



# Creating Competence

Strategy of JAMK University of Applied Sciences 2020 - 2030

## Foreword

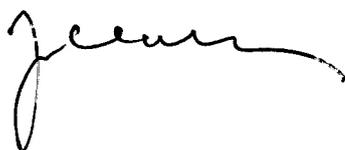
The revised strategy of JAMK University of Applied Sciences is entitled “Creating competence”. This means enhancing the competitiveness of not only our students and clients, but also our personnel by means of new competences. In the future, JAMK will take responsibility into account in all its operations and act in an ecologically, socially and economically sustainable manner.

Significant changes are constantly occurring in the operating environment of the universities of applied sciences, some of which may be unforeseen and come as a surprise. In our view, the most important of these are climate change, the transformation of learning, digitalisation, the growing role of entrepreneurship, new business models, internationalisation and structural change in the higher education institutions. Additionally, several large investments are being implemented in Central Finland, including the New Hospital Nova, the Kangas area, Hippos and the Kukkula area. These investments also offer completely new kinds of development platforms for the new competences generated by JAMK, which at the same time also significantly facilitates their development.

The slow economic growth, social sustainability gap and sparse public funding pose new challenges for higher education institutions. The polarisation of population growth in a few growth centres is also beginning to be reflected in the declining size of younger age groups at the end of the 2020s. The UAS must revise its structures and operating models and improve the efficiency of its operations to ensure high-quality education, research, development and innovation (RDI) activities and other services even in changing circumstances. An essential part of the strategy is the renewal of structures and operating models at the level of the entire institution. We have named this transformation as “Reinventing Higher Education”.

The strategy has been prepared in cooperation with JAMK’s students, staff, external interest groups, management and Board. It takes into account the objectives of the Vision for Higher Education in 2030 drawn up by the Government, the development targets of the Digivision 2030 of Finnish higher education institutions, the principles of open science and research and the steering by the Ministry of Education and Culture.

The Rector/President is responsible for the implementation of the strategy. In support of it, a strategic development programme has been prepared. The results of the implementation are reported to the Board on a regular basis. The contents of the strategy and the development programme are updated annually.



Jussi Halttunen, Rector

## 1. The Operating Environment

The digital economy is expanding further into all fields of business. This is made possible by increasing digitalisation and the availability of network connections everywhere. In the digital economy, services will gradually move online, and traditional productive activity will change through digitalisation. The behaviour of customers has also changed and is still changing strongly. Another important megatrend is the emphasis on sustainable development. Climate change, in particular, extensively affects society as a whole and its various sectors. In education, sustainable development must be taken into account more comprehensively in different professions and their competence needs. This calls for new ways of acting and new kinds of expertise to enable us to promote the change and competitiveness of working life and business and the creation of new jobs. In addition to the above, the main factors affecting JAMK in the operating environment are urbanisation, the decline in the birth rate, the ageing of the population and the need for lifelong learning. Structural cooperation between higher education institutions will be strengthened both in Finland and internationally. The operating environment is increasingly prone to rapid, unforeseen changes that must be prepared for.

In 2017, the City of Jyväskylä adopted a new city strategy. The strategic spearheads are Happy, healthy and participatory citizens, Fresh, growth-oriented business policy, Wise use of resources and the Capital of sport and physical activity in Finland. JAMK is involved in the implementation of the strategic spearheads. We also participate in the strategy work of the other owners where appropriate.

JAMK will continue to be a strong and independent university of applied sciences with the City of Jyväskylä as its main owner. Local cooperation in the region will be increased between different levels of education (the University of Jyväskylä, the Jyväskylä Educational Consortium GRADIA, the Vocational Education Institute of Northern Central Finland, HUMAK University of Applied Sciences) and research institutes (VTT, the Natural Resources Institute

Finland and the Finnish Institute of Health and Welfare). In Jyväskylä, the cooperation will take place through EduFutura cooperation with the university and the Educational Consortium. Cooperation targets include, in particular, the Finnish Music Campus, health, exercise, well-being and rehabilitation, learning and pedagogics, applied cybersecurity and promotion of entrepreneurship and business. New joint study modules will be produced for UAS degrees. New UAS-level courses will be produced for secondary education to facilitate a smooth entry into tertiary education. Additionally, opportunities for making administrative and support services more efficient and higher in quality will be examined.

