

# B

## Pedagogical Model 2016

- expertise with smart attitude and joy



Kajaanin ammattikorkeakoulu Oy

Kajaani University of Applied Sciences

# Pedagogical Model 2016

–expertise with smart attitude and joy

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## 1 BACKGROUND OF THE PEDAGOGICAL MODEL

### 1.1 Kajaani University of Applied Sciences' strategy and schools

The strategy of Kajaani University of Applied Sciences (KAMK'24 Strategy) is based on the regional strategies of Kainuu and national education policies. It promotes the status and impact of KAMK within the Finnish higher education system. The strategy will assist in reinforcing regional impact and internationalisation. The vision "Finland's smartest university" cuts through all levels of operation at KAMK. KAMK's area of excellence is smart solutions which are solutions that increase expertise at the international level in the production of new business models, services, innovations and technologies. The schools produce such expertise through the degrees they offer and their RDI activities. The staff is expected to have expertise in teaching, research and development (R&D) as well as regional development tasks.

The staff is expected to have management, interpretation, evaluation and development expertise. Management expertise means that the structures of the curriculum are identified and the staff is organized in accordance with the forms of expertise required by the curriculum. Interpretation expertise is the concrete visibility of the organisation's aims and practices in the work of the staff. Evaluation expertise is visible in the use of progressive assessment procedures and methods: gathering feedback, using it, and making changes if needed. Within development expertise, the staff's research based and development-oriented approach creates new practices.

Since 1.1.2014, Kajaani University of Applied Sciences has been a limited liability company. The operational organization comprises five schools as well as campus, RDI and education services. RDI Services also include Kajaani University Consortium's [Adult and Continuing Education Unit AI-KOPA](#) and the [Research and Education Centre CEMIS](#) specialising in measurement and information systems.

**The School of (Mechanical and Mining) Engineering** is a rapidly developing operational area of excellence (also includes the construction engineering degree). The school's profile is production systems. **The School of Information Systems** integrates business information management and information technology competence into the regionally and nationally significant Centre for Measurement and Information Systems Research and Education CEMIS. The profile of this school is games and simulations. **The School of Business (and Innovations)** is responsible for business education and it promotes the growth of business expertise and skills in the other schools of education as well as enabling business development. The profile of the school is entrepreneurship and new business opportunities. **The School of (Activity) Tourism** is unique in Finland with its combined activity-based sports and tourism education package. The profile of the school is experiential activities. **The School of Health** is a solidly regional function supporting the region's social and healthcare sector and business development. (Figure 1.)

