings of the Lepaa Campus in 1910. 1950s and the following decades, the technical, healthcare and commercial institutes in Forssa, Hämeenlinna, Riihimäki and Valkeakoski were established to meet the region's educational needs. The School of Professional Teacher Education is rooted in the earlier tradition of teacher education in Hämeenlinna that started in 1959.

HAMK is the 8th largest university of applied sciences in Finland and the only higher education institution in the Kanta-Häme region. HAMK has a student population of around 8o00, and around 600 employees. The graduate employment rate is one of the highest in Finland as is also the rate of graduate who start their own business. HAMK's research units carry out applied research, support teaching and promote regional impact.



HAMK operates as a limited liability company with six shareholder municipalities. HAMK also has two subsidiary companies Häme Vocational Institute, which offers vocational upper secondary education, and Häme Summer University, which offers open university-level education.

HAMK has an extensive partner network in Finland and abroad. HAMK is also a member of the RUN European University, which includes eight European higher education institutions.

HAMK's aim is to be the most inspiring and the most workplace-oriented higher education institution in Finland. Our vision is: HAMK is an internationally and nationally networked higher education institution that is committed to its partnerships. HAMK graduates are desired experts in the labour market; they are global problem-solvers with a creative and progressive approach. Our applied research generates vitality, sustainability and wellbeing. HAMK effectively utilises the possibilities offered by technology in improving the quality and performance of education and research.

HAMK_strategy2030

1 HEI creates competence

- Auditointiryhmän arvio

The 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 *excellent*.

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

Strengths

- The continuous improvement of teaching through regular pedagogical training and keeping curricula up to date is explicitly anchored in HAMK's vision and serves as a guiding principle of HAMK's strategic policy.
- HAMK offers and uses various feedback channels to capture input from students, teachers, staff and external stakeholders and thus identify areas of further development. This constant improvement of the quality of education creates a very motivating atmosphere for studying.
- HAMK's concrete sequence of the development of qualification goals, the planning of the study programmes as well as the development and renewal processes integrate input from staff and students as well as external stakeholders such as alumni, external partners, and working life staff.

Recommendations

- HAMK should continue to expand the cooperation with its alumni to consistently use their input for planning, designing and evaluating its programmes and other provisions.
- HAMK should manage provision of equal learning and research experiences for all students – domestic and international – in all programmes and formats.
- HAMK should redirect attention to the design and form of assignments with regards to the different study formats, so that courses with comparable objectives and content bear a comparable workload and consider the needs of the specific student groups.

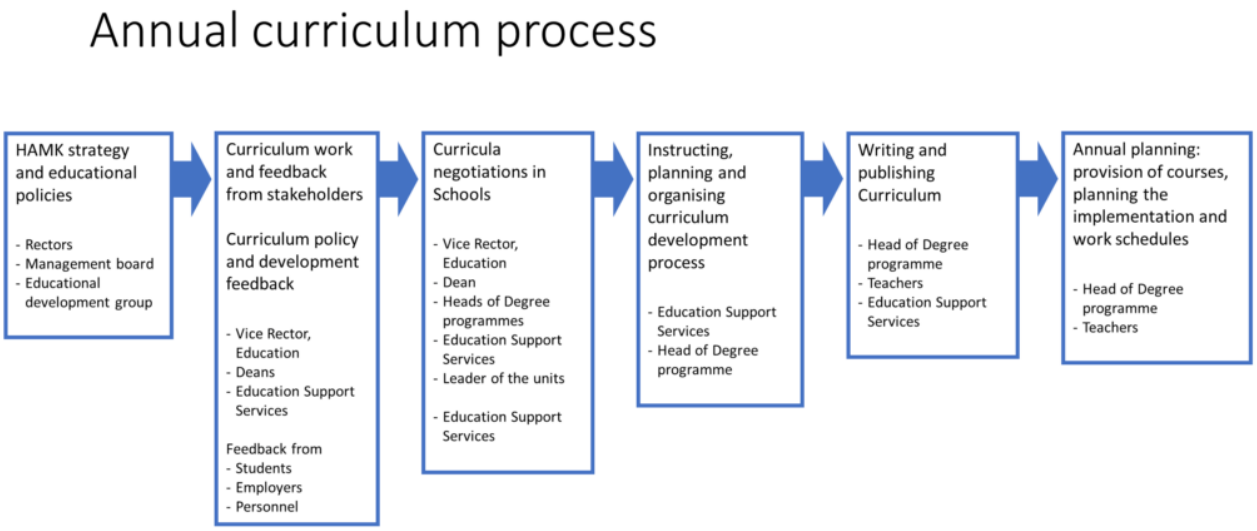
1.1 The planning of education

- Korkeakoulun itsearviointi

The curriculum work implements the strategy and defines the learning objectives

The planning of degree and professional teacher education offer is based on the strategy, the operating licence, the performance agreements between HAMK and MoEC, and profiling of education. The Degree regulations outline the planning of education and provision of courses. The curriculum process ensures that the education is linked to the strategy and renewed, is relevant in the labour market, and the key competences are accumulated. Feedback from students and employers and the previous implementations affect curriculum work.

The process examines the objectives of the degrees, the description of the professional field, the module structure and the competence objectives. National competence requirements and the levels of NQF are considered. The student's workload is dimensioned according to the principles of the ECTS – a challenge during the pandemic. The process is documented in the teaching resource planning system.



Freedom of choices support the student-oriented approach

Students are offered three different study methods. The **8–16 day studies** progress on a regular schedule with guidance and their own study group. The **18-100 part-time studies** serve those

studying alongside work, mainly online, under guidance, as a part of a team and independently. The **24/7 accelerated studies** are suitable those with competences related to the degree and independent study skills. The study methods also serve the needs of continuous learning in a flexible manner. Students have space to make individual study choices from HAMK's offering and cross-curriculum study networks.

The methods 8–16 and 18–100 are already established in completion of entire degrees. In the 18–100 method, the number of online degrees has increased in recent years. The 24/7 method is implemented in most programmes for parts of the degrees. The aim during the predominantly distance learning in the pandemic has been to maintain the models as original.

Continuous dialogue involves stakeholders in the development of education

Employers participate in developing the contents of education via module projects, ensuring that the students' competences and the employers' needs correspond. The module model has already increased the participation of employers in the development of education. At least every three years, representatives of employers audit the content and impact of sample modules.

Students participate through representation in HAMK's management group and development groups, and through diverse feedback procedures. The national Graduand feedback questionnaire and Career monitoring survey provide information for assessing the relevance for labour market and supporting the curriculum development. HAMK recognises the need to create opportunities for students to more active, creative participation and a more customer-oriented role in the development of services.

The structures of continuous learning services are renewed

The needs of continuous learning are considered in connection with the curriculum work: the structures are developed so that parts of modules or entire modules can also be offered as services for non-degree students. The offer of continuous learning education has been organised under the HAMK Up brand offering open higher education studies, specialisation studies and made-to-order education. HAMK also owns Häme Summer University with university studies and continuing education. The offer is built based on the feedback from participants and employers, with RDI processes, and by monitoring and analysing educational policies.

Employment, education and RDI activities meet

The integration of RDI and education renews the contents of education. **Module projects'** topics are based on workplace assignments related to the learning targets, and the project structure supports learning and problem-solving. Working in a module project requires students and teachers to have a research-oriented attitude. **Theses** solve workplace commissions a targeted manner and are conducted as development projects at work or in connection with research unit

projects.

HAMK ’s operating models aim at strengthening the link between the students and the employers, and students’ capabilities for RDI activities and entrepreneurship. The pedagogy and methods of entrepreneurial activities are applied in the **Entrepreneurial University** operating model that will be available to all degree students. HAMK **Design Factory** (DF) is an operational environment enabling programmes to practise multi-disciplinary, experimental innovation activities. The DF addresses problems and challenges presented by companies and other actors. HAMK recognises the importance of supporting workplaces in student project work.

The same **RDI and learning environments** brings RDI, projects and education together. Teachers can participate in RDI projects to develop and renew their competences and teaching. The researchers participate in teaching and supervise thesis work. A significant proportion of those working in HAMK’s research units regularly work in education tasks. Students’ participation in RDI projects is increasing.

Strengths	Enhancement areas
The curriculum process is well established, supporting the planning of education and ensuring strategic perspectives are accounted for.	There are differences in the planning of students’ workload, especially in the Covid pandemic period.
The student has many possibilities to participate in RDI activities. RDI in module projects, in particular, have been established as a good operating model.	The smooth movement of personnel between research units and schools in their work tasks still requires improvements in practical solutions.
Choice offered to the student by the three study methods.	Connections to employers in education are partly dependent on personal connections.
	Alumni participation in planning of education could be developed.
	Cooperation between continuous learning and degree education must be continued.

1.1 The planning of education

- Auditointiryhmän arvio

Student-centred and workplace-oriented approach is an essential feature for HAMK

The institutional strategy (HAMK Strategy 2030) is deeply rooted in HAMK's (Häme University of Applied Sciences) vision to be the most inspiring and the most workplace -oriented higher education institution in Finland, that is committed to its international and national partnerships. The self-evaluation report and the interviews provided evidence that everyone is willing to do their best in realising this vision, and that there is a clear focus on utilising the possibilities offered by technology in improving the quality and performance of education.

The strategy considers the conformity of the qualification goals with the National qualification framework and the compliance with legal requirements, in particular the state-specific structural requirements. The audit team was able to ascertain that the quality assurance measures were developed after thorough preliminary clarifications and in-depth consultations, and they are therefore well accepted and supported among all staff throughout the higher education institution. One of the quality benchmarks concerns the competence orientation of the study programmes, which are based on action-oriented learning objectives and competence-oriented forms of examination.

HAMK is strongly linked to the regional working life field through close project-partnerships and networks and is thus well equipped to educate a qualified workforce for the future, taking future skills into account. An essential aspect is the participation and the conscious bringing together of all status groups, which was confirmed in the interviews as teachers and business life have continuous discussions on this matter. This has led to a consequent inclusion of stakeholders from the business field into the development processes and resulted into steady input and feedback for HAMK.

The strong co-operation in research, teaching and administration aims to expand services by joining forces and involving external partners in the monitoring processes. Education offers at HAMK are planned, designed and evaluated in cooperation with partners from working life, for example through the advisory committees and to some extent alumni feedback. HAMK has an informal approach to alumni for more feedback on achieved competences and their value for working life, especially through feedback from graduates on education or Design Factory projects (in Chapter 4 introduces the Design Factory). Nevertheless, the systematic inclusion of alumni feedback could be improved. In the interviews, it became clear that the cooperation with alumni can still be expanded and their input used more consistently for the planning education.

Development and planning cycles are clearly defined and assure up-to-date learning outcomes

The planning of education and degree programmes is based on clear development and planning cycles and, from the auditors' point of view, guarantees the implementation of qualification goals and intended learning outcomes of degree programmes. It also assures that programmes are studiable and both intended qualification level and qualification profile are achieved. The decision-making processes, competencies and responsibilities in the management system for teaching and learning are largely defined.

HAMK is planning its degree programmes and other provision with clearly defined learning outcomes and in accordance with assessing the relevance for the future labour market. In accordance with the Degree regulations, the regular internal evaluation of the study programmes takes place by means of an annual curriculum planning process. The starting point of this process at HAMK is the annual curriculum process, focusing on the strategy, the operating licence, the performance agreements between HAMK and Ministry of Education, and profiling of education. The systematic curriculum process ensures that the education is linked to the strategy and regularly reviewed and renewed; furthermore, this process ensures that education is relevant for the labour market, and the key competences are accumulated. Through the interviews, it has become clear to the audit group that HAMK's curriculum work was developed systematically with the aim of continuously improving the quality of HAMK's study programmes.

One good example of this is systematic development from previously fragmented curricula to a more integrative curricula with common planning of the modules through teaching staff. Hence, the process for planning is systematic, comprehensive and diligent because it incorporates feedback and data from various perspectives and stakeholders as well as research. The development process and the renewal process integrate input from staff and students as well as external stakeholders, such as alumni, external partners, and working life.

The concrete sequence of the development of qualification goals, as well as development and planning of study programmes based on internal and external requirements are coherent. Development of the study programmes involves both theoretical and professional expertise. If necessary, referral of the study programme concept, or changes to an existing study programme, are implemented. RDI and projects with regional partners, staff and students are also sources for input into education. This ensures that a certain topic is looked at from various points of view. The process is documented in the teaching resource planning system. Based on the reviewed study programmes, the audit group was able to gain a comprehensive picture of this system.

Students' learning experiences inside and outside the campus

HAMK has made substantial efforts to bringing learning environments, RDI projects and education together. The facilities at HAMK (e.g., labs) are a great resource for real world learning experiences. This concept of gaining ideas on what working life will be like in the future is also

evident in summative and formative assessments. The Design Factory especially offers many opportunities to practice experimental activities for students. The progress of students is also well monitored by means of data use, i.e., Peppi, Solemove-system. With an international focus, the RUN-EU alliance will offer more than 60 international courses available for HAMK students.

Nevertheless, the audit team learned from the interviews that students' learning experiences as well as work placement and internship opportunities, are somehow uneven regarding international (incoming) students. The interviews underlined that the opportunities for international students are limited to jobs where minimal to no Finnish language skills are required. It was also mentioned that international students and Finnish students do not often do things together on or off campus, because international students might group within their own nationalities as well as within the international groups. This disconnect has been exacerbated by the Covid-19 pandemic. HAMK should take care of providing equal learning and research experiences for all students – domestic and international – in all programmes, and formats.

In the student workshop it was also reported that not all materials of the international offers are always available in English and up to date; and students feel that some of the teachers should have better language skills for teaching international students. It is recommended to extend and improve the related services and to pay close attention to capture international students' needs. Here, HAMK has already initiated a pilot project focusing on this particular student group through mandatory language courses and special events. The audit team encourages HAMK to continue these efforts and provide an international environment for all students.

Curriculum design and enhancement processes foster flexibility and renewal of study design

As part of the curriculum drafting, the assessment criteria, assessment formats, pedagogical methods and learning environments are aligned to the intended learning outcomes. This includes realistic assessment and review of student workload, application of ECTS, appropriate modularisation, adequate examination organisation, advising and counselling services, consideration of gender equity and the special needs of students. At HAMK, the education is planned in accordance with the European Qualification Framework, as well as with the National Framework for Qualifications and other Competence Modules. Feedback stemming from course evaluations or feedback from the students' representatives, e.g., as to workload, is also considered in the planning of educational programmes. In the interviews, the strong involvement of students in the programme development cycle was confirmed.

Student representatives explicitly expressed HAMK's flexibility in the curriculum development and renewal process and the student's role, because objectives are set by everybody in the HAMK community, including students. The strong voice of students creates a motivating atmosphere for studying at HAMK. In the interviews, the reforming of the curricula in 2020 was very positively acknowledged because it focused on better serving the customers' needs. This flexibility is facilitated through various study methods and formats, ECTS credit transfer and

recognition of prior learning, as well as by institutional support for learning and learning progress.