JAMK will continue to strengthen its activities as an active and high-quality international higher education institution, anticipating changes in the global operating environment. JAMK will form networks for education and RDI activities with its international university and business partners, taking into account the new initiatives of the higher education collaboration in the EU.

JAMK will safeguard the high-quality implementation of education, RDI activity and service business by ensuring the stable development of basic funding. JAMK seeks moderate economic growth through funding from the Ministry of Education and Culture and external financing. The objective is to increase external financing to 30–35% by 2030.

## 2. Values, Mission and Vision

The strategy is entitled “Creating competence”, which means using competences to improve the competitiveness of both our students and our clients. JAMK is a multidisciplinary university of applied sciences that grants degrees in the fields covered by its operating license. It also carries out RDI activities in the corresponding fields and produces services to its clients. JAMK’s operations are characterised by internationalisation, entrepreneurship and high quality.

According to its vision, JAMK is internationally acclaimed for reinventing education and developing competitiveness. The operations of the reinvented institute of higher education are based on responsibility, trust and creativity.

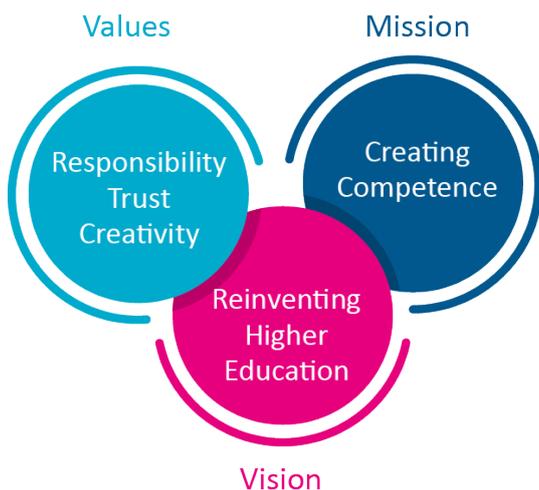


Figure 1. Values, mission and vision.

Responsibility is manifest in the recognition of the themes of sustainable development, well-being, ethics and global responsibility in education and in RDI and service business activities. JAMK is a reliable operator, which means, among other things, predictability, sustainability and high quality of operations. Creativity is a basis that is manifest in e.g. innovative pedagogical experiments and open-minded solutions in RDI activities. Responsibility, trust and creativity are reflected in the operating culture of the UAS community and in the co-creation of the reinvented institute of higher education.

### 3. Reinventing Higher Education

The challenge of reinventing higher education is to respond to changes in learning and in working life and to guarantee state-of-the-art operating practices for the students, staff and clients. The reinvented higher education institution will also respond to the tightening demands of the economy and the need for renewing university pedagogy and RDI activity.

The aim is to form a new kind of higher education institute in Finland and to reform the operating practices and model for a Finnish UAS. The reform

applies to all the operations, facilities and learning environments of the university of applied sciences. The reinvented institute of higher education is an international community that is digital, virtual, versatile and entrepreneurial and facilitates continuous learning. It is a partner that enhances competences and competitiveness for working life and educational partners both in Finland and abroad.

A reinvented institute of higher education takes responsibility into account in an ecologically, socially and economically sustainable manner in all of its operations. Ecological sustainability will be promoted by building a sustainable and responsible campus. Learning and competences will be focused on the themes of sustainable development, ethics and global responsibility. The solutions and innovations resulting from RDI activities will be used for promoting sustainable well-being, reduction of the carbon footprint and transition from greenhouse gas emissions to a neutral economy. Social sustainability will be strengthened by building an active and prosperous campus community that promotes equality, ethics, accessibility, and social interaction and effectiveness.