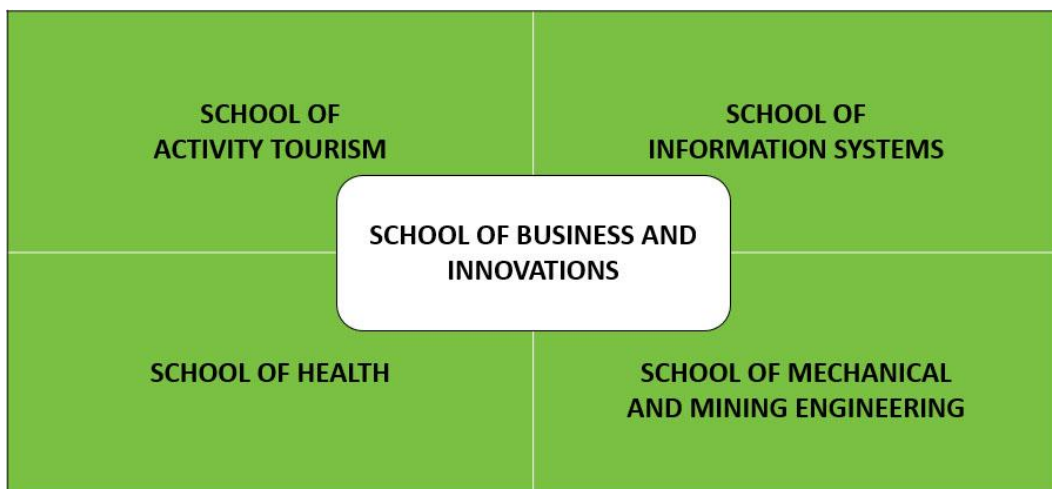


Figure 1. Kajaani University of Applied Sciences' Schools

The school's profile is smart home care. The responsibilities of the development focuses (education, RDI and campus services) are organized in a matrix, where responsibility lies with the development directors and the director of finances and personnel (Figure 2).

The Adult and Continuing Education Unit, AIKOPA consists of Oulu University's Kajaani University Consortium, and Kajaani University of Applied Sciences' continuing education units. AIKOPA offers higher education supplementary training courses, expert and development services in Kainuu, Northern Finland and Ylä-Savo as well as nationally and internationally. AIKOPA implements the areas of excellence of its parent organisations within its selection of services.

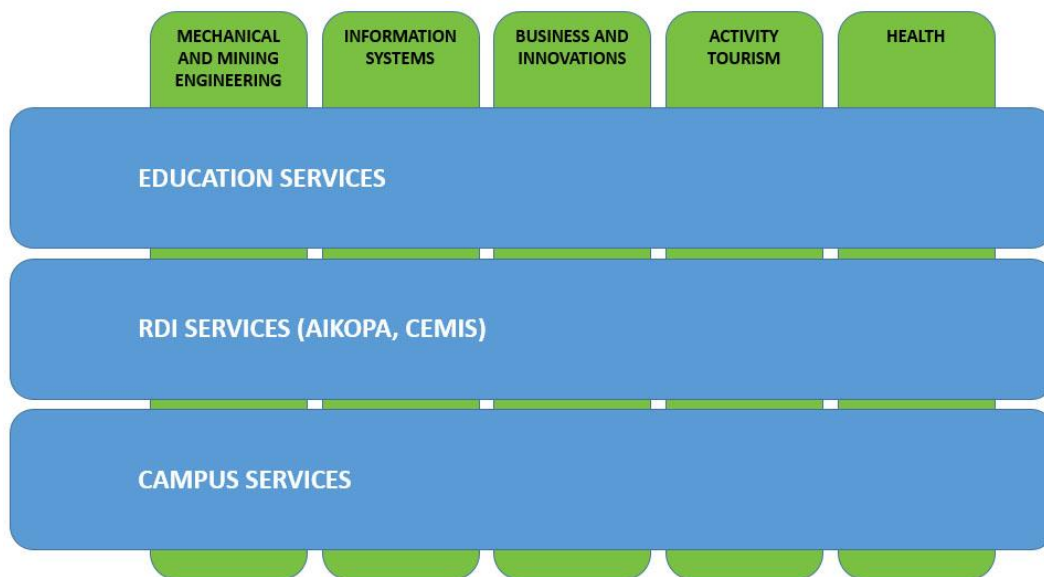


Figure 2. Matrix of Kajaani University of Applied Sciences' schools and development focuses.

The KAMK'24 strategy and reorganisation within the operations of KAMK require new forms of expertise practices among the staff to enable work across disciplines. Cooperation with other educational organisations, the region's businesses, other areas of working life and international partners, is also required.