The concept of the study formats (8-16 day, 18-100 part-time and 24/7 accelerated studies) gives students the opportunity to choose the location of where to study as well as when they want to study, catering to the life-circumstances needs of various groups of students. However, it was noted in the interviews that the workload, especially for assignments, is not always well distributed. Thus, HAMK should redirect attention to the design and form of assignments, comparing the three different study formats and using student feedback, so that courses with comparable objectives and content ensure a balanced workload. In the interviews with the students, it became clear that especially assignments in a mixed group do not fit into every study method. The audit group recommends to critically reflect this issue and make necessary adaptations so that course format, study method and workload distribution go well together.

1.2 The implementation of education

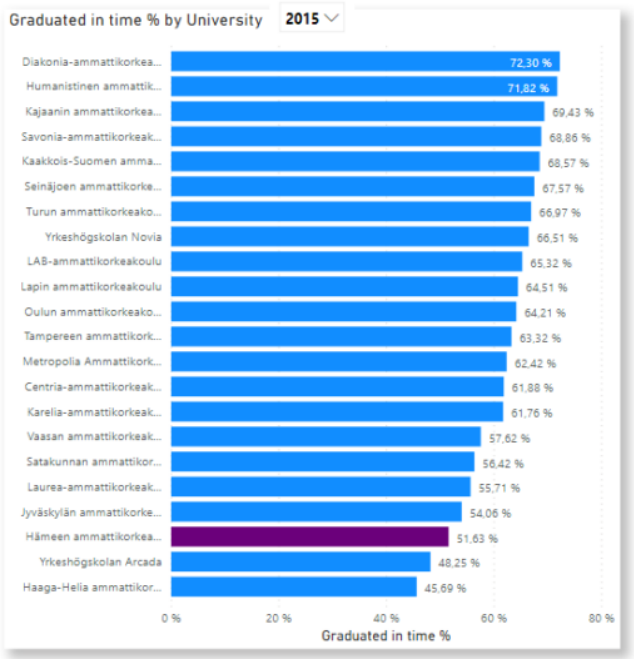
- Korkeakoulun itsearviointi

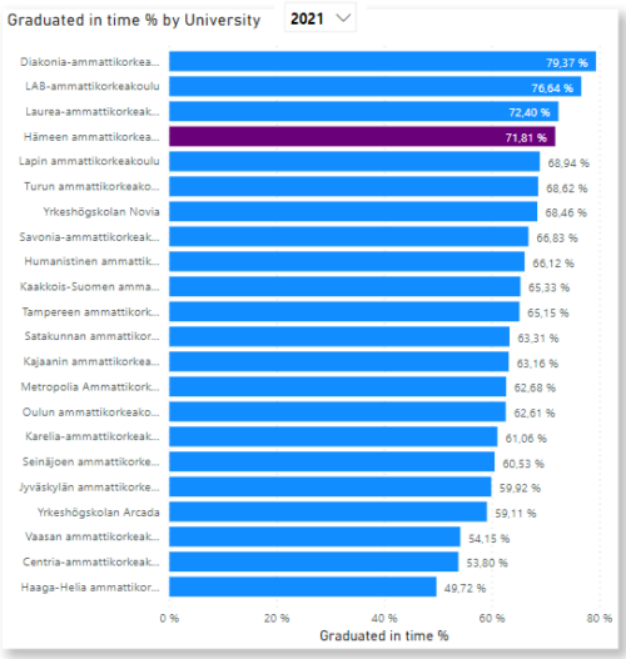
The module model supports goal-oriented learning

The implementation of education has systematically been developed from courses towards workplace-oriented, phenomenon-based **modules.** In this model, the phenomena of the labour market are introduced as module projects with a research and development-oriented approach. The international section can be found in all modules. The possibility of international mobility has been incorporated into the module structure of degrees.

The contents of the degree programmes (DP) are presented as a **module map.** The degree is divided into modules of 15 credits, and a module can be divided into smaller units. The student should complete four modules during the academic year, a total of 60 credits per academic year. However, the 24/7 module will be developed so that students can build individual and flexible study plans.

A **teacher team** are responsible for the module implementation. The implementations are based on the curriculum and the concept of Design Quality for Module Implementation. The teams plan the contents of the education, the student's workload, the pedagogical methods and the learning environments to support the student' active role and goal-oriented learning. Feedback from students and employers and information on previous implementations will be considered in the planning. Students receive module-specific support for learning, opportunities for cooperation and interaction with teachers, peers and employers, and feedback on their learning. The LeaD team supports teachers technically and pedagogically and coordinates the peer/mentor activities. Joint planning and module structure have had a positive impact on students' timely graduation.





Diverse learning environments enable students to have a vivid and communal learning experience and support the progress of their studies. HAMK uses digital and physical learning environments (incl. forests, gardens, farms, laboratories). Learning and study counselling materials are distributed on the Moodle learning platform, where students can follow their own progress. Studies are supported using digital tools (e.g., Teams, Zoom). Theses, work placements and projects are often carried out in the client's environments.

In 2016, a self-assessment and cross-assessment of the study methods were carried out. It showed that methods 8–16 and 18–100 had been launched successfully, but the 24/7 approach still required work.

The student's own activeness and the progress of studies are supported

Versatile and timely guidance supports adherence and progress in studies, internationalisation and career planning, as well as the student's active agency and professional growth. Students are provided with guidance by a multi-professional network of actors. The guidance model and the job descriptions of study counsellors (now full-time) have been renewed.

HAMK's learning platform (Moodle) and student's desktop (Pakki) strengthen the students' self-direction and goal-oriented learning by making it possible to monitor one's own studies and make active choices. The learning experience measure piloted in 2021 supports the student's awareness of his/her own learning and the progress of studies, and the teacher's ability to better consider the different study skills of the group. The competences of teaching staff are strengthened through the HAMK100 programme.

Equality of students is promoted through joint procedures and services

Applicant Services harmonise the application procedure and ensure a smooth connection with national joint application processes. Transparent student selection is ensured by public admission criteria.

The **Education Support Services** are responsible instructions and procedures guiding the planning and implementation of education. These respond to claims based on legislation and regulations (e.g., recognition of prior learning, progress of studies and completion of degrees and promotion of equality of applicants and students). The instructions ensure the smooth running and quality of the operations, increase transparency and equal treatment of students.

At the beginning of the studies, all students are offered the digital **Starter Pack**. During their studies, students have access to **library** and **student welfare services**, and services promoting equality. These are mainly available digitally, in Finnish and English and 24/7. **HAMK International** help in matters related to student and staff mobility, internships, employment and integration. Entering the labour market is supported by the **Valo graduation stage service**. During the pandemic, HAMK been faced with new challenges requiring flexible methods and services for international students, in particular. As HAMK has the readiness of offering digital education and services, the pandemic has not caused major problems in this area in general.

The **HAMKO** student union monitors issues related to education, degree structure, quality, steering system and internationalisation, and influences through representative institutions and the feedback system. HAMKO appoints student representatives to the Board of HAMK, the HAMK management group and development groups. They monitor the students' interests in their livelihoods, housing, equality, and health and well-being at the local and the national level. HAMKO also serves HAMK's students by organising events and maintaining the HAMK student culture.

Strengths	Enhancement areas
The module model provides continuous and versatile feedback on the implementation of education.	The ways in which the module model is implemented varies between degree programmes, (e.g., the role of the module coordinator).
The development of learning, teaching and learning environments based on research (HowULearn, HowUTeach, LearnWell).	More opportunities and flexibility to students to make their own study plans.
Learning environments are versatile.	
Guidance has been restructured and its significance has been recognised.	

Education Support Services are strong.

1.2 The implementation of education

- Auditointiryhmän arvio

HAMK has transparent information on students' admission procedures and study paths

All relevant information on student admission and recognition of prior learning is easily accessible and transparent. Study applicants can find various information on HAMK's website – in both Finnish and English languages. The website is well structured and informative. Various entryways to HAMK's programmes are possible, because most of HAMK's degree programmes offer so-called Study Paths. They consist of modules and courses in the first year of a Bachelor's degree and studies in the first semester of Master's degrees. Clear regulations as to RPL, as well as credit transfer possibilities, ensure flexible learning and study completion paths for applicants and students. In the interviews, it became clear that the recognition of previous studies is based on clear regulations and works well.

Clear process descriptions, as well as written guidelines, provide a sound basis for transparency and equality in the admission procedures. The audit team confirms that admission criteria are openly shared and found that they are written in a clear and comprehensible language. HAMK promotes the equality of both applicants and students. Clear instructions that ensure the quality of operations and equal treatment of students are proof of that. Good examples are the Equality Guidelines for students and applicants and Starter Kit of Digital Skills for new students, which helps them to start using HAMK online tools, equipment, environments, and methods already before the actual studies start. This involves digital badges with which the students can demonstrate their competence and helps students to navigate through the studies.

The competence development of HAMK teachers is well taken care of

Particularly due to the Covid-19 pandemic, it has become a necessity for all HAMK teachers and students to learn and teach in online courses. Here, the teachers' competence development with regards to the implementation of online studies was very well supported. A good example of practice concerning the development of teaching skills is the HAMK100 personnel training programme. The interviews confirmed that HAMK is offering many opportunities, such as open badges, on-the-job-learning, mentoring, study circles, online coaching and digi-pedagogical training for developing competence for its staff, based on competence mappings.

In the interviews, it was underlined that HAMK consistently maps the competences required and to be developed, catering comprehensively for staff competence development. One good example of this is the progress in team teaching and peer learning. In discussions with those responsible in the rectorate and faculties, the audit team was able to gain evidence that the

measures were developed and decided upon after thorough preliminary clarifications and in-depth consultations and are therefore well accepted and supported among the teaching staff throughout the university.

Focusing on the success and well-being of students

HAMK's student-centred approach, which begins while designing educational programmes that aim at developing students' competences for work-life and practice, is fostered by various opportunities of flexible learning paths and study methods. The students are guided by a multi-professional network of actors as well as staff and student representatives and tutors, throughout the entire learning process with regard to their professional and personal skills. This competence-enhancing and motivating study environment also means provision of efficient and flexible support services.

HAMK's learning platform, Moodle, and the students' desktop, Pakki, as well as feedback systems like Spark and HowULearn, combined with the use of data from the Power BI system, strengthen the students' self-direction and goal-oriented learning by making it possible to monitor their own studies. Hence, HAMK includes in their decision-making processes various information on the students' learning processes, experiences of the learning environment, general working life skills and well-being related to studying.

In the interviews, students, as well as teachers, expressed their satisfaction with the digital services, as they are handy to use and well accessible. Through further feedback formats, such as the Rector's student consultations, degree programme feedback discussions and student well-being survey, areas of further development as to services are identified and solutions are discussed. A good example of this is the Guidelines for Equality of students and applicants.

The student union HAMKO is also a key partner for HAMK, as they are involved in the monitoring of education, degree structures, quality and well-being. Students can also receive recurring individual guidance offered by student counsellors and tutors; for workplace questions and issues, HAMK's career services provide advice and support. In the interviews, the participation of student representatives, i.e., board, management group and development groups, in quality assurance processes was emphasised as being very pronounced and so were the numerous services offered to make the student study experience at HAMK as beneficial and individual as possible.

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1.3 The evaluation and enhancement of education

- Korkeakoulun itsearviointi

Education is evaluated and managed on a knowledge-based manner

Education is monitored with quantitative and qualitative indicators. The staff have access to information produced by the feedback system, the information describing the activities and outcomes in the BI system, and the Peppi system (e.g., credit accumulation). The feedback and indicator information helps to anticipate, detect and intervene in unwanted developments in time. E.g., interruptions in studies or quality problems related to study modules can be anticipated based on data describing the progress of studies and observations made by the module team.

The operations are evaluated and developed in the HAMK Management Group, the Education Development Group, the unit management teams, the groups of heads of degree programmes and study counsellors, and degree programme staff meetings. Self-evaluations are carried out regularly. Monitoring and self-evaluation activities produce signals that are important for development. This information is used in management by objectives system.

The quality and performance of education are strongly linked. HAMK has invested in educational models and the enhancement of the staff's pedagogical capabilities through the HAMK100 programme. The results can be seen as impact and performance (e.g., the indicator of degrees completed on time). Continuous evaluation, experiments and development of operating methods at all levels from module teams to the institution's management, play a key role in maintaining performance.

Collecting feedback is comprehensive, indicator data complements the situational picture

Feedback is collected from all stakeholders in several ways and for different purposes. Through the feedback system, students and employers participate in developing the quality of education.

Student feedback is collected with systems in a planned manner during the studies, at the graduation stage (Graduand Feedback Questionnaire) and five years after graduation (Career Monitoring Survey). The qualitative feedback in interaction is also part of a functional quality and feedback culture. This feedback information is extracted from the students in the Rector's students' hearings and at the Meet the Dean events. In degree programmes' joint feedback discussions, the students and the head of the DP discuss themes related to education. Feedback received in these events is documented and used as part of development work.

The diversity of the feedback system, the more systematic use of the information, and increasing

responsiveness have been areas for development. Therefore from autumn 2021, module feedback is collected through the Spark system allowing the feedback to be quickly linked to development (affecting the following modules) and giving feedback on feedback. The module feedback system is currently the smoothest part of the education feedback system.

The performance and quality of education is also monitored with **indicators** describing the activities. The performance indicators are compiled into BI tools to support management and planning of operations. Indicator entities that are essential for work have been built for the staff groups in different roles. The impact of the education is monitored with indicators (e.g., credit accumulation/student and /education, graduating on time, forecast tools for graduation, number of labour market connections in the modules). The utilisation rate of BI tools has increased steadily over the past few years.

Continuous evaluation guides the development of education

The curricula and contents of the DPs, the achievement of the learning objectives and the impact of the educational activities are continuously evaluated. The education is evaluated based on versatile information produced by feedback and measurements, and the necessary development measures will be launched as part of the **management of all HAMK** and its units. Heads of DPs and module teams evaluate the modules based on study feedback and take development measures within strategic policies. Through the available information and evaluation, the pedagogical management monitors the progress of the objectives in the curricula and the implementation of the education according to the annual planning cycle and launches development work at a strategic level.

The representatives of employers assess the student's competences in several stages of studies (module projects, implementation according to the Entrepreneurial University concept, work placements and theses). Employers regularly evaluate the students' capabilities and module contents in workplace audits. Employers affect the curriculum work via the feedback system and consequently also the contents and implementation of education.

Internal and external assessment activities produce targeted information to support development. **Evaluations** are carried out regularly. The evaluation activities are diverse and the need for harmonisation is identified in the ways in which the evaluations are carried out, the division of responsibilities and the practical implementation of development proposals. The development of education has unified procedures and structures, yet the need for further harmonisation can still be identified. Examples of the functionality of evaluation and development are the improved accessibility of education, the stronger link between the labour market and education, and better responsiveness to the needs of different learners. Through development and changes, the impact of HAMK's education has been enhanced.