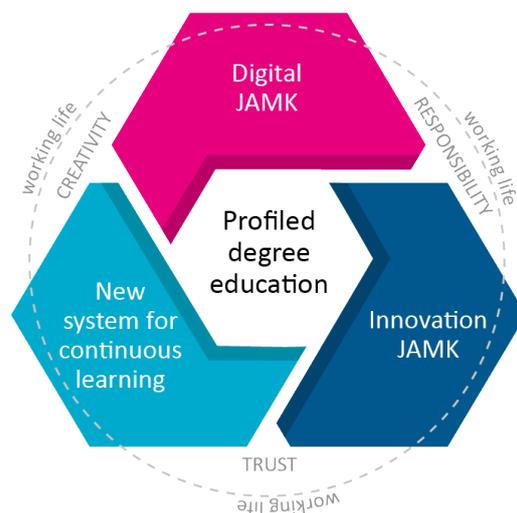


Figure 2. Reinventing higher education

JAMK's high-quality pedagogical competence and the utilisation of research results create a basis for renewal. JAMK has already been active in fields such as online education, teaching people who study alongside their work, international activities and education export. Research and the opportunities

offered by digitalisation, such as artificial intelligence and learning analytics, will be utilised in pedagogics. Due consideration will be given to the new competence needs created by the transformation of working life. The development work is supported by the EduFutura cooperation with the University of Jyväskylä and the Jyväskylä Educational Consortium.

JAMK offers open and digital learning and cross-institutional study opportunities of high pedagogical quality in Finland and abroad. The learner is supported by means of digital guidance and electronic student services, which are built on the foundation provided by the learner's MyData and the national data repositories created as a result of the Digivision 2030 work carried out by higher education institutions and the common service system of the educational system. JAMK is part of the common digital service environment for higher education institutions, and the accessibility of its education will be improved.

As a reinvented institute of higher education, JAMK is a key operator in the Jyväskylä city of education concept, in the innovation ecosystems and development platforms of the region and in European cooperation. JAMK supports the development of business in the region through regional, open learning solutions and by strengthening research, development and business activities on the most important development platforms as well as the competence capital they need. All activities are guided by the principles of open science and research, good scientific practices and the consideration of the goals of sustainable development. JAMK's RDI activities are client-centred and effective and have a renewing effect on working life and education.

## 4. Focus areas and emerging fields

JAMK has chosen the focus areas and emerging fields based on the needs of the operating environment and the gathering of the competences of JAMK and its partners into competitive centres of excellence. The focus areas and the emerging fields are multidisciplinary, combining several of JAMK's competence areas.

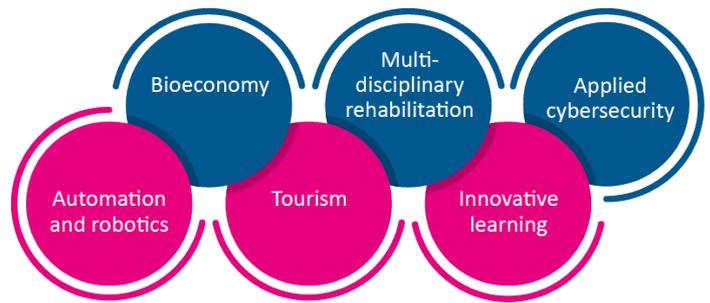


Figure 3. JAMK's focus areas and emerging fields

The focus areas are growing and known at the national and partly also the international level. Each focus area has a significant education task, focused RDI activities and professional service business activities. The focus areas and the emerging fields are consistent with the objectives of the Jyväskylä region and the Regional Strategy for Central Finland.