## 1.2 Strategies and action programmes

Operational planning is directed by targets, an action programme and implementation plan (four-year), and action plans (2-year) for the development focuses, schools and units, agreed with the Ministry of Education and Culture

Behind the KAMK'24 strategy lie the 2015 Kainuu Programme and the Kainuu Higher Education Strategy. The Kainuu Programme consists of the 2035 Regional Plan, and the 2014-2017 Regional Programme. The Regional Plan sets out the long-term objectives of regional development and the Regional Programme, the short-term strategic choices. The 2035 vision for Kainuu is a "Healthy and robust Kainuu". Cooperation in Kainuu emphasises the consideration of labour market needs prediction, the aging population, high unemployment and sparsely populated areas. Important perspectives taken into account in developing Kainuu are competence/skills, sustainable development, equality, parity, internationality, culture and the unique offerings of the locality of Kainuu, and the opportunities of digitalization. Rural Kainuu and the third sector are also taken into account, particularly from the perspective of equality. The Kainuu Programme is supported by the 2020 Russia Strategy, the 2030 'Iän iloinen (*Joy in Aging*) Kainuu' Strategy for aging policy, the 2020 Kainuu Climate Strategy, the 2020 Kainuu Environmental Programme, and by the Kainuu Joint Municipal Social and Healthcare Authority with its: Organisation of Healthcare Plan 2013-2016. The spearhead sectors of Kainuu are tourism and services, the technology industry, the bioeconomy, and the sustainable mining industry. (Kainuun ohjelma 2015)

The Kainuu higher education strategy is based on Kainuu's development needs. The strategy assists in promoting cooperation among universities (University of Oulu, Lapland University, East-Finland University, KAMK, CEMIS, AIKOPA) in Kainuu. Cooperation will be created particularly in the welfare sector (nutrition, health and exercise), measurement and information systems (games and simulations) and the mining sector.



### 1.3 Future expertise producer

Operational planning is directed by targets, an action programme and implementation plan (four-year), and action plans (2-year) for the development focuses, schools and units, agreed with the Ministry of Education and Culture

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## 2 EXPERTISE DEVELOPMENT IN SMART KAMK

### 2.1 Phenomenon based learning and learning concept

KAMK learning is conceptualised by a phenomena based approach. Phenomenon based learning and teaching is based on comprehensive, real phenomena that are examined in genuine contexts by way of work based orders and commissions. Knowledge, skills and attitudes are acquired by crossing boundaries and disciplines.

Phenomenon-oriented learning is based on the socio-constructivist learning concept. According to this concept, knowledge is constructed when individuals solve jointly assigned problems and assignments together in teams. Knowledge is not just the internal element of an individual but it is formed in social contexts. The monitoring of individual learning is moving towards emphasising context based social interaction. The basis of learning is the *students'* active engagement and construction of meaning. The students take responsibility for their own learning and actively strive to acquire target skills and knowledge. They apply knowledge during their studies, reinforcing the skills needed in working life.

*Teachers* are increasingly becoming learning experts and facilitators, not simply the vessels and agents of knowledge concerning their teaching subjects. Team teaching is one form of teachership. In phenomenon based teaching, the teachers in the team have common objectives, resources and practices. Each is individually responsible for achieving the objectives. KAMK's *expert services staff* is involved in teaching, e.g. librarians are involved in the different stages of the thesis process. Project workers and development engineers can participate in implementing learning projects, supervising theses etc. KAMK emphasises the benefits of cross- disciplinary learning.