Strengths	Enhancement areas

Feedback is systematically collected from different actors and is utilised in decision making. Tools of knowledge management are up to date.	Further clarifying the implementation and responsibilities of evaluation activities The utilisation of the collected data and its transition into real development measures will, in part, remain superficial.

1.3 The evaluation and enhancement of education

- Auditointiryhmän arvio

Enhancement of education is based on evident data and feedback

Evaluation and further development of HAMK's educational provision is based on various channels of feedback as well as institutional data. In the interviews, employers and students, as well as staff, showed their proactive participation in developing the contents of education. This strong involvement of teachers, students, and external stakeholders in both the planning and the programme development was confirmed in the interviews as well as in the additional material. Up-to-date research data and the future skills needs are taken account in the degree programmes. Especially the student workshops pointed out and valued the good programme planning and the clear opportunities for various forms of feedback in degree programmes as well as the responsiveness of the heads of the degree programmes.

In general, the student feedback explicitly underlined their satisfaction with their role in the curriculum development and renewal process, indicating that the studies are very useful, practical, diverse and future-oriented. Important assessment data are derived from regular course feedback. Data sets are made available to all stakeholders for this purpose, including metrics, statistics, course evaluation information, and graduate studies. HAMK not only focuses on quantitative data (i.e., the National Graduation and feedback questionnaire and Career - monitoring survey) but also on qualitative dialogues with students when they participate in so-called development groups and boards. The continuous improvement of teaching and study quality through regular didactic training in HAMK100 and keeping the curricula up to date are also explicitly anchored in HAMK's vision and can thus also be taken as a guiding principle. The documents also show that the underlying system is continuously being expanded and optimised.

From autumn 2021, module feedback is collected through the Spark system, allowing the feedback to be quickly linked to development affecting the following modules and giving feedback on feedback. Overall, the audit team concludes that HAMK uses a systematic approach for the enhancement of education that meets the requirements. The participation of teaching staff and students, administrative staff and graduates is ensured. Beyond the description of the processes in the self-evaluation report, HAMK was thus able, through the interviews, to clarify the systematisation of the further development of their study programmes.

HAMK has implemented various opportunities for students and staff to gather feedback on different levels within the institution. The interviews confirmed that feedback is an important aspect for HAMK in the focus of enhancement of education. One example of good practice is the Meet the Dean events. In these informal meetings students can discuss their concerns and opinions, showing the importance of student feedback for HAMK. HAMK's motto, "It is an important value for us that they are heard", was underlined in the interviews. In addition to the

exchange with the deans, further discussion and reflection processes concerning the development of study quality were initiated within the schools. Through these various channels of feedback, students can also evaluate the support services offered, such as counselling, tutoring or career advice and mobility options. The interviews showed that student support services are also further developed based on student feedback and aim at directly responding to the needs of the learners.

Especially in the process of developing and optimising a module, student and teacher feedback is gathered. HAMK gathers feedback regularly and reacts upon the feedback in systematic ways, but the transparency to students about follow-up actions could be more structured and consistent. Students receive grades for modules that they have completed. The teacher gives each student an individual grade even if the work was carried out in a group or as common project assignments. HAMK teachers are encouraged to discuss feedback with their students systematically. Hence, a point of development, also indicated by students in the workshop and in the interviews of the student representatives, is the provision of feedback on their grades. In this context, it was also mentioned that teachers should be more proactive in pointing out student errors.

Through the documents provided as well as the interviews with various groups of internal and external stakeholders, the audit team gained convincing evidence that HAMK has consistently pursued the process of continuous improvement. This stringent and long-term focus on quality improvement has not only shaped HAMK's programmes as being up to market needs, student-centered and competence oriented, but also HAMK's profile as truly work-place oriented HE institution.

Continuous learning is a strategic development target

Continuous learning is a strategic field for HAMK. As mentioned in HAMK's vision and strategy statement, HAMK students are owners of their own learning, and teachers act as instructors and enablers of learning. The interviews confirmed that the modules are well structured, based on three study models, so that it is possible to build new degree programmes or parts of degree programmes flexibly for new target groups of continuous learning without making changes to HAMK's operating licence.

The audit team encourage HAMK to further develop different forms of continuous learning on a more systematic basis to foster lifelong learning, i.e., in the open university of applied sciences, specialisation studies and other further training. The audit team see the newly reformed continuous learning brand, HAMK Up, as a promising example of how to establish continuous learning trainings as regular learning experiences for those who want to gain further competences and knowledge in a specific field. This programme widens the range and diversity of training.

The benefits of digitalisation are utilised in teaching and guidance, i.e., by using digital literature

as study packages from the library. This should be aimed at not only focusing on those people who want to raise their education level but for all potential groups.

1.4 The HEI’s examples of successful enhancement activities

- Korkeakoulun itsearviointi

Developing curriculum process

The curriculum process is at the core of the development of education. In 2010-12, HAMK focused on the development of the module model, study methods, and the national DP reform. The aim was to increase degrees’ workplace relevance and remove curriculum fragmentation. The degrees’ core competences were structured, and the profiling competences defined, and they both were were constructed into workplace-oriented modules of 15 credits. In 2014, all degree programmes started using the modular curricula and team teaching.

The reform of the curriculum process was aligned with the development of ICT systems. The Peppi system was introduced, and it has expanded to include the management of personal study plan work, recognition of prior learning, thesis process, electronic study documents, the graduation process and student feedback. Students have been provided with services independent of time and place, as well as transparency and equality in the management of study processes.

The 2020 curricula were reformed so that they better serve the customers of continuous learning, enable the students to build their personal study paths more smoothly and recognise prior learning. The national Digivision 2030 was considered in the reform.

Developing and establishing the module model

Previously, according to student feedback, there were several starts and ends during the semester, and the assignment deadlines were overlapping. There were overlaps in teaching contents because joint planning was only occasional. The reform begun with ideas of the three education models and the modularity of studies.

The module model has been developed with an experimental approach, renewing processes and operating methods, establishing functional practices and collecting feedback. In the current model, the modules are functional entities with uniform schedules and registration times at the HAMK level. As a rule, students start studying in a new module 4 to 5 times per year. If the student wants and can speed up his/her studies, the changes will be considered in the PSP. The workload of students feels lighter when the common learning assignments and module projects are coherent. As a result of the transition to the module model, student feedback in the Rector’s students’ hearing has improved and the accumulation of credits has improved.

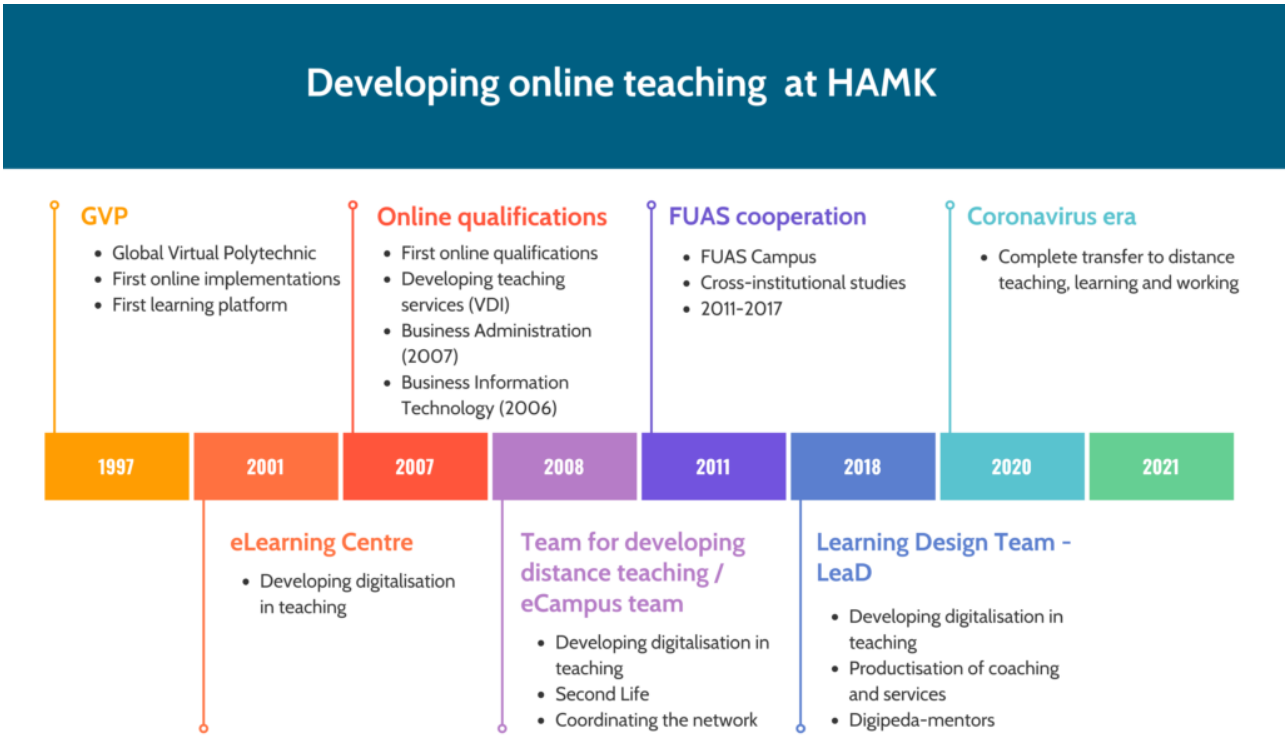
The module model was combined with a necessary reform of the study feedback procedure. Feedback is given by module, with a joint feedback form. The feedback is imported in the BI system, where it accumulates as a basis for the development of education. Employers give feedback by module projects. This has made it smoother to get relevant feedback from the world of work.

The transition to a team-teaching model has reformed teachership

Developing team-teaching is linked to developing the module model and curriculum reform. Instead of individual course responsibilities, teachers were organised to work in teams responsible for planning and implementing a competence-based module. The aim was for teachers to have joint responsibility for guiding students' learning and assessing their competences, while creating implementations that integrate different subjects and correspond to phenomena in the labour market. From the teachers' perspective, the change has been significant. Cooperation between teachers increased, which increased their collective ability and resilience, trust in their ability to solve challenges together, and the ability to regulate their own and the team's activities according to the needs of the students. Although the change has not been easy, the teachers have felt that shared responsibility and collegial cooperation are valuable and improve well-being. The effects of team-teaching are reflected in the personnel's well-being survey as an increase in the experience of obtaining peer support.

Developing support for online teaching

HAMK has developed online teaching systematically since 1997.



Currently, the development work is facilitated by the LeaD (Learning Design) team, who operates as a network of 25 people in different areas of expertise, with variable shares of working hour. The network covers all schools, research units and support services, encouraging into digital development. The LeaD team has systematically developed facilities, equipment, and instructions, thus facilitating the digitalisation of teaching, learning, and working.

Everyday digital support and coaching is readily available and provided in many ways. Coaching (incl. open badges) is based on national quality criteria for online implementations and accessibility, and implemented and developed on the basis of participant feedback.

HAMK's digital competence was self-assessed in accordance with the DigCompOrg framework. Based on the self-assessment results, areas of development, milestones and measures were defined and refined, along with the persons in charge and the schedules.

2 HEI promotes impact and renewal

- Auditointiryhmän arvio

The 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 *good*.

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

Strengths

- HAMK has an ambitious strategy for enhancing its societal engagement and impact which is supported by its management system, appropriate processes, and a highly committed board.
- HAMK has succeeded in creating an inspiring and innovative organisational culture, which engages both staff and students, and interacts systematically with the local and regional stakeholders.
- HAMK diligently sets the direction of its societal engagement and renewal activities through the involvement of internal and external stakeholders.

Recommendations

- To solidify its societal relevance and impact, further development of systematically monitored and maintained relationships with regional and local interactors, focusing on competence and solution-driven collaboration is to be maintained.
- Design Factory should be used to foster dialogue and co-creation as well as transdisciplinary and societal learning within all HAMK.
- HAMK should actively seek and define impact indicators to strengthen the relevance of its societal engagement.

2.1 Managing societal engagement and impact

- Korkeakoulun itsearviointi

The strategic objective is to be the most inspiring and useful

HAMK's societal interaction and impact objectives are defined in the strategy. Objective achievement is followed up systematically and the results are communicated actively. The current objectives focus on a student-centred approach, strengthening labour market orientation, promoting internationalisation and sustainable development.

HAMK is the only higher education institution in its region and educates experts for the labour market. These experts have capabilities for developing their field and for entrepreneurial activities. This can be seen in practice, for example, as a high degree of entrepreneurship among students. The students' work-based projects and theses are an important part of labour market development and HAMK's RDI activities.

HAMK reforms labour markets and the society through RDI activities, constructing new knowledge and new operating methods together with stakeholders. RDI activities are carried out in networks and are mainly implemented in publicly funded projects. This is important for the vitality and renewal of the region. In addition, HAMK provides tailored RDI services for companies and the public sector.

HAMK is led towards strategic goals

HAMK's **strategic leadership** contributes to complementary management processes. The vision and objectives are formed in continuous dialogue with the society, analysing the operational environment. HAMK is able to influence regional strategies and project funding. This is implemented in practice by participation and influence in regional planning, regional strategy work, and ecosystems (e.g. the sustainable bioeconomy ecosystem of the City of Hämeenlinna and the Steel Construction Excellence Center, SCEC). Hence, the needs and the strategies of national and regional stakeholders will also influence HAMK's strategy and operations.

Knowledge management creates a situational picture of the operational environment and foreground information on HAMK's status. This enables monitoring the progress of the strategy and developing the activities. **Competence management** builds capabilities for achieving goals and setting new, more challenging objectives.

The objectives of the strategy are formed into unit, team, and personal tasks in management and supervisory work. This work is supported by the **management by objectives (MBO) system**, in which the progress of the objectives and tasks is monitored. The ability to act and change is promoted by competence management. Knowledge management provides information which is

visualised to support MBO (e.g. a utility indicator under development).

Management is constantly developed to increase impact and usefulness to the society. HAMK has identified the need to develop the work of leaders and managers, and the practical utilisation of knowledge management. For thin, coaching is under way, and the Business Intelligence system (BI), user competence and data literacy, and related leadership and management practices are enhanced.

Continuous profiling work is based on societal interaction

Profiling work and strategic choices have increased HAMK's uniqueness among higher education institutions. HAMK's profiling work is strong, and it directs focus and resources on selected targets. Its impacts extend from the strategic level through the profiles of education and research units to curricula, research programmes, and the development of the competence of personnel.

HAMK has consistently developed the profiling work. It is carried out using various methods, including foresighting. A key element is continuous dialogue with the society. There are built-in procedures for this dialogue in strategy work, curriculum and research programme work, as well as in connection with education and RDI activities implementation.