### 4.1 Focus Areas

#### Bioeconomy

JAMK promotes the development of a sustainable and profitable bioeconomy in society. The vision is to create a centre of excellence in bioeconomy, whose activities put special focus on the utilisation of new technologies and circular economy solutions as well as management and marketing competence. JAMK's extensive substance competence in bioeconomy (agriculture and forestry, energy and water) is a strength that enables broad-based education and business cooperation. JAMK's reinvented Bachelor of Natural Resources programme focuses on business competence in the field of natural resources. The Bioeconomy Business Accelerator creates a pathway to growth in global business cooperation, generates new business in the region and opens a pathway for students to innovative growth companies. Alongside these, special effort is placed on integrating automation, robotics, digitalisation and cybersecurity as part of education and RDI activities. JAMK will strengthen the bioeconomy campus in Saarijärvi and the position of the Bioeconomy Institute as a regional centre of excellence.

#### Multidisciplinary Rehabilitation

JAMK is internationally acclaimed as a reinventor of multidisciplinary rehabilitation. We produce nationally and internationally valued rehabilitation competence by means of research, development and

education in response to the changing needs of society. We are a significant developer of rehabilitation models and methods and a reinventor of rehabilitation competence both nationally and internationally. The focus area focuses on active lifestyle and physical rehabilitation, client/service guidance and rehabilitation processes as well as rehabilitation technologies and environments, with the objective of sustaining lifelong working and functional capacity. Building on the focus area, the Rehabilitation Institute serves as a platform for competence, research and business development in which companies, researchers, developers, students and instructors meet. The focus area is a key contributor in the centre of excellence for rehabilitation and is active in the development of the entire national education sector.

### Applied Cybersecurity

JAMK is a significant international-level operator in education, RDI activities and services related to cybersecurity. Our vision is to be a national and international forerunner in new cybersecurity technologies. The development opportunities offered by digitalisation, such as artificial intelligence and data analytics, are applied to JAMK's existing competence in cybersecurity. As part of its special competence, JAMK offers an international-level cyber environment modelling the digital ecosystem in which competence development and RDI activities can be carried out on a broad scale. The cybersecurity competence is applied in response to the needs of public services, the finance sector, health care, manufacturing industry, critical infrastructure and digital business, among others. The Jyväskylä region will continue its growth as an area specialised in cybersecurity and its applications, constituting Finland's most significant centre of excellence in this field.

## 4.2 Emerging Fields

### Automation and robotics

JAMK invests in competence in automation and robotics. Automation and robotics respond to global changes and megatrends by seeking solutions that increase competitiveness to meet the needs of industry and service operations. Automation, robotics and machine vision are strongly developing areas. The newest development is represented by collaborative robots that can lighten the workload in fields such as

assembly lines, health care and homes. Besides traditional expertise and education in automation and machine vision, JAMK will increase education and RDI activities as well as expert and testing services in the field of robotics. The aim is to improve the competitiveness of service activity and manufacturing in the region through applications in robotics.

### Tourism

JAMK develops education, RDI activities and service business in the field of tourism. Tourism is a nationally significant export sector and an employer that grows faster than the rest of the economy. JAMK's tourism education and RDI activities focus on responsible tourism, digital value creation and creative tourism business. The field has extensive national and international cooperation networks in place to support e.g. the attainment of the objectives of the Lakeland Tourism Area through education, RDI activities and business-specific services. JAMK serves as the leader of the International Centre for Responsible Tourism (ICRT) network in Finland.

### Innovative learning

JAMK is a developer, reinventor and researcher of working life oriented learning and the pedagogical solutions supporting it. JAMK participates in the implementation of the regional spearhead, competence economy, in collaboration with working life. JAMK operates in a working life oriented learning ecosystem and as an expert community in professional higher education. The operations focus on developing, researching and producing new innovative pedagogical solutions by means of pedagogical design and digital environments. A programme of applied research will be created for innovative learning to evaluate and develop methods, solutions and models for working life oriented learning in collaboration with different fields of education and network partners.

## 5. Strategic Development Programme 2021–2024

The objective of JAMK's strategic development is an operating model for reinventing higher education. The key development targets will be addressed through a strategic development programme, the themes of

which include personnel and management, good working life connections, new generation pedagogy, effective RDI activities, quality management and internationalisation. Additionally, service business plays a key role in promoting the effectiveness of the reinvented institute of higher education. Service promises have been defined for JAMK's core operations.