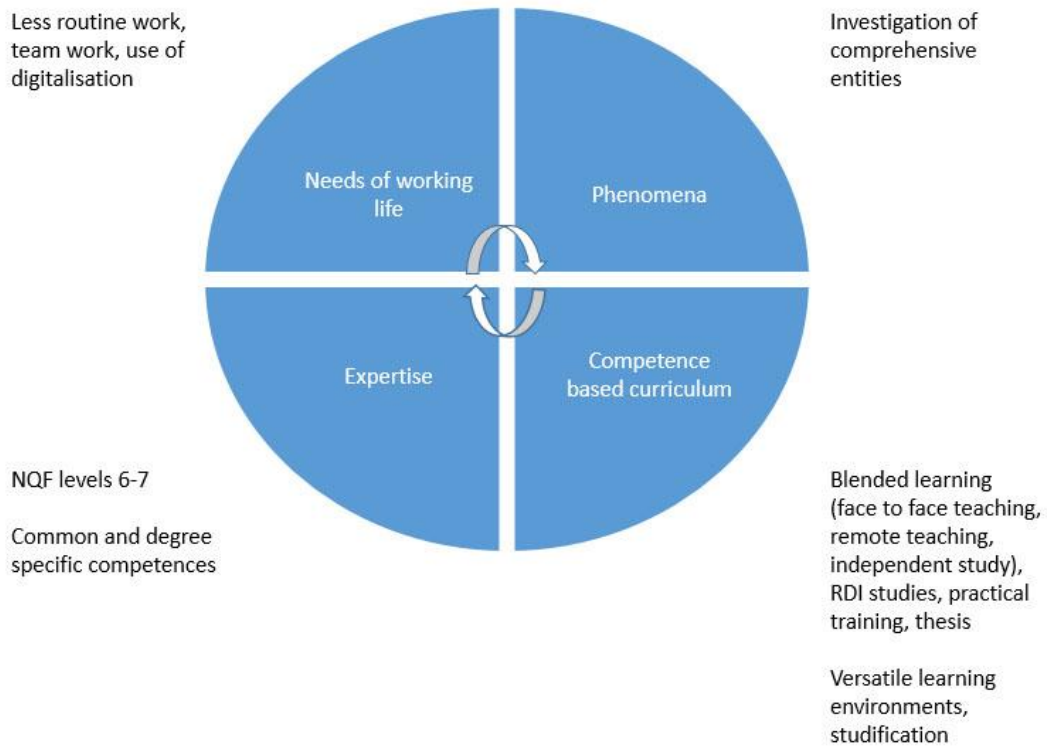


Figure 3. Phenomenon based learning at KAMK.

The reinforcement of student-centeredness means that the role of the teacher has become that of learning and development facilitator. In addition to being an expert in teaching, the teacher is now an expert at creating learning environments. This is emphasised when skills are applied in practice and acquired theoretical knowledge is applied. (figure 4.)