To support the profiling work, analysed information on changes in the operational environment and HAMK's competitiveness is collected. Profiling work contributes to the benefit of stakeholders in matching and impacting education and RDI activities. HAMK is constantly seeking and developing new ways to complement traditional forums with vibrant societal dialogue that supports development. This is systematically supported by strategic corporate communications and stakeholder cooperation.

Strengths	Enhancement areas
The strategy strongly guides the activities and promotes the growth of impact.	HAMK has a strong regional presence but there is still a need to improve impact based on profiles.
Profiling work is a strong and proven procedure.	The ways of maintaining labour market connections are diverse, and they should be evaluated more systematically according to the strategy and profiles.
HAMK is a strong and impactful actor in the region in education and RDI.	There is a need to further analyse national and international development partnerships and systematise co-operation models with them.

2.1 Managing the societal engagement and impact

- Auditointiryhmän arvio

HAMK’s goals for societal engagement are well defined, as are the ways to measure the progress

HAMK’s strategy of becoming the most inspiring and the most workplace-oriented university, and a bold and inspiring reformer, is promoted through its societal engagement and impact. In the interviews, the impact of HAMK was also referred to as an emerging ”growth mindset”, providing a sound basis for a shared vision locally and regionally. HAMK’s objectives in societal engagement and impact focus on a student-centered approach, strengthening labour market orientation, promoting internationalisation and sustainable development. Goals for societal engagement and related indicators are well defined, as are the ways to measure the progress and milestones.

HAMK’s management enhances the impact of the societal engagement with Management by Objectives system (MBO). Power-BI and reporting systems for RDI, based on data collection and regular analysis of the institutional environment, add to the transparency of HAMK’s activities. This ensures the legitimacy and relevance of strategic choices with regards to societal impact. Appropriate procedures are in place, which support the achievement of the set goals and objectives.

Societal relevance is ensured through engagement with local and regional stakeholders

The changes in HAMK’s operative environment are monitored through a variety of activities, for instance by the bi-annual the Labour Market audit, which can be mentioned as a particularly useful activity of capturing the labour market’s needs and demands. There is regular feedback from and dialogue with local employers and stakeholders, as well as involvement in planning the curriculum to ensure its relevance and usefulness for the local and regional labour market. The interviews emphasised the importance of long-term partnerships in responding to changes in the operative environment and in achieving working-life impacts.

The local and regional relevance and impact is clearly visible and addressed through diverse actions and governance practice; whilst national and international impact is less evident and needs further attention to become stronger and more visible. Among the actions already undertaken to ensure the access of international talent into the regional labour markets is, e.g., the Talent Boost Pledge, which seeks to support incoming international students to find their path into the Finnish labour market. The audit team heard promising examples of work to play a more active part in international talent attraction, including the recruitment of coordinators and

specialists. Furthermore, the audit team also learned that first steps have been taken to involve more companies and thus ensure more practice-based learning in various areas and ecosystems, such as bio economy and bio economics.

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

- Korkeakoulun itsearviointi

HAMK is profiled as a higher education institution whose activities are based on strong RDI work. In HAMK, the targets are defined in the strategy, and RDI activities implemented in research units, and in degree programmes as student projects and theses included in study modules. The world of work participates in all forms of RDI activities.

Education and research units produce results and impact

Module projects, development activities and theses are carried out in cooperation with business life. These activities strengthen the competence of students and staff, and the development challenges of the world of work will be solved. Around 140 RDI projects are carried out at HAMK each year, and around one fifth of these are international in scope.

HAMK uses the **Entrepreneurial University** operating model where students encounter assignments from the business life and solve them using RDI methods. **HAMK Design Factory** offers students, teachers, and business partners a platform for multi-disciplinary experimental innovation activities.

The project-oriented RDI activities of the beginning have been transferred to strategic, profiled operations. HAMK's Sheet Metal Centre (the foundation of the current HAMK Tech) was established in 1996. The current **research units** were established in 2015 (HAMK Bio, HAMK Edu, HAMK Smart, and HAMK Tech). A significant proportion of the Schools' staff work for the research units. Research units and educational units cooperate.

The **Research Development Group** leads and sets the objectives of research. The **principal research scientists** are responsible for the **research groups**. The **Tenure Track** offers doctoral degree researchers a career path towards a position as a principal research scientist. Cooperation with universities is implemented through the doctoral dissertations carried out in projects, supporting the goal of **professional doctoral degrees**.

Research programmes outline profiles, research contents, and targets. They guide the competence management, funding applications, and project portfolios. Currently, the funding base consists mainly of EU's regional development funding. The aim is to increase the direct and competitive funding. An operating model to the productisation and commercialisation of RDI results is being developed further. The research units' joint, multidisciplinary development work and stakeholder cooperation have recently been strengthened.

Key indicators are monitored and customer feedback is collected. There is a need to further

increase the benefits of research to the customer and the society. A utility indicator is currently being developed to measure this capability.

RDI communication is part of open RDI activities and societal impact. Professional, scientific, and general articles on the RDI results are published.

Centralised support services to ensure the quality of RDI activities

The **Project Services** team and Financial Administration guide the administrative quality of projects' application processes, implementation, and documentation, and financial monitoring and reporting of projects. Project administration processes and transparent IT systems have been developed, and HAMK's ability to participate more in international funding applications has improved.

The **RDI Support** team's services cover open science and research, IPR issues, publications, research data life cycle and material management planning, research ethics, and project communications support.

Education is being reformed through research

DPs are renewed through **interaction between education and RDI**. RDI personnel participate in teaching, providing the latest research data. Teachers participate in RDI activities, developing their competence. Participation in curriculum work and teaching has been defined in the work description of the principal research scientists.

Students can participate in RDI activities in research units. They can carry out module projects, work placements, and theses in research unit projects. Research units also employ students in assistant positions and graduates. Master's degrees are developed into a research-based direction by utilising the research results produced by RDI activities. Master's degree students in their workplaces also bring their background communities as a part of HAMK's networks.

The pedagogical research and expertise of HAMK Edu are utilised in the development of education. Research units play an important role in promoting HAMK Global activities. The results of RDI activities will be made available to business customers through the continuous learning channel (e.g. Chief Expert in Engineering project). Cooperation between HAMK Up and research units is being developed

HAMK promotes research ethics and open science

HAMK's open science work is based on the national declaration. Operations are guided by the principles of openness. HAMK has focused on promoting open publication, opening up research data, and providing services that support an open operating culture.

The guidelines of the Finnish Advisory Board on Research Integrity have been implemented into

RDI projects and the thesis process. HAMK has instructions and support persons for allegations of misconduct. Staff are offered training (incl. open badge) in the area.

Strengths

Organising research activities with outsider funding into research units will bring long-term sustainability and stability to RDI activities.

Specialising in accordance with the research units' profiles and focusing on limited areas of research strengthens effectiveness.

The needs of the labour market have a strong impact on the research activities of research units.

There is strong support and expertise for the administrative work related to the projects.

Research integrity and responsible conduct of research is well-considered.

Enhancement areas

Further improve co-operation between HAMK Up, educational units, and research units in the field of continuous learning.

Extending alumni activities to research units.

Improve the overall support of innovations including commercialisation as part of innovation activities.

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

- Auditointiryhmän arvio

HAMK’s research units play a significant role in setting institutional targets

HAMK has set the targets for the impact of RDI-work in its strategy. The aim of RDI is to serve as a significant push factor for social innovation through profiled research units such as HAMK Bio, HAMK Edu, HAMK Smart and HAMK Tech. Research units are responsible for the effectiveness of research.

In recent years, special attention has been paid to the needs of working life and companies in developing research activities, which are reflected in HAMK’s targets and indicators for strengthening its role in working life and in international RDI ecosystems; among these are, for example, the number of open research programmes drafted together with working life partners, business funding for RDI and the number of peer-reviewed publications. The tenure track possibility for staff members is an important asset in attracting international experts to the region as well. Being part of a network of regional universities also contributes to reform society, as well as providing a route to HAMK, its staff, students, and stakeholders to learn and to strengthen HAMK’s profile, develop competences and thus improve its societal impact.

The strategy of top excellence identifies the directions of RDI activities and brings together the goals, strengths and development areas. Progress and achievement are monitored by annual milestones. In this process, stakeholder feedback is systematically considered. In the interviews, the staff confirmed that the regular review discussions with research units are based on the progress and achievement results and include the impact achieved, dissemination and commercialisation, partnership, funding, research competence, and the link between research and education. Indicators for monitoring are in place, yet most of them refer to input or output rather than to impact, with the notable exception of the ”number of open research programmes drafted together with working life”. The audit team therefore encourages HAMK to actively seek and define impact indicators to strengthen the relevance of its societal engagement.

There are several areas of high societal relevance, such as sequestration, circular economy, and sustainability, where partners and local and international excellence can meet. In these areas, HAMK has good coverage of the whole chain, from research to societal actors, companies, all the way to individual farms and farmers or urban planners. In the audit interviews, promising cases of bridging economic, ecological and social sustainability were mentioned, e.g., Living labs. HAMK is encouraged to continue this way and further intensify its societal impact.

Research ethics and Open Science are well integrated into curriculum and every-day practice

Distribution of responsibilities, as well as practices for the implementation of Open Science and scientific ethics, are in place. HAMK's principles for ethical and open science are guided by its "Principles of openness", which are transparently published on its website. Responsible research and Open Science are actively discussed and taken into consideration, as are the principles outlined by the Finnish National Board on Research Integrity (TENK) and research ethics. Practices and awareness of what to do in case of misconduct or concerns over research ethics are in place, with digital badges and micro credentials for students, assuring that the research ethics are widely familiar and in use. There are also staff members in charge of helping both students and staff with IPR and contractual questions.

Library and information services provide easily accessible and up-to-date guidelines and information on research ethics. The audit team also heard about the two-week -long "Deal Weeks", where students get to explore real-life business projects and real-life cases with special attention being paid to ethical principles. These are a good example of how to teach and explore research ethics in practice.

2.3 Promoting renewal through the organisational culture

- Korkeakoulun itsearviointi

HAMK’s operating culture includes common objectives, responsibilities, and freedom to develop

The strategy **guides** the activities through the system of target management and the MBO system. The work is steered by objectives, guidelines and instructions, and jointly described processes. The use of guidelines and instructions has an established position, ensuring uniform quality and equality.

The operating culture also strongly encourages **cooperation and co-creation**. Creative, multi-disciplinary, multi-professional, and project-like manner of working is characteristic for co-creation. Co-creation is visible in development groups (e.g. RDI Support Team, Study Guidance and Counselling Group). Competence development is encouraged by means of supervisor work, HAMK 100 coaching programme, and career paths. Experiments and renewal are resource-targeted (e.g. LeaD team and Design Factory).

In education, the **module model** provides the student and the teacher with the opportunity for individual learning and teaching work. In RDI, the operating culture is concretised in **multi-disciplinary cooperation** between research units, such as RDI projects (e.g. Bioeconomy 4.0 and Carbon 4.0).

Renewal and continuous improvement are promoted by **experiments**. HAMK supports experiments that further the achievement of strategic objectives. Examples of such experiments include the DP of Information and Communication Technology, Bioeconomy that is based on the needs of the labour market and crosses educational boundaries; the transfer of teaching to a module model; and the Entrepreneurial University concept where students are offered the opportunity to experiment as part of the module studies. Also feedback culture supports renewal (e.g. Rector’s students’ consultation).

Networks enable renewing societal interaction

HAMK influences the development of its operational environment in networks. Certain networks support regional impact. Business networks are built with sectors relevant to HAMK profiles, with education and RDI experts leading this area. International networking is managed strategically, and these networks are regularly assessed. Recent assessments have concerned mobility partner networks and international strategic partnerships. Based on the assessment, strong and functional partnerships were identified, and networks were reformed to serve the needs of students and HAMK.

At the **regional** level, companies and labour market organisations, other NGOs, and secondary level education providers belong to HAMK's partner network. Connections with municipalities and regional business operators (e.g. business developers and chamber of commerce) are essential. The ecosystem of the City of Hämeenlinna (sustainable bioeconomy), the Bright Green business network of the Forssa region, the Circular Economy Village of Riihimäki, and the Data Network of Tavastia Proper are examples of regional networks.

At the **national** level, the networks with developers and decision-makers in selected sectors are essential for HAMK. Networks of Rectors' Conference, development networks for lifelong guidance, higher education pedagogy, and vocational education and training, the National Teacher Education Forum, as well as Steel Construction Excellence Center network, the Finnish Constructional Steelwork Association, and Industrial Biotechnology Cluster Finland are such networks. The most significant RDI projects are implemented in a multi-disciplinary manner in networks formed around the projects (e.g. Bioeconomy 4.0 and Carbon 4.0 networks).

The beginning of **international** alliances is the Beyond Alliance in 2015. Based on evaluations, HAMK has now mutual strategic partnership with Feevale University (Brazil) and a partnership with Via University College (Denmark). HAMK's most significant alliance is the Regional University Network European University (RUN-EU). European Universities are reforming European education, creating joint education and RDI activities, and the RUN-EU connections are of great regional importance. HAMK is currently building also its partner networks outside the EU.

Research units are involved in international **innovation ecosystems** (e.g. The Africa Action Plan). HAMK's Design Factory is part of the international Design Factory network. International partnerships renew education and RDI, and improve the preconditions for obtaining business and international funding.

HAMK Global has an extensive international network of **education system developers**, committed experts and education influencers. This provides HAMK with an international impact on the reform of education systems and the raising of the level of education.

The **alumni** are part of HAMK's network. Alumni work is carried out for each degree programme. The contact details of the alumni are maintained in a joint register and all alumni receive joint communications. HAMK's career monitoring team monitors alumni career progress through a national career survey. For research units, the alumni form a channel for partnerships. HAMK Edu and the international HAMK Global Education alumni in professional teacher education have built cooperation, in which alumni have become important research partners for HAMK. Alumni activities are found to be more widely in need of development.

HAMK's CRM system has been renewed and its use has been optimised based on the evaluation of experiences from previous systems and practices. Updating the IT system and its more comprehensive utilisation helps to manage contacts and reduces personal dependence on network relationships.

Strengths

RUN-EU is a significant amplification of internationalisation.

International research project networks, specifically Africa network.

Determined efforts to build, join and develop networks together with competence development.

Enhancement areas

Increasing the utilisation rate of the CRM system and strengthen the routine for its extensive deployment.

The contents and operating methods of alumni activities need renewal.

2.3 Promoting renewal through the organisational culture

- Auditointiryhmän arvio

A creative atmosphere and a spirit of innovation shape HAMK's organisational culture

In the interviews, HAMK's organisational culture was described in such terms as "loving the learning", "thinking outside the box ", "feeding design thinkers" and "loving the breaking of the silos". The audit team heard convincing statements that HAMK is successful in encouraging piloting, prototyping and executing experimental activities. This spirit is well reflected in its organisational culture and demonstrated in HAMK's Design Factory as an example for long-term commitment to innovation, multi-disciplinarity and design thinking.