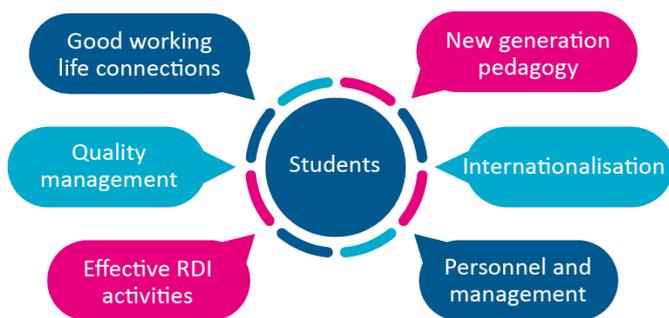


Figure 4. Strategic development programme 2021-2024.

## 5.1 Students

The students participate in JAMK's operations as active development partners. JAMK's partner in the development work is its student union, JAMKO.

JAMK will further strengthen the student-orientation, quality, accessibility, transparency and responsibility of its operations. JAMK will systematically reform its digital learning, guidance and service environments. JAMK will continue to build flexible learning paths and educational offerings, and ensure smooth transitions and procedures for the recognition of prior learning and experience in collaboration with other educational institutions. The opportunities for students to participate in RDI activities will be increased through the Future Factory operating model that connects working life cooperation, teaching and RDI activities. Internationalisation will be facilitated by means of studies pursued in foreign higher education institutions and by strengthening the working life connections of foreign students and supporting employment. JAMK's alumni activities in the schools will be increased.

The well-being of students will be promoted by gradual improvements in student welfare and guidance services. This concerns especially student health care, student sports, strengthening of a sense

of community and other promotion of mental well-being. The working conditions of students will be improved in connection with the renewal of the premises. The needs of all students will be taken into account by developing and improving access to education.

## 5.2 Personnel and management

JAMK develops the competence, occupational well-being and management of its personnel. The development efforts focus on reforming team work in collaboration with the personnel, the strengthening of the digital competence of the personnel, customer orientation and project and business competence. Recruitment and job rotation are central means of renewing the personnel structure. Retirement will increase in the next few years, so particular attention will be paid to competence management and recruitment of key personnel. The competence, motivation and well-being of the current personnel will be promoted through job rotation and diversification of work duties.

The changes in work will pose a challenge to JAMK employees in the future. The changes will be planned and implemented together in such a way that all of the personnel can commit themselves to the goals of the reinvented institute of higher education. The change also poses a challenge to occupational well-being. At the heart of occupational well-being are managerial work, self-management, professional skills and competence, and the promotion of working capacity.

The organisation will be examined annually in line with the strategic priorities. The most essential needs for change pertain to the strengthening of the focus areas, development of administrative and support services, service business, new operating models brought about by international activities, and working in different networks and ecosystems.

## 5.3 Good working life connections

JAMK aims at developing competence and competitiveness in its operating environment through close interaction with its personnel, students, alumni, customers and partners. Stakeholders are regularly consulted on e.g. the planning and implementation of

educational offerings as well as on curriculum and strategy work.

JAMK's societal impact will be increased based on its societal interaction programme. The aim is to develop stronger partnerships and more diverse networks with working life. In the focus areas in particular, development work will be carried out in collaboration with regional, national and international partners.

## 5.4 New generation pedagogy

### Degree programmes

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*" We offer flexible and working life oriented education in an international learning environment."*

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Learning at JAMK is based on a student-oriented approach, learning ecosystems and the application of state-of-the-art technology. Learning activates the students, is diverse, contains modules narrower in scope than an entire degree and is working life related. The education is open, well-profiled and international. JAMK will strengthen its degree programmes in response to the needs of the region and intensify its educational offerings in collaboration with its EduFutura partners, companies, partner higher education institutions and other stakeholders.

JAMK will increase online teaching with the aim of making all courses, student services and student guidance available online during this decade. The information, guidance and counselling services and open learning materials needed by students and clients will be produced using the JAMK DigiCentre.