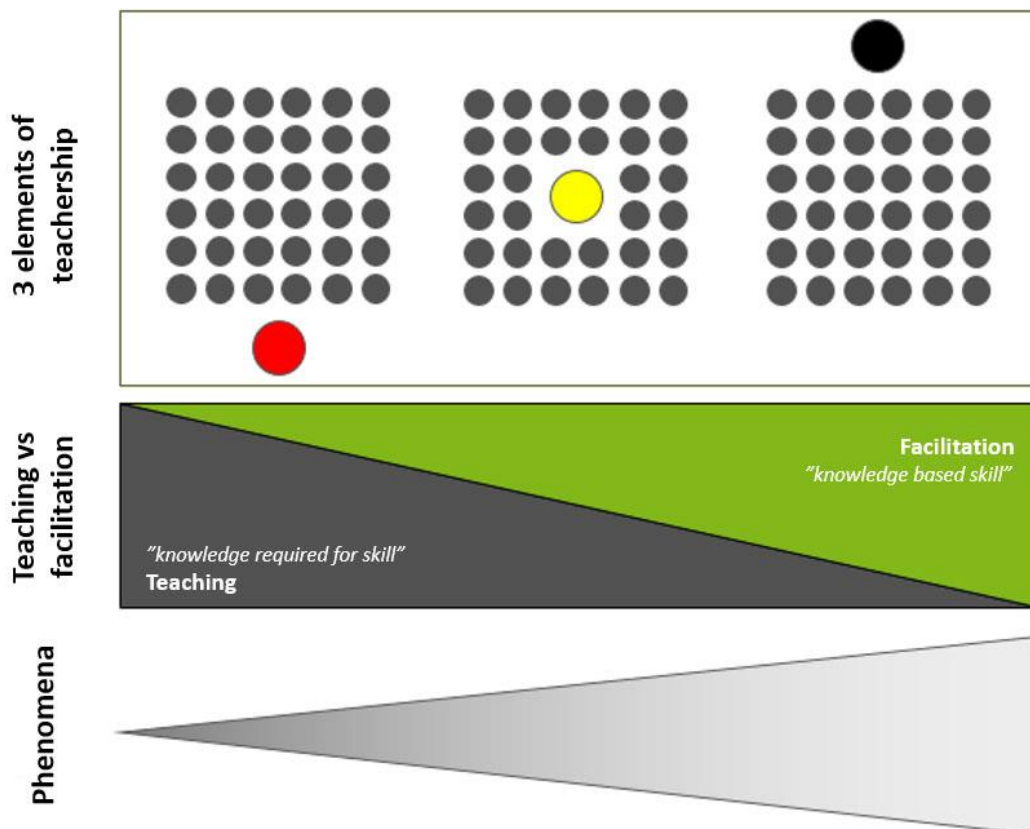


Figure 4. Three elements of teachership (Kilpeläinen 2015)

Teaching, RDI and work based cooperation form an unbroken, interactive whole which assist the University of Applied Sciences in fulfilling its expectations. Professionalism requires that knowledge is understood and reformulated through interaction between students, teachers and working life.

The University of Applied Sciences Master's degree emphasises authentic work based practices as the learning context. Development needs create temporary networks, communities and teams. The focus of learning lies within the needs of learning and work communities across organisational boundaries. University of Applied Sciences Master's degree students form a learning community that provides considerable social support and trust. The community forms a significant communal space for reflection. As well as the investigation of practical situations, reflective learning also involves

the systematic tracing of the processes behind such practices. The students' learning is accompanied into dialogue and interaction with the theories, concepts and research concerning phenomena.

A deeper and acutely developed expertise is the basis of the Master's degree. Shared expertise helps to form new models of working that increase the competence to face ever-changing operational environments. Teaching methods that support competence sharing and communal learning help to apply shared expertise as a model of practice in work communities. The significance of silent knowledge is also emphasised in work based studies and professional activity. Shared expertise can be used when university of applied sciences Master's degree students and alumni act as mentors for Bachelor degree students.

**The learning concept by which Kajaani University of Applied Sciences organises teaching is socio-constructivism. The teacher is an expert in learning and facilitation. The students' own activity and construction of meaning form the foundation of learning.**

## 2.2 Competence based curriculum

Kajaani University of Applied Sciences has a competence-based syllabus. It describes the *generic competences* (learning competence, ethical competence, work community competence, innovation competence, internationalisation competence) and the *degree specific* competences that form the basis of qualification at Kajaani University of Applied Sciences. The development of KAMK's generic, **smart solutions competence**, is defined as follows: "The students are able to apply their knowledge and skills in the technological solutions of their own professional fields and in the development of new business models and services. They are able to evaluate and develop operations in different work based contexts and cross-disciplinary teams, to create new solutions.

The syllabus emphasises working life. The modules and courses that form the curriculum are linked to genuine work based projects, development assignments, also enabling work studification. The aim is for 70 credits to be implemented as research and development studies. Each degree includes an internationalization path, an entrepreneurship path and a smart solutions path.

The syllabus *describes* the objectives and annual themes of the degree qualification (from learner to expert, user and developer). Appendix 1 is a description of the whole syllabus.

The main elements of curriculum planning *progress* as follows:

- The main task of the degrees is defined based on feedback from stakeholders after which core competences based on form of expertise are defined.
- The structure of the degree is defined (modules and courses)
- The objectives, content and size of the modules and course content are planned
- A course implementation plan is compiled for each course for each academic year.

Kajaani University of Applied Sciences' competence based syllabus is based on modules where the courses are stacked and divided into compulsory or optional studies. The courses are linked together as wider areas of competence to help the students manage their studies more easily. The aim of the modules is to ensure the studies are sufficiently wide, e.g. 15 credits.