Design Factory is an area of activity where the centralisation of critical mass and the decentralised nature of education can lead to creative tensions, but also creative solutions. The fact that Design Factory concepts have more often emerged in larger urban universities is no indication that such innovation platforms could not be successfully promoted and implemented in a more rural setting and at more decentralised campuses as the example of HAMK demonstrates. Furthermore, HAMK's Design Factory could provide a valuable benchmark for the whole RUN EU alliance, through building and embedding the idea of Design Factory and design thinking into a more decentralised and regional university. This could have great international, and even global relevance.

The interviews also brought confirmation that HAMK's organisational culture is conceived by a spirit of listening to the clients and collaboration partners, of dialogues and co-creation and regular active interaction with stakeholders. The management and maintenance of networks as an institutional and organisational asset are in place, and a shared, renewed CRM has recently been put in place and taken into use, playing an important role in this process.

Further development of relationships with alumni could be more active

Alumni are increasingly seen as an important asset but could also be used more actively to increase the pride in the local / regional university. More systematic and long-term work with alumni and the need to ensure a better dialogue and over-all monitoring of their views and experiences was discussed in the audit interviews. This seemed to be work in progress. For regional universities in particular, alumni are an underestimated resource and all forms of retaining them in the university network are welcomed, from guest lectures to "alumni of the year" awards, as was confirmed in the interviews. Regional stakeholders were the ones who most actively emphasised the further potential of alumni, as their continuous commitment to their Alma Mater can be a resource in many activities, from lobbying and investments to project-

based problem solving and brand marketing.

HAMK has well-functioning procedures for managing and updating its stakeholder relations and collaboration networks

HAMK has various active national and international networks, and during the audit, it became clear that this active collaboration created added value for students, staff, and stakeholders. The management and maintenance of networks as an institutional and organisational asset are in place; HAMK's CRM system has been renewed and optimised based on the evaluation of experience from the previous systems and practices and was recently taken into use.

A variety of national and international networks are invited to take part in active collaboration and enhancement of activities. The RUN EU alliance is a particularly promising example of networks and offers unique opportunities. HAMK's participation in the RUN-EU alliance offers further opportunities for peer learning with partners, students and colleagues, and profiling HAMK as a place where creativity and experiments foster a bold growth mindset. In the interviews, the audit team heard of examples of how international alliances, strategic partnerships, HAMK Global and Design Factory can also play key roles in attracting international students, building bridges between students and research companies, and developing solutions as well as creating new connections. During the interviews, the audit team heard about forms of concrete collaboration (e.g., mobility of international teacher trainees as an important means of supporting internationalisation).

2.4 The HEI’s examples of successful enhancement activities

- Korkeakoulun itsearviointi

HAMK’s RDI activities have become increasingly effective

When established in 1996, HAMK’s RDI activities were cooperation with companies and the public sector, with students participating in projects. HAMK reached Minedu’s status of Centre of Excellence of regional impact twice and became the most significant project actor in its region, even though the projects did not always form a mutually supportive entity. In time, five focused education and research centres were set up to enhance multidisciplinarity and serve the needs of the labour market, later replaced by four research units. Regional development was strengthened by the start-up incubator and business services (today’s Entrepreneurial University).

External evaluations on RDI activities were conducted in 2013, 2015 and 2019. The impact of RDI activities has been increased and HAMK has progressed from individual projects onto multidisciplinary and more effective project portfolios in line with strategy and profile. The networks have expanded and become more international. Multidisciplinary teamwork has continued to be developed in both education and RDI activities. Regional cooperation has also been developed.

The roots of goal-oriented profiling work are deep

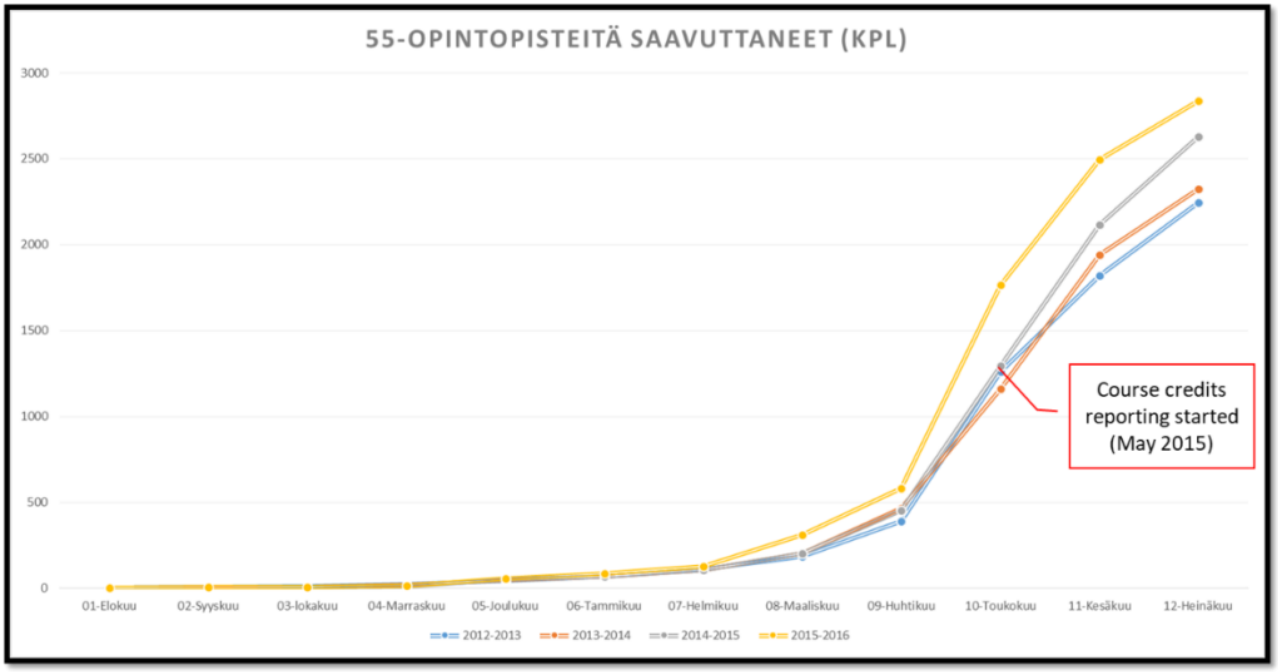
HAMK has carried out profiling work as from its beginning with a **principle:** the work in units should not overlap and regional needs and differences should be considered. The division of labour between education and RDI activities has later been guided by **strategies.**

The HAMK 2020 strategy (2014) included guidelines for reforming the structure of education and establishing research units which required clarification of profiles. Systematic profiling work was launched in 2015 to focus the competences in education and to define the flagships research. In addition to top management, hundreds staff members and stakeholders participated in the profiling work which included workshops utilising the methods of future research. The workshops were preceded by guided preparations in the units, which were based on rectors’ development ideas. The results of the work were iterated, and progress was made from understanding the basic principles towards specific profiles evaluated by the world of work. The process was long and laborious because of the difficulty of redirecting thinking and making choices.

Currently, profiling is realised as part of curriculum and research programme work. Integrating unit profiles into HAMK’s operation area strategies remains an important part of profiling work. An international perspective has been included.

From collecting data to the real-time analysis and acting

HAMK's quality system has always collected information on activities. The first reporting portal in 2005 monitored financial indicators. The construction of knowledge management data infrastructure was started in 2015. The first automated report on the accumulation of credits provided a situational picture and caused the productivity leap in the 55 credits accumulation. This successful step encouraged to strengthen knowledge management further.



As from 2020, an independent team has realised the development of systems. Tools and visualisations are now developed in an agile manner, experimenting and responding to information needs (e.g. the user-driven MyBI concept).

Performance monitoring has become more automated, real-time analytics supporting management. It covers strategic and tactical level analyses as well as real-time operational work reporting. The development focus is on predictive and explanatory analytics, and promoting staff knowledge literacy. This will be reflected in the ability to make decisions based on information, which contributes to improving the performance of the activities.

The development of Project Services has strengthened the capacity for impactful RDI activities.

Project activities have been supported centrally at HAMK throughout its existence. The support service has been developed to meet the strategic objectives and the needs of the operational environment. This strengthens the capacity to successfully participate in funding applications and to implement projects.

The Project Services team assist in finding sources of funding and preparing applications. It

monitors the financial progress of HAMK projects. As a rule, projects are now successfully implemented throughout their lifecycle in accordance with the plans presented in applications to the funding providers.

The RDI project processes have been modelled: The guidelines for starting and ending the project were renewed. The process also harmonises the activities in information, risk, and material management, contract processing, and project communications. Research funding is being applied for from more and more demanding funding sources. RDI actors are trained in contract technology and interpreting funding providers' instructions. The project information systems support project management, and a reform of tools is under way.

The support provided by Project Services has strengthened the RDI activities. This can be seen, for example, in a more extensive access to competitive RDI funding.

3 HEI enhances quality and well-being

- Auditointiryhmän arvio

The 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 *excellent*.

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

Strengths

- HAMK has established a comprehensive feedback system to capture input from internal and external stakeholders for the institution's further development, with students having a strong voice in HAMK's quality dialogue.
- Well elaborated tools and plans for competence development are diligently linked to the personal development and well-being of staff.
- HAMK's solid and comprehensive quality management is firmly rooted in the institutional quality culture and fostered by various forms of quality dialogue and quality measures, as well as a purposefully developed quality mindset within the entire institution.

Recommendations

- HAMK should critically reflect and review data production and distribution with a view to make the system more efficient as well as more effective and data analytical for utilisation for improvement and enhancement activities.
- HAMK should define qualitative and/or quantitative indicators for staff satisfaction and well-being measurement to enable a more analytical view of the survey and measurement results.
- HAMK should evaluate the outcomes of the RUN EU alliance, regarding impact and enhancement opportunities for the region and regional development, particularly with regards to competence and skills development.

3.1 Using the quality system in strategic management

- Korkeakoulun itsearviointi

Strategic management procedures are the core of the quality system

According to HAMK's quality policy, strategic management and the quality system are intertwined. Management, operational planning, and activities are guided by the continuous improvement approach (plan-do-check-act cycle, PDCA), as well as the principles and practical procedures of quality management.

The quality system refers to HAMK's organisation, division of responsibilities, resources, and procedures, the aim of which is to ensure the quality and impact of education, RDI activities, and support services. Mechanisms for gathering situational information and feedback are built into the procedures. This information collected on the activities is analysed and utilised in the planning and development of the activities. The quality system ensures the implementation of development measures and the launching of new ones.

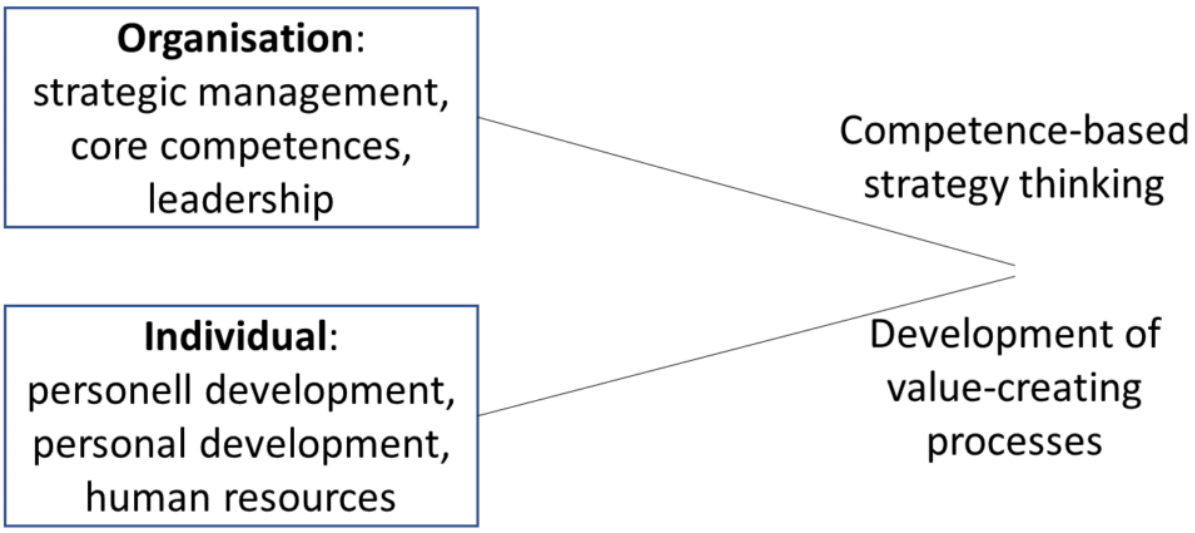
Each HAMK unit and function, as well as staff member is responsible for practical quality work in their own activities.

Strategic management is management by objectives (MBO), competence

management, and knowledge management

At HAMK, **strategic management** is based on creating a strategic vision and setting related objectives. Achieving the strategic objectives requires the right kind of competence in the right places to be built through competence management. Monitoring the progress of the strategy and possible reorientation require the correct situational picture and result data. The MBO system describes the objectives and tasks of various levels, and these include responsibilities, schedules, and connections to other objectives. Responsibilities are distributed appropriately to the various parties and levels of the organisation. As part of management, performance appraisals are conducted, through which strategic objectives are broken down as part of personal tasks. Internal communications plays an important role in pursuing and achieving goals.

The operating model for **competence management** introduces a comprehensive overview of the organisation's future and the competence needed. Competence-based strategic thinking combines strategic leadership and the development of competence among personnel. This operating model strengthens HAMK's knowledge capital, which enables more ambitious strategies.



Knowledge management involves collecting, analysing, and visualising information, and sharing it with those who benefit from it. Data is accumulating and collected from HAMK's activities and external data sources, as well as their combinations. The information is combined, modified, and visualised according to use. The information is utilised in the management and development of HAMK's operations. The enterprise architecture work supports HAMK's quality management and the development of operations to achieve strategic objectives.

The progress of the strategy is monitored annually through the evaluation of the set milestones

and their implementation. The Management Board, the Education Development Group, and the Research Development Group act as management forums in which the progress of the objectives is assessed and agreed upon. The rule of thumb the Management Board is to make documented decisions, and the Education and Research Development Groups are meant for less formal dialogue between rectors and leaders of the units. In addition to the above-mentioned groups, HAMK also has several development groups that cross unit boundaries. Their task is to develop strategically important, thematic, and HAMK-wide activities (e.g. LeaD team, Guidance Counsellor Group, RDI Support Team).
Development needs of the management system have been identified through the quality system. The management system has been simplified and procedures have been harmonised, accordingly. The number of separate layer of documents that guide and report operations has decreased significantly as a result from active digitalisation.

Strengths

Harnessing information systems as a tool for achieving objectives.

Systematic competence development practices.

Using PowerBI tools to support knowledge management.