During the strategy period, JAMK will increase its degree-awarding and English-language educational offerings as well as studies in foreign partner institutions of higher education and strengthen the working life connections of foreign students during their studies to support their employment. JAMK will improve the connections between working life cooperation, teaching and RDI activities by means of the Future Factory operating model, among other things. Operations will be further developed in a student-oriented and student-activating direction. Additionally, the accessibility of the studies and the

use of open learning environments and methods that promote it will be improved. In the change, the needs of different fields and students will be taken into account.

### Continuous learning

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*" We attend to your competence at different life stages."*

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JAMK is a pioneer in continuous learning. In the transformation and changes in working life, the challenge of new learning applies especially to the working-age population. At JAMK, continuous learning services will be reformed and the offerings will be increased, especially in open studies. Opportunities for open UAS studies and cross-institutional studies will also be increased as part of the EduFutura cooperation and in collaboration with other universities of applied sciences and stakeholders, with the aim of guaranteeing open learning opportunities for all. Continuing education for the needs of working life will mainly be increased in the form of online studies. The objective is that working life will make use of JAMK's open online studies and other flexible opportunities for continuous learning on a national scale.

## 5.5 Effective RDI activities

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*" We co-create solutions that renew operations and improve competitiveness."*

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RDI and artistic activities will be pursued both to renew own competence and to improve the competitiveness of working life and business. JAMK's RDI activities produce solutions and innovations that promote well-being and ecological and social sustainability. The commercialisable results will create new business and improve the competitiveness of local businesses. JAMK will support the development of entrepreneurial and business competence and create new businesses in collaboration with the Startup Factory.

The RDI activities that serve working life will focus on JAMK's focus areas. The EU structural funds will remain as the most important source of funding. The focus of funding will shift from regional to national and international funding. At the same time, the significance of research and cooperation with national and international networks and research consortia will increase. The spearhead of JAMK's international RDI activities are development cooperation projects related to education and training.

The aim is to further increase the role of JAMK as an implementer of RDI activities both regionally and in relation to other higher education institutions. Applied research and the further processing of the outcomes of RDI activities into innovations and further into products and services will be increased. In its operations, JAMK promotes the principles of open science and research and the operating models and principles of good scientific practice. Open research results and materials are promptly made available for utilisation.

## 5.6 Service business

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*" We respond to your future competence and development needs."*

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JAMK is a partner of working life in the renewal of services, products and business in different fields. JAMK seeks more extensive and longer-term partnerships and contracts with its clients. The objective is high-quality, profitable and productive service business.

The majority of JAMK's service business consists of domestic education and laboratory services and education exports. Domestic service business is expected to exhibit modest growth in the future. This requires the renewal of service products. Education income will be further increased through tuition fees, on-demand courses arranged abroad and in Finland, international education projects and joint projects. JAMK will expand education exports into a significant part of its service business in collaboration with other operators. JAMK is prepared to establish branches overseas to strengthen exports of education.

## 5.7 Quality management

Quality management supports the attainment of JAMK's strategic objectives, the smooth functioning and effectiveness of operations and the reform of the academic community. JAMK will develop its quality management in response to the needs of the reinvented institute of higher education, anticipating future changes in national and international requirements and ensuring the success of the higher education institution in national comparison and international cooperation. JAMK will continue the international accreditation of its degree programmes and actively develop its quality management on the basis of the development recommendations given in connection with its third audit. The students, clients and partners play an important role in quality management.

## 5.8 Internationalisation

JAMK will continue to be an active international institute of higher education, increasing the number of English-language degree programmes and foreign students, education exports and international RDI projects.

During the strategy period, the international and professional competence of the students and personnel will be ensured and developed in collaboration with high-quality foreign partner institutions. International competitiveness will be improved by increasing strategic cooperation in education and RDI activities. International joint implementations, online studies and flexible study opportunities abroad will be set up in education. As the number of foreign students grows, the students' proficiency in Finnish will be ensured and their employment and integration into society will be supported. JAMK's international RDI activities will be increased in its focus areas and development cooperation.