Each module forms a cohesive whole that can be completed as a whole module or by accomplishing separate courses. The students can be advised to complete the separate courses in a recommended order. The module is delivered during a semester or the academic year. An objective is defined for the module and a head of module is responsible for compiling the module together with the teachers delivering the module. The head of module coordinates the overall planning of the courses in the module: teaching content,

objectives, teaching methods, learning assignments and how the work is shared.

The Kajaani University of Applied Sciences curriculum model may contain features of an integrated content curriculum. In this case, the courses are multidisciplinary or they are core packages consisting of several subjects that are linked to the modules during different stages of the studies. The themes or 'furrows' of an integrated content curriculum can be worked into projects where the students produce concrete outputs. There are also cross-disciplinary modules that are delivered within all fields of study. The proactive amk model, as well as business and project skills are studied via such modules.

Curriculum planning at KAMK progresses according to the KAMK curriculum planning schedule, which can be found at:

<http://workspaces.hallinto.kajak.fi/laatu/laadunvarmistus/default.aspx>

- Processes, P1. 1 Curriculum. Curriculum planning is also closely linked to the theses, practical training, course implementation and study assessment processes.

Curriculum planning follows the principle of continual development in line with the KAMK strategy, and planning is supported by the university's feedback system.

The planning process of the Adult and Continuing Education Unit, AIKOPA differs somewhat from degree curriculum planning. The following describe AIKOPA's supplementary training services and the factors that affect curriculum content within each form of education.

- **Open University of Applied Sciences education** is implemented according to the syllabi of the degrees offered at Kajaani University of Applied Sciences. Course selection planning specifically takes into account regional training needs and life-long learning provision.

- The aim of **labour policy based adult education and jointly procured training courses**, is to balance the demand for and supply of manpower, to counter unemployment and to fulfil manpower needs. The content and delivery of such training is planned according to the content of the call for tender/request for quotation in cooperation with working life.
- **Seminars and supplementary professional training** implemented as paid services and projects are planned according to work based competence and educational requirements. Special attention is given to needs that arise from regional change. Coordinated network-based cooperation with the regions actors and customers guarantees the quality of the training courses implemented for different groups.
- **Training courses by order and staff training** offered as paid services are planned in intensive cooperation with the customer ordering the service. Such courses are designed to respond to staff development needs such as a lack of competence experienced by an individual (work) community (e.g. language skills, customer service skills, competence in a certain field of knowledge).
- **Specialisation studies** are funded by the Ministry of Education and Culture and planned within field specific networks to which universities of applied sciences belong in intensive cooperation with working life. The aim of such studies is to produce competence in areas of expertise that are not offered by the market.

The syllabi of the supplementary courses offered by Adult and Continuing Education AIKOPA's are compiled in close cooperation with working life and customers. In the syllabi, special attention is paid to regional requirements.



## 2.3 Teaching methods and learning environments

### 2.3.1 KAMK's teaching methods and learning environments

The **teaching methods** used at KAMK provide students with good social skills and the potential to progress, as well as supporting professional growth. Table 1 describes examples of the teaching methods used at KAMK.

KAMK mainly uses blended teaching methods where some teaching is delivered face to face in a classroom and the remaining work, as distance learning. Such studies emphasise community as well as the student's own study path. During periods of distance learning, online interaction and reflection are emphasised. Blended study enables studying from home, flexibility and more effective studies.

Learning assignments are linked with work based phenomena and issues. Work based phenomena can be multidisciplinary in nature and the way studies are organised at KAMK enables interdisciplinary cooperation with students in the other schools. This form of study can also be called 'learning by doing' or 'problem based learning'. It is intended that by 2024 40% of all the studies will be delivered via online teaching. This also enables studying throughout the year.

An increasing number of students who study at universities of applied sciences already have experience of digital teaching methods from school and upper secondary education. This competence base benefits teaching: it motivates, activates and supports self-directed learning.