Enhancement areas

Development of data architecture.

Developing data literacy and the culture of knowledge management.

3.1 Using the quality system in strategic management

- Auditointiryhmän arvio

A clear strategy serves as a roadmap for HAMK's development plans

HAMK has a clear strategy, laid down in the Strategy 2030 document, which was developed in a participatory process led by the Board and the Rector's team. It is published on HAMK's webpage and outlines the institution's strategic goals related to its core processes of education, RDI, societal impact and international cooperation. Strategic goals are translated into achievable and measurable objectives, the process towards achievement of the set goals is monitored through defined qualitative and quantitative indicators, as well as regular review processes at all organisational levels. Furthermore, a well-elaborated BI system supports the implementation of HAMK'S strategy.

Quality policy and Quality management form the backbone of HAMK's quality work

HAMK's Quality Management is firmly embedded into a quality framework of the ***pdca*** *cycle;* not only representing the Deming cycle, but according to the audit team's experiences, also standing for ***p****eople and* ***p****olicy,* ***d****ialogue and* ***d****evelopment,* ***c****ommitment and* ***c****ollaboration and* ***a****mbitions and* ***a****ctions* as proprium of the institution.

The institution's quality policy, which is publicly accessible on HAMK's webpage, stipulates that quality means "*doing the correct things right the first time" (sic)*. Thus, quality work at HAMK implies active use of the QMS tools, commitment of all staff to strategic and quality goals, and a constant "quality dialogue" across the institution as was confirmed in the interviews by staff and students. The staff recognise that the steady contribution to the further development of quality by everyone's (daily) work is crucial for fulfilling the institution's quality policy and strategic ambitions. Quality, as a shared responsibility, is a principle of HAMK's mission, both as education provider and research partner.

Quality actors at all institutional levels, and their responsibilities, are clearly defined and transparently communicated to all stakeholders: the Rector of HAMK as head of the Quality Management Development Team, bears the overall responsibility of the institution's quality system; the quality manager takes care of coordinating quality work at the different organisational levels such as Schools, Research units and Support services. Students have a strong voice in quality management ("we are heard" as student representatives mentioned in the interview), being part of various institutional bodies and through involvement in processes and feedback circles.

A system of multi-faceted QMS tools fosters strategic management and the profile of the institution

A well-designed BI system, management principles such as Management by Objectives (MBO), competence and knowledge management, clear processes, guidelines, and a comprehensive feedback system form the basis of HAMK's Quality Management. The system, that has undergone a steady, long-term development since its first implementation, with decisive quality enhancement steps having been taken since the last audit, as mentioned in the self-evaluation report and in the interviews – focuses on three clearly formulated objectives: to foster the realisation of HAMK's strategic goals and objectives, to ensure uniform operations throughout the institution and to support evaluation and improvement of operations.

Regular reviews of the system ensure that the institution's quality management remains efficient and target oriented. The comprehensive information – data, results, and reports – which is provided by HAMK's BI system, is systematically used in monitoring and evaluating strategic goals and testifies to the achievement of the set milestones. Monitoring is supported by an easily accessible and recently remodelled STARA 2.0 tool that transparently tracks the progress of tactical goals and objectives and visualises the progress of achievement. The management team confirmed the major value of this system and the information provided even though there is a tendency of data overload that may overlay analytical aspects necessary for improvement activities.

The various tools that HAMK has implemented into its QMS support has sharpened the institution's profile as a recognised work-place -oriented Higher Education Institution, with special focus on competence and practice-orientation. Among these tools, which were appreciatively mentioned by internal and external stakeholders in the interviews, are, e.g., profiling, labour-market surveys, feedback from academic and industry partners, alumni, staff and students. Well prepared staff performance appraisals, which are done annually, are a useful and efficient way to link strategic objectives to personal tasks and needs and are highly valued, as the audit team learned in the interviews. The comprehensive feedback system ensures that input from internal and external stakeholders alike is captured for further development of quality and the quality system. The strong students' voice in the institution's quality dialogue was confirmed in the interviews.

In the interviews, staff from different units and levels confirmed that their work is guided by HAMK's strategic goals and the institution's quality policy principles. Quality issues have become a "set topic" in meetings at all levels, which underlines that quality and quality orientation are firmly incorporated in HAMK's DNA. The audit team gained convincing evidence that HAMK uses its solid and well-developed Quality Management System both for strategic management and further development of the institution.

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

- Korkeakoulun itsearviointi

The strategy guides competence development

Competence is a slowly-developing capital, and its maintenance is given constant attention. **Competence management** and development are based on strategic objectives and feedback produced by the quality system. Future competence needs are identified in continuous profiling work and interaction with stakeholders. The competence needs of teachers are altered, for example, by rapid changes in the labour market, digitalisation and an increase in the number of students and their diversity.

The **competence mappings** carried out every two years provide information on the state of staff competence, and the areas that are most important from the perspective of the strategy. The competence mapping enables each employee to see their development areas in relation to the learning outcomes set for the task. The results of the competence mapping will be reviewed in the performance appraisal, and areas requiring improvement will be agreed on.

The offer of the **HAMK 100 training and coaching programme** are planned based on the results of the competence mapping. The programme supports both personal development and the development of shared competence in work communities. The HAMK 100 includes internal and other training, coaching, digital badges, and webinars.

In annual **performance appraisals**, the supervisor and the employee together build the employee's personal goals, which support the employee's job description, development, and strategy. Suitably challenging goals motivate development at work, bring a sense of success, and demonstrate the importance of one's own work within overall strategy. The MBO process will thus become more concrete in performance appraisals and the jointly agreed setting of objectives. The practice has been applied systematically to all personnel since 2006. Stara system has been used to record discussions.

The **overall evaluation system** aims to achieve a fair, just, and motivating pay. In it, the employee's basic salary is determined on the basis of the position, competence, and performance. The overall evaluation makes it possible for a person to influence their pay development. The system has been developed by a variety experts, and is evaluated and updated by an Overall Evaluation Group consisting of representatives of personnel and the employer, and different professional groups.

Recruitment and building **career paths** are a way to acquire strategically important expertise.

Transparency and fairness of recruitment procedures are ensured through open communication and by centralising recruitment decisions on the Recruitment Team managed by HR. The centralisation of activities harmonises implementation and communications, and ensures compliance with legislation and agreements. Recruitment, as a rule, is public. However, in some situations, fixed-term employment relationships can be continued or made permanent without a public procedure. A person can move to other tasks or progress in one's career without recruitment, as competence develops (e.g. Tenure Track).

Well-being is a common issue for the entire work community

Well-being at work consists of the possibility of continuous development and learning, fair and inclusive management, interaction, and opportunities to influence. The work of **supervisors** is a tool for implementing strategic objectives, and they play a key role in the formation of the employee experience. The role description of the supervisors has been reformed in 2021, and the coaching related to this has been launched. Supervisors also have the opportunity to participate in peer mentoring. The aim is to move from administrative supervisory work to preparatory work that enables employees to flourish. Supervisor work is measured as part of workplace well-being measurements.

The well-being of personnel is **measured** systematically by various atmospheric measurements. The ParTy (better work community) measurement is performed every two years, the Pulse surveys on a quarterly basis, and the risk management survey every four years. During the pandemic, Pulse surveys were conducted more frequently. The risk management survey includes sections for measuring cognitive ergonomics and coping at work. The results of the measurements related to well-being at work are regularly reviewed together with the occupational health service provider in steering group meetings, as well as with the entire personnel. The results of the ParTy survey have been reported to the BI system.

HAMK offers broader occupational **health care services** than statutory ones, the possibility of **flexible working hours**, and good opportunities for **sports services**. The aim of the **active support model** is to promote the well-being and health of employees, to prevent the loss of work ability, to increase the functionality of work communities and to have a positive impact on the work atmosphere. In 2019, the Knowledge Work Ergonomics **project** was implemented together with occupational health care. HAMK has annual **communal events** for the entire personnel, such as annual Personnel Days event (1-2 workdays) and Christmas events.

Well-being at work and equality are supported through **occupational safety activities**. Occupational safety is responsible for improving the working environment and working conditions, and ensuring that the personnel's work ability and health are maintained. HAMK has two occupational safety representatives.

Strengths	Enhancement areas

All functions of competence management are interlinked, each supporting the development of a person’s competence and enabling the implementation of the strategy.

Utilisation of the BI system in the development of personnel competence.

Various expert groups are involved in the development of the activities.

Verification of impact, collection of data in order to assess success of well-being measures.

Informing people more openly about career paths through personal competence development.

Equality procedures exist, but indicators require updating and implementation has not yet been completed.

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

- Auditointiryhmän arvio

Doing the correct things right the first time means having the right competences

HAMK's motto for its quality policy "*doing the correct things right at the first time"* implies having the right competences to fulfil one's tasks. Thus, constant and well-targeted competence development plays an essential role in the institution's strategic management. To this end, HAMK has set up various procedures and processes to capture competence development needs of its staff and uses a variety of tools to continuously monitor both individual as well as institutional competence development. Regular and well-prepared staff performance appraisals and personal meetings help defining individual competence needs and setting personal targets and milestones. Competence mapping and HAMK's *Competence Tree* are diligently used tools to follow both development areas and outcomes achieved. In the interviews, staff also referred appreciatively to HAMK's system of mentors and supervisors for personal guidance, as well as the encouragement for "taking the extra mile" with up-skilling courses or even doctoral studies. The opportunities for experiential teaching and project "experiments" provided by HAMK's Design Factory are valuable means for innovation and personal learning and considered as an asset of HAMK, as the audit team learned in the interviews.

To cater for the rapidly changing pedagogical needs, driven by a dynamic labour market and progressing needs for digital learning, HAMK provides a specific training and coaching programme – HAMK100 – as well as the system of "digi-edu". Labour market surveys and feedback from external stakeholders and partners also serve up-dating competence needs in order to aid graduates in a successful integration into the job-market. This information, too, feeds back into the competence development plans for HAMK's teaching staff. The audit team could learn in the interviews that individual and collective learning for competence development of staff is well supported by HAMK's various measures and initiatives, and that the set of tools, including plans for competence development, forms a comprehensive "living system" of recognised value for all staff members. Furthermore, staff also referred to the "competence gain" stemming from the necessity of providing digital teaching during the Covid-19 pandemic and how helpful "digi-edu" had been in this respect.

Communication, cooperation, equality, and transparency nourish staff's well-being

For HAMK, people are at the centre of all core areas: well-being of staff at work fostered by

fairness and equality, open communication and a motivating work environment are key elements for human resource management. Supervisors help shape employee experiences, surveys are used to capture employee job satisfaction and arising needs for further development. Well-being is closely connected with equality and equal treatment at work and promoted by removing physical, mental and social barriers within operational environments and the practices of working. To prevent any form of discrimination and ensure that each person that is part of HAMK ”can study and work on an equal footing with others, regardless of the individual’s personal characteristics” (sic Guidelines), HAMK has comprehensively laid down the scope and principles for equality in specific documents (Equality Plan for staff, Guidelines on promoting equality among students and applicants) and published them on HAMK’s webpage. The implementation of equality principles for students and staff is monitored and periodically evaluated.

Specific surveys, in the self-evaluation report, referred to as ”atmospheric measurements”, such as PULSE or ParTy, are regularly used to measure staff well-being; the results of these surveys also feed back into the BI system and are used in HAMK’s strategic management. Specific indicators for well-being measurement might be supportive, particularly for strategic management, and are therefore recommended by the audit team.

The staff expressed explicit appreciation for HAMK’s caring attitude for their well-being and competence development, and mentioned the various services offered, such as healthcare and sports services, the flexible working hours, as well as multiple opportunities of cooperation, teamwork and learning from each other. HAMK’s actively practised “open door policy”, regular team meetings and collegial support also contribute the well-being of staff.

Open communication ensures fairness, equality and transparency within HAMK’s work community, and for all institutional processes. Recruitment procedures and requirements are openly communicated and based on centralised decisions. In the interviews, staff convincingly confirmed that they feel well supported according to their needs and value the pleasant and stimulating working atmosphere at HAMK, that fosters their well-being, equality and personal development.

3.3 Functionality and development of the quality system

- Korkeakoulun itsearviointi

HAMK's **quality system** forms a cycle of management, planning, and implementation, as well as monitoring and development (PDCA). It ensures that the activities are in line with the objectives and that the activities are continuously evaluated and developed. The quality system covers HAMK's basic tasks and support functions and is closely linked to management and resource planning. This strengthens the functionality and coverage of the system. Labour market, students, and staff participate in the development of HAMK's activities through the feedback system and evaluations. The students are represented in the HAMK Board, the Management Board, the Quality Management Development Group, and other development groups.

HAMK's strength is the **long history** of the quality system and quality culture. Quality concerns all at HAMK. **Students,** as an integral part of the HAMK community, participate in quality development as part of the procedures in their studies. Each HAMK **employee** participates in developing and maintaining quality in their own work by working towards the objectives, following agreed practices, utilising BI data and feedback, and on the principle of continuous improvement.

HAMK's **operating culture** supports and promotes the sharing of good practices, shared learning, and co-creating. The sharing of good practices takes place through cooperation, management, and the activities of development groups (e.g. LeaD Team, Language and Communications Team, Guidance Counsellor Group, RDI Support Team). The groups work together to learn and develop, and group members share their knowledge with their own units and stakeholders. Shared learning and sharing of competence are supported in everyday management work, as well as through work community communications and digital platforms.

Development projects are a means of increasing and sharing competence. The joint, annual **Personnel Days event** focuses on the selected strategic theme. **HAMK 100** programme supports the sharing of good practices.

An example of more extensive implementation of good practices is the development of the quality of module implementation, with the concept of Design Quality for Module Implementation and the support of the LeaD team, which began with the development of online teaching and has expanded to cover all education implemented as modules.

Quality system procedures guide and produce information

The **instruction system** ensures comprehensive smoothness and consistency of the work. The guidance, validity, and coverage of the instructions vary appropriately. The instruction system supports management, supervisory and operational work. The persons responsible for the various

functions maintain instructions in their area of responsibility.

Information is collected on the state of operations. Information is generated on the implementation and quality of HAMK's basic tasks, the implementation of the strategy, and the funding indicators set by the MoEC. The knowledge base is utilised to support management and resource planning.

Peer **reviews,** external **evaluations,** and **self-assessments** enable shared learning and development. **Feedback** procedures help identifying development areas in a targeted manner. The feedback system is extensive and analysing feedback data is a part of basic activities. The amount of feedback data in terms of quantity and time span is rich. As the amount of data is abundant, HAMK selects and utilises the data relevant to be analysed in deep. The feedback system identifies the needs for delimitation and clarification.

Quality system is developing

Staff is committed to quality work. Quality management mechanisms function well, and the system is constantly being developed. The foundation and key procedures of the quality system have remained for decades, but the description and operations are **adapted** to the needs of the constantly changing operational environment dynamically and in communication with stakeholders.

The quality system has been developed on the basis of **feedback** received from FINEEC audits, other external evaluations and information produced by quality work related to management and resource planning. Quality system has been digitalised in relevant procedures and processes. The description of quality management has been clarified on the new intranet. Internal communication related to quality has been increased. The goal-oriented approach has been strengthened by the reform of the MBO's information system. Operating instructions have been streamlined by lightening the guidance system and reducing the number of individual instructions. The new intranet serves as a staff interface for the instructions, and its implementation is partly under way.

The importance of quality management has been emphasised through resourcing: HAMK has a full-time Quality Manager, and a Team of Quality Contact Persons from each unit has been established to support the quality work of the units. The activities of the Quality Management Development Group have been sharpened.

In 2019, the inclusiveness of stakeholders was strengthened, based on the results of the labour market audits of research units and modules. The evaluation results were one factor leading to HAMK board discussing with stakeholders more regularly than earlier. Strategic communications on research units have been strengthened, and customer and partnership management and feedback surveys have been developed (CRM system reform, utility indicator). The integration of campuses into their local community is promoted through joint experiments (e.g. Riihimäki

Robotics).

Strengths	Enhancement areas
The long history of quality management and the formed committed quality culture	Need to further increase explicit quality dialogue
Willingness and the ability to develop the system and operations into the digital era	The feedback system produces data in such quantities that it cannot be utilised in all respect
Management commitment, functional organisation of QA and resource allocation	Balancing the impact of feedback from stakeholders in the complex operating environment

3.3 Functionality and development of the quality system

- Auditointiryhmän arvio

A solid and comprehensive quality management system frames HAMK's core processes

HAMK's quality system is based on the principle of continuous improvement of all its core areas, strong stakeholder involvement and an actively supported quality dialogue as main drivers for improvement and development. Stakeholder involvement and quality dialogues are key in enhancing the quality of education, research and innovation to foster competence development and HAMK's societal impact and engagement. Close linkage to strategic management and planning, regular monitoring and reviews of quality cycles and core processes, integration of various forms of feedback and shared responsibility for quality development clearly shape HAMK's quality management system. The interviews with representatives of various units, including different support services, provided evidence that a common understanding of quality, and each individual's contribution to it, is well grounded in the institution.

Strategic management, which is built on the pillars of management by objectives, competence and knowledge management is diligently supported by HAMK's BI system and fosters goal orientation and further development. Examples of quality dialogue as mentioned in the interviews are teamwork, common data interpretation, as well as various forms of feedback, and a regular integration of quality issues in meetings and personal contacts. The staff also referred to the process for co-creation of modules and the sharing of good practices across departments as examples of quality dialogue, which create an immediate impact on the quality of education and stimulate innovation in teaching, learning and research. All forms of quality dialogue also help recognising development needs both on an institutional and individual level and foster participation in quality management.

HAMK's quality management as a breeding ground for quality culture and enhancement

Continuous improvement ensured by a smooth and well-guided *pdca cycle,* participation of internal and external stakeholders in quality work and feedback, shared learning and co-creation all foster and nourish HAMK's quality culture and a widely shared quality-oriented mindset. Quality management and its tools are steadily further developed, with the digitalisation of the institutional quality management system through the STARA 2.0 system serving as a recent example of good practice. HAMK's readiness to innovate and to improve through the implementation of digital tools, its educational research, as well as its network of academic and business partners, essentially contribute to the institutional quality culture but also to the impact on its core processes of education and RDI. In the interviews it was clearly stated that the use of

educational research results in the ability to better monitor students' learning experience; furthermore, HAMK's participation in and its input to the RUN EU alliance were mentioned as examples for evidence and purposeful enhancement activities. As HAMK has a leading role in regional societal development, outcomes stemming from the EU RUN alliance should be evaluated regarding impact and enhancement opportunities for regional development.

In all interviews, the functionality, the steady further development, the purposeful use, and the positive impact of HAMK's quality management and quality management system were confirmed. The audit team also gained convincing evidence that, at HAMK, quality is considered a shared and common responsibility, which builds on inclusion and participation of all internal and external stakeholders, on transparent information, purposeful processes and tools, and a diligently monitored quality culture throughout the institution. HAMK's quality culture and the steady and long-term further development of its quality management are considerably conceived by a bold attitude, a clear strategy with ambitious goals and "the HAMK community" as was mentioned as an overall strength in the interviews.

3.4 The HEI’s examples of successful enhancement activities

- Korkeakoulun itsearviointi

Sustainable Development Programme

HAMK has the only **SD degree programme** and is the second most extensive **education provider** in bioeconomy, natural resources and food production in Finland. Over the years, numerous national and international **SD projects** have been implemented in RDI activities. **Campuses** have been maintained considering their legacy, and the SD perspectives guide their maintenance and renewal. HAMK owns, administers, and manages significant **forest carbon sinks**.

A **Sustainable HAMK 2030 programme** was prepared in 2019-2020. Board, students and staff were involved. The programme has systematized the integration of SD perspectives in operations. The Sustainable Now! -MOOC attracts over 1,000 students per year. The personnel are supported by information, coaching, and educative events.

SD challenges are solved with companies in **projects** and **theses.** HAMK supports developing countries to develop their national **education systems**, teacher education, and competence to promote sustainability. Over the past three years, 260 SD-topic **articles** have been produced.

SD work is monitored and developed by a **multi-disciplinary team,** supported by a coordinator. The annual progress of the targets are **self-assessed**, and SD performance is **measured** in the GreenMetric World University ranking. (2019: 78/780; 2020: 35/912; 2021: 14/956.) **Reporting** on environmental impacts is part of the financial statements and annual reports.

Developing a competence mapping to support competence management

Competence mapping provides information on HAMK’s competence capital to support strategic decision-making and personal performance appraisals. Competence mapping indicates where HAMK’s competence should be strengthened. The **competence tree** with strategic competence areas was built in 2016. The first competence mapping was carried out in 2018. It was utilised to identify organisation-level demands and implemented with the Stara system in connection with performance appraisals. The results were transferred to the data resource and created into reports and indicators for various needs from the competence capital. As one result, the HAMK 100 programme became more utility-driven.

In 2020, the competence mapping was implemented again. Prior to the mapping, expert teams updated the competence areas on the basis of previous feedback and clarifications related to

strategic objectives. Competence mappings reveal competence needs and required training needs by competence area, unit, and person. The person sees their own mapping data through MyBI and can, together with the supervisor, plan their own development path in a way that performance at work and the achievement of personal objectives is enabled. Competence mapping is one of the tools that can be utilised when a supervisor performs an overall assessment in accordance with the pay system.

HAMK 100 training and coaching programme

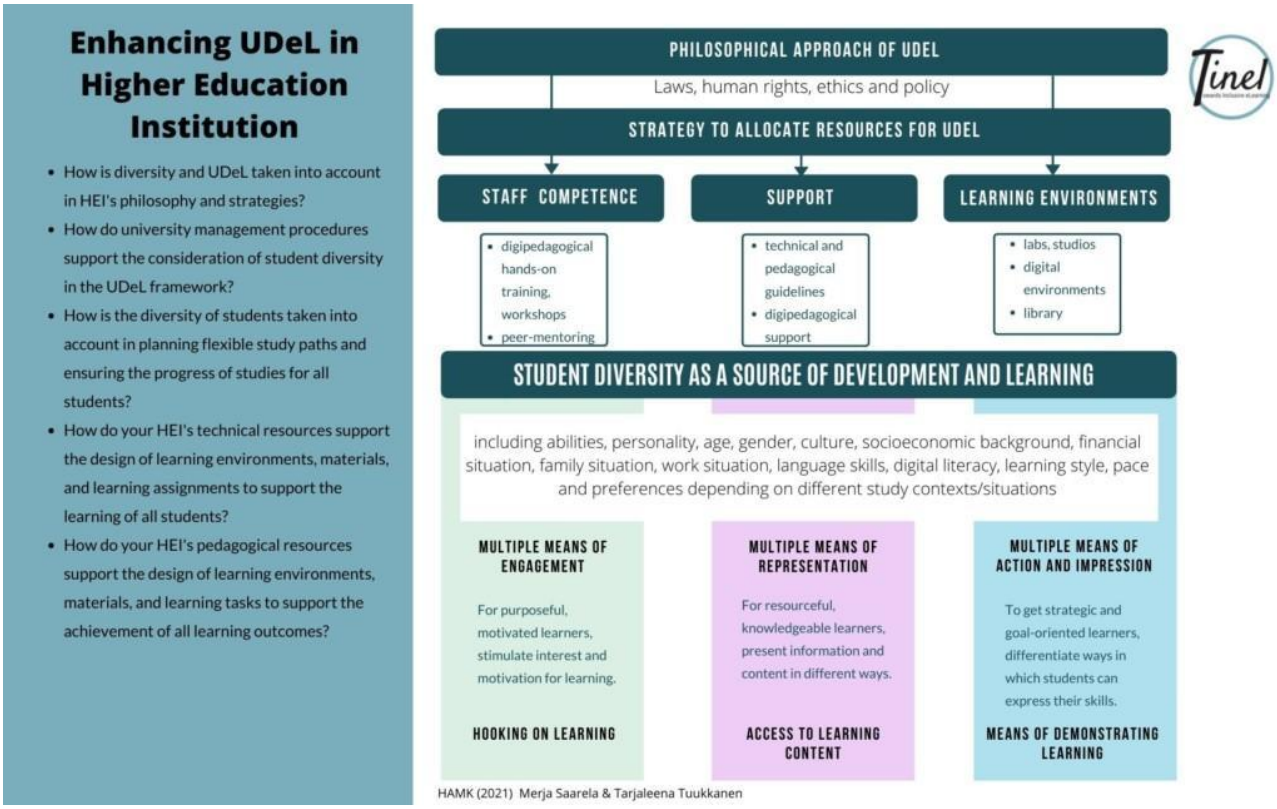
The HAMK 100 training and **coaching programme** was launched in 2017. The programme is for the entire staff (the name refers to 100%) and the areas are related to HAMK's strategic objectives and support their achievement. Originally, the training focused on teaching and research staff, but soon the offer was extended for support and administrative personnel. Different education programmes and units can order tailored coaching and workshops to develop their shared competence.

The effectiveness of the programme is monitored and evaluated by a Steering Group. HAMK 100 is a used and valued method for developing personnel competence. Activities are organised, regular, and well-informed about. Participating is easy and flexible. The programme supported staff to adapt into distance teaching and working due to COVID-19 successfully.

Development of accessibility

The development of digital accessibility is linked to the activities of the Multisensory Environments and Assistive Technology **research group**. In the beginning, accessibility focused on multisensory opportunities in learning environments and assistive technology solutions. With new legislation and LeaD activities, development areas were systematised into strategic activities.

The **framework** for pedagogical and technological accessibility is Universal Design for Learning (UDL). The targets are: 1) developing pedagogical and digital competence, 2) developing pedagogical and digital support services and 3) developing digital learning environments. The goal is easy access for everyone to remote workspaces, participation, various digital materials, presentation materials, documents, and their contents.



The structure of HAMK **website** and the Moodle **learning environment** has been created accessible, with ReadSpeaker supporting the accessibility of content. The personnel's accessibility **skills** have been strengthened with versatile training opportunities and open badges. The work is supported by **instructions,** library's accessible **materials,** Celia cooperation, video **subtitling services**, accessible document and slide **templates.** The Digistart package for students includes familiarisation with assistive technology tools.

4 HEI as a learning organisation

- Auditointiryhmän arvio

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

HAMK chose Design Factory as the evaluation area IV.

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

Strengths

- Through Design Factory, HAMK has created the opportunity of mutually beneficial connections with industry.
- Multi-disciplinarity and the provision of contact points between students and working life well prepare students for their future professional life and translate HAMK's vision of being the most work-place-oriented HEI.
- HAMK's Design Factory is an ideal hub to resolve real-life challenges and cases using the academic strength of the institution and companies' expertise alike.

Recommendations

- HAMK should further develop communication on the benefits of Design Factory to students and external stakeholders to gain more visibility and enhance impact.
- HAMK should focus on building and creating more long-term cooperation with external partners, to enhance education and create a work-life environment to assure sustainable and meaningful impact.
- To fully exploit the benefits that emerge from cooperation with other departments, Design Factory methods and thinking should be consistently integrated into course activities throughout all HAMK.

4.1 An evaluation area selected by the HEI

- Korkeakoulun itsearviointi

The **Design Factory** was selected as a context central to HAMK's strategy to be developed. The DF is visualised in the HAMK Vision 2030 at the crossroads of the Internationalisation and Entrepreneurship and Cooperation focus areas for the year 2021. HAMK DF was established, based on co-operation with Aalto University, as an instrument to support the transformation of HAMK to become an international, active, and modern higher education community, as well as, facilitating co-creation with businesses, the public and third sector.

The international and global collaboration activities with other HEIs and industry in the context of the Design Factory were chosen as the objective of the assessment. Benchlearning with other design factories were chosen as a means to develop international and collaboration activities of the HAMK Design Factory. During the writing of this report there were 34 other design factories that could function as benchlearning partners. inno.space Design Factory Mannheim was selected as the benchlearning partner organisation based on positive experiences gained from international collaboration. The inno.space Design Factory has participated actively in the international activities of the Design Factory Global Network (DFGN) and SUGAR network.

Strengths	**Enhancement areas**
Top management support	International courses organised with other design factories
Design Factory studies are included in the curriculum of HAMK degree programmes	More active involvement with Design Factory Global Network events and activities
Opportunity to create new courses and award credits for Design Factory studies	Partnering with international companies and organisations
A large number of students participate in Design Factory courses and workshops	SUGAR network and 9 months academic programme collaboration

As a result of an online workshop, the strengths and enhancement areas for benchlearning were identified by staff from the HAMK DF and inno.space DF Mannheim.

Top management support and making Design Factory concept visible in the HAMK strategy and vision were perceived as important strengths of the HAMK DF. The inclusion of DF studies in the curriculum in HAMK degree programmes (Bioeconomy Engineering, Sustainable Development, Smart and Sustainable Design) was perceived as an important enabler for involving and attracting students to DF courses. The possibility to create new courses and to award credits for students participating in DF activities were also perceived as strengths of the HAMK DF compared to some other design factories. These strengths were considered to enable large numbers of students participate in DF courses and workshops yearly at HAMK DF.

In contrast, enhancement areas targeted for benchlearning were related to the

internationalisation of HAMK DF. This included areas such as organising international courses with other design factories, becoming more actively involved and benefitting from the DFGN, partnering with international companies and organisations, and finally learning more about the opportunities provided by joining the SUGAR network and participating in the 9-month-long academic programmes.

Benchlearning was found to be a good method to practice continuously learning from other design factories and has inspired the staff to organise future visits and co-host international activities with other design factories.

4.1 Design Factory

- Auditointiryhmän arvio

Design Factory shows promise in bringing strategic goals to life

HAMK has chosen Design Factory as a voluntary evaluation area of the audit. It wishes to further strengthen its role and desire to become a strong and modern higher education institution, as laid down in HAMK's Vision 2030 at the crossroads of internationalisation and wants to learn from others in this respect. HAMK Design Factory is the outcome of a co-operation with Aalto University and serves as an important instrument to support the transformation, HAMK's Design Factory facilitates co-creation with businesses, the public and the third sector. Design Factory, its meds and practices are equally relevant for making HAMK an inspiring hub for innovation, experimental learning and interaction between students and representatives from business life.

As an interdisciplinary product for service design and a learning platform uniting students, teachers, researchers and stakeholders Design Factory is a strategic focus area. Design Factory brings diverse perspectives together into a dialogue and put the customer and the user (of services) with the human aspects at the core of the strategy through design thinking.

As Design Factory's goal was described earlier and elaborated further in the audit interviews, what makes Design Factory unique is the design thinking as its core, as well as the nature of Design Factory as an evolving concept, which is never finished, complete or ready, rather inviting to explore, experiment and engage with empathy. In the interviews, the value of Design Factory was described as follows: "No other person can give you the right answers and solutions beforehand, rather one needs to explore and experiment to find what works and adapt accordingly. In doing so, one needs to use empathy, for the students that are the centre of the activities, the teacher-facilitators and other stakeholders involved in the learning environment." Therefore, Design Factory and its staff invite everyone to use one 's inner guide when working with people and to try to consider and see issues from others' perspectives, helping one to arrive at solutions that are good from the perspective of those people involved.

These sentences reflect well on design thinking, which inspires Design Factory activities, as the core of design thinking is the aspiration and attempt to put empathy at the heart of RDI work. This is an ambitious and interesting starting point also from an international and multi-disciplinary perspective.

Design Factory is seen as a joint venture with multiple benefits

During the audit visit, Design Factory was discussed in interviews with various groups of teachers and students. Design Factory enjoys the support of HAMK management and students alike, and it has also great potential for becoming both internationalised and localised (through curricula

across various departments). The feedback was considerably positive and described Design Factory as one of the best HAMK innovations in the past years. To fully exploit the benefits that emerge through cooperation with other departments, Design Factory methods and thinking should be consistently integrated into course activities across HAMK.

The audit team was impressed by, how Design Factory and its methodologies are already integrated into the Bio economy Engineering, Sustainable Development, Smart and Sustainable Design courses, and they represent the great practical use of the skills and knowledge obtained in students' main course. Therefore, integrating it into more modules would be strongly encouraged. This could also encourage further multidisciplinary projects and encourage people with different backgrounds to develop solutions together.

Design Factory of interest both for regional and international networks

Design Factory was recognised as a good medium for creating connections in business and making potential internship opportunities for students and recent graduates. Students are offered the opportunity to find new solutions and experiment as part of the module teaching. The atmosphere that this part of the HAMK was offering to its staff and students encouraged them to develop cooperation with EU programmes and offer a good platform for further development.

More cooperation with colleagues from regional and international network is encouraged, such as the currently running RUN EU alliance, aiming at jointly developing cutting-edge teaching, learning and research between seven regional universities across Europe, to meet the future competence needs. Over the course of the three-year project, RUN-EU seeks to deliver short and flexible student and staff mobility measures, as well as to create research collaboration and research groups, introducing doctoral paths, planning and implementing double and joint degrees, and also building joint administrative structures. So far, mainly short-term cooperation activities and measures were created in the past years, focusing on one case or task. Changing the focus to more long-term cooperation with industry partners could significantly benefit both sides.

The Design Factory bears the potential of becoming the unique selling point for all courses

In the interviews, the audit team heard how closely integrated into mainstream activity Design Factory already is, as it is currently embedded in almost every study programme, and every course includes at least one course in Design Factory.

Design Factory clearly has already been a great investment for HAMK's students and staff. There is more space however for better communicating all the benefits that Design Factory can offer to students, staff, as well as the local business community and societal stakeholders. Students are already aware of the existence of Design Factory, though some were not sure about how they can get involved and what they can expect from the experience. Further development of this

communication could greatly help further involvement and engagement of more students and staff on new projects.

5 Benchlearning

- Korkeakoulun itsearviointi

The benchlearning focuses on the Design Factory (DF).

Design Factories implemented in other UASs were chosen as target groups. Discussion was started with two potential partner organisations, which were similar in the size of the staff and whose DFs had been established relatively recently. The Porto Design Factory was established in 2015 at Porto Polytechnic in Portugal and the inno.space Design Factory Mannheim was established in 2018 at Hochschule Mannheim in Germany. To gain a better understanding of the partners a visit to the Porto Design Factory was organised and the planning of a joint course with the inno.space Design Factory Mannheim was started.

The planning with the inno.space Design Factory Mannheim resulted in a joint course titled the International Product Development Project, which was organised from 16th March to 6th July 2021. The course included weekly co-teaching and co-planning together with the inno.space DF Mannheim. Based on these experiences inno.space DF Mannheim was selected as the partner organisation as both parties identified good practices that could be learned from each other.

HAMK's objectives included to learn:

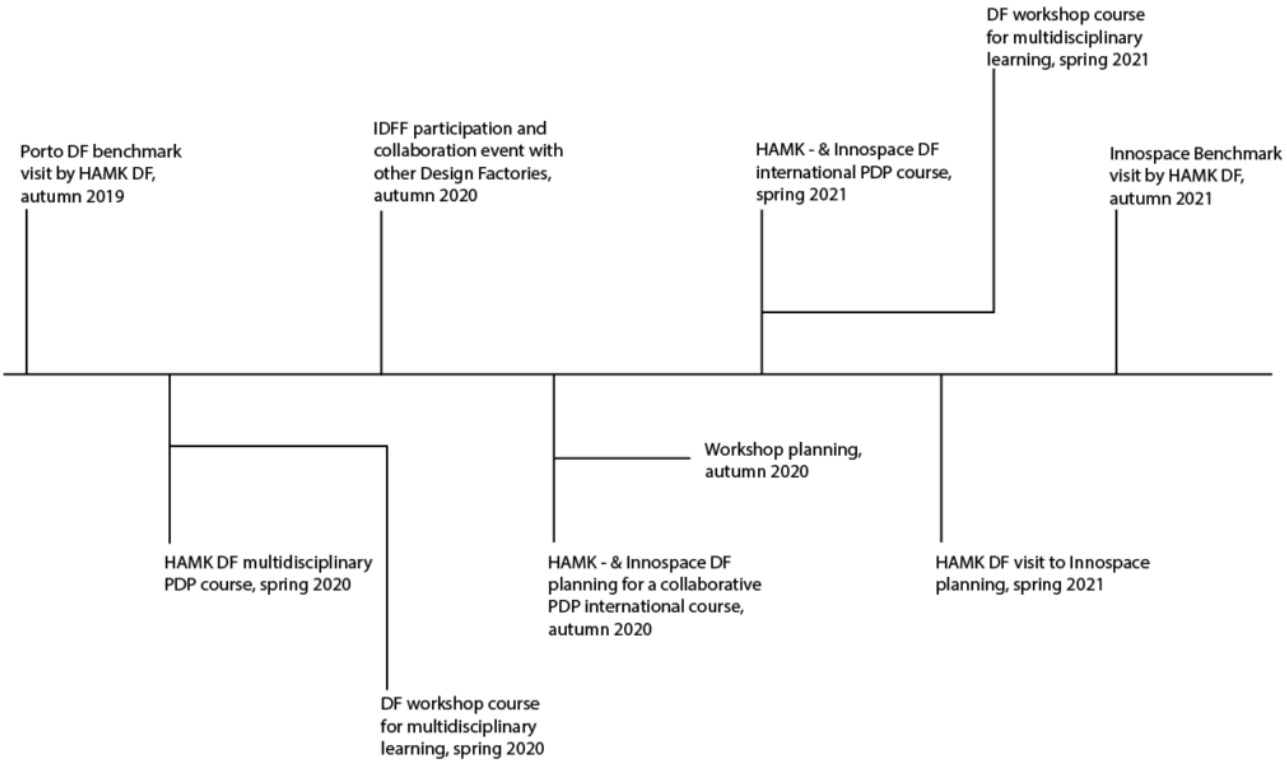
- good practices for organising international courses with other design factories
- about hosting and facilitating international Design Factory Global Network (DFGN) events and activities
- how to partner and organise university-industry collaboration with international companies and organisations
- about the SUGAR network and how HAMK could participate in the network and in ME310—a 9-month-long master's level programme on global innovation that inno.space Design Factory Mannheim started in 2014 in collaboration with Stanford University.

Inno.space DF Mannheim's objective was to learn about how to scale student projects to involve larger numbers of students in their DF courses and workshops.

The benchlearning was implemented by: 1) physical visits, 2) joint teaching and learning, 3) online meetings, and 4) workshops. Physical visits included observations and interviews with DF personnel and some joint teaching and learning activities. For example, HAMK DF staff participated in the teaching of an international bootcamp organised by inno.space DF Mannheim.

In addition to visits, inno.space Design Factory Mannheim followed the planning and implementation of a multidisciplinary product development project organised by the HAMK DF. Also a joint planning and implementation of an international product development project involving students from both UASs took place. Online meetings were organised to plan and

implement the teaching activities and to facilitate benchlearning visits.



The first activity was a benchlearning visit to Porto Design Factory by Senior Lecturer **Ville Siipola** and Senior Lecturer **Jaakko Vasko** from HAMK.

Discussions with inno.space Design Factory Mannheim resulted, first, in inno.space DF Mannheim staff following the launch of the HAMK DF multidisciplinary PDP course by participating in Zoom teaching sessions. In the International Design Factory Festival it was agreed that the HAMK DF and inno.space DF Mannheim would together organise an international product development project to deepen their collaboration. This course took place fully online during the Covid-19 lockdown. Co-teaching was planned and implemented using Slack, Google Drive, Zoom, and Mural platforms.

When the physical lockdowns were removed, a benchlearning visit to inno.space DF Mannheim was organised. Participants in the benchlearning visit included Technical Specialist **Markku Mikkonen** and Marketing Assistant **Jali Närhi** from HAMK, and Teaching Team Member **Clara Dieing**, Teaching Team Member **Damien Wrobel**, Prototyping and Workshop Assistant **Manuel Walter**, Professor **Peter Kaiser** and coordinator Professor **Kirstin Kohler** from inno.space DF Mannheim.

The implementation of the benchlearning process was successful. Observations from the visits to the Porto DF and inno.space DF uncovered answers to important questions set beforehand, but also revealed some surprising findings. The challenges of attracting students to join the DFGN

and SUGAR projects in the Porto DF and inno.space DF were a surprise for HAMK staff considering that they both have a longer history of successful projects. It turned out that the inno.space DF Mannheim cannot award credits independently, which necessitates conforming to what has been agreed with particular Mannheim degree programmes. Furthermore, the inno.space DF Mannheim was unable to award credits for their workshops, which in practice meant that they are extra work for the students. Even with these limitations, inno.space DF Mannheim has been successful in launching several joint international courses with other design factories.

In HAMK one central limitation was observed to be the participation of master's-level students in the DF courses. International courses organised by the Design Factory Global and SUGAR networks typically necessitate intensive and regular interaction between international and interdisciplinary student groups from different institutions. HAMK master's degrees are, however, organised in the fashion that lessons take place on Friday evenings and Saturdays so that it is possible to study alongside a job. Whereas, international courses typically require travel between different international locations during the working week and can also include several days or a week-long bootcamp event for students limiting potential master's level participants from Finland.

The jointly organised international product development project was able to demonstrate that HAMK bachelor's level students and Mannheim master's level students were able to successfully complete an international product development project for Coffee Consulate in Germany, and despite the difference in study levels, HAMK students were capable of meeting the requirements set for the students participating in Design Factory Global Network projects. Based on these experiences, it was decided to continue the international product development project also in future years.

Good practices of HAMK	**Good practices of the partner organisation**
Close collaboration with degree programmes and research units.	Extensive teaching collaboration with other design factories, e.g. Aalto Design Factory and Tarto Sandbox
Jointly organised studies that are included in the curriculum of the following HAMK degree programmes: Sustainable and Smart Design, Bioeconomy Engineering and Sustainable Development, and the HAMK Design Factory offering.	Actively hosting and facilitating DFGN events including the International Design Factory Week and International Design Factory Festival activities.
Provides the possibility for anyone to do low, medium and high fidelity prototyping in HAMK DF spaces, with tools, materials and other equipment.	Member of SUGAR network (since 2014), which provides the M310 course in common yearly with the content to be shared between other SUGAR Universities.
Students are awarded credits for participating in Design Factory courses and workshops by Design Factory.	Provides the possibility for anyone to do low and medium fidelity prototyping with their space, tools, materials and other equipment.
	Students need to apply for DFGN, and SUGAR network project and applicants are interviewed.

Applied good practices of the benchlearning partner

The most concrete examples of applying new ideas include the already-established international product development project with inno.space DF Mannheim.
Another concrete example to strengthen the international and global collaboration with other HEIs is a student project proposal submitted to ATTRACT phase 2 Developing breakthrough technologies for science and society together with inno.space DF Mannheim and Aalto Design Factory.
Benchlearning also resulted in better understanding of prototyping machinery and approaches that can be implemented in the future investment rounds to provide a lower threshold for students to participate in prototyping at HAMK Design Factory.

Audit team's feedback

Design Factory was also HAMK's benchlearning area, as HAMK did not only want to compare its Design Factory approach to others but at the same time learn from others on how to strengthen the impact of DF projects and experimental learning on teaching and learning. The partners were selected among other UASs who also had established a Design Factory recently. The partners were The Porto Design Factory and inno.space Design Factory Mannheim, both very active and innovative in this field.

The objective for the benchlearning project was to learn good practices for 1) organising international courses, 2) facilitating international DF Global Network activities, 3) learning how to establish university-industry collaboration with international companies and 4) learning more about the SUGAR network, its goals and objectives and also to participate in the network. It was implemented by site-visits, joint courses, online meetings and workshops. The HAMK's concept aims at using the Design Factory as a method in which participants learn from each other in relation to a given topic, identify commonalities and differences, and work out good practices. Hence, the goals of benchlearning were clearly set and the process was carried out systematically during 2019-2021.

During the process, HAMK has learned many good practices, options for improvement were identified and new ideas as to further developing the use of HAMK's Design Factory were gained. One concrete example was to have acquired a better understanding of the prototyping machinery and of approaches that can be implemented in the future investment rounds such as a lower threshold for students to participate in prototyping at the HAMK Design Factory. This means that the focus of benchlearning was on joint learning and the joint creation of content (co-creation) rather than on quantitative comparison (figures, data, facts). HAMK is encouraged to continue the well-established cooperation with international network projects and further develop and expand Design Factory activities.

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.