Table 1. Examples of KAMK's teaching methods

Teaching method	Description
<b>Project learning</b>	<p>Long-term work on a specific topic:</p> <ul style="list-style-type: none"> <li>Defining objectives</li> <li>Agree on work share</li> <li>Gathering information</li> <li>Work</li> <li>Evaluation of results</li> </ul>
<b>Problem solving</b>	<p>Learning content problematized and solutions are sought using problem solving techniques.</p> <p>Theoretical knowledge gathered linked to the problem researched in small groups and applied to solving the problem.</p>
<b>Research based learning</b>	<p>The students direct their own learning by setting problems, forming their own perspectives and explanations and by searching for information independently to create wider expanses of knowledge and understanding. The focus is on sharing the research process in the learning community and the continual interaction between members of that community to ensure good learning results. The role of the teacher in directing this process is significant.</p>
<b>Portfolio learning</b>	<p>The portfolio is formed from the competence objectives of the curriculum according to which students study and complete their own portfolios with outputs and indications of their competence. The student is at all times aware of the learning objective and moves towards them. Individual aims and flexible study paths enabling the portfolio promote study motivation and commitment.</p>
<b>Studification</b>	<p>As they work, the students acquire competence that corresponds to the objectives of their degree. In studification, the student, work based representatives and the teacher agree on which course topics or parts of</p>

	topics can be learnt and how competence will be demonstrated/ indicated.
<b>Flipped learning</b>	Flipped learning aims to encourage students to examine a new topic independently after which the topic is discussed in a group. This is collaborative learning where the students benefit from the community and teacher by being motivated by them. This type of learning emphasises the activeness of the students, interaction, and the use of technology and online resources in learning.
<b>Gamification</b>	The use of game like elements in teaching, such as the use of narratives and rewards. When using stories or narratives, a context requiring creative problem solving is built around an assignment.
<b>Learning games</b>	Learning through board, card or digital games alone, in pairs or groups. Suitable for practising previously acquired skills and knowledge, revision and testing and for learning complicated skills.

In addition to traditional classroom teaching, the university has several innovative **learning environments** that support competence development. Phenomenon centred learning has a key role in how such learning environments are used. The students, staff, regional companies and other stakeholders encounter each other in these learning environments. Traditional classroom teaching is mainly used during basic studies when theory is particularly significant and the foundations for developing expertise are being built. Classroom teaching benefits from the region's businesses and organisations in the form of visits and visiting lecturers and alumni. The use of versatile learning environments encourages students to deal with new situations where the formulation of new ideas is possible in a dialogue based process.

Learning environments where those studying different professions are encounter each other on a daily basis, offer the opportunity for working within new interfaces. Such environments are known to be a catalyst for creating innovation. In an operational environment that stimulates innovation, people of different backgrounds work together on the same problems. Innovation communities can be close teams that meet daily, or looser network based communities. The success of innovation communities is based in the sharing of expertise and information and on the ability to combine different perspectives and approaches.

In addition to physical environments, other learning environments include the regional, national and international environments which the students encounter during their studies. The students conduct genuine work based projects for the region's companies and actors, as a part of their studies.

Digital learning environments enrich and add to phenomenon centred learning. Online learning is not dependent on time and place. This gives students more freedom but requires the capacity to work independently. The students also have the opportunity to study in national networks. Table 2 describes KAMK's various learning environments.

Table 2. KAMK's main learning environments.

<b>Learning environment</b>	<b>Opportunities</b>
<b>(CSE)-simulator environment:</b>	
<b>Driving simulators</b>	Research, product development and teaching environment, software and device development
<b>Game testing laboratory</b>	Assignments linked with practical training and thesis, modelling, video recording and animation projects (bio-metric game testing methods in use), virtual tourism
<b>Product development workshop</b>	Project tools, supervised clubs, also practical training place and project work environment
<b>Prototype workshop</b>	Machine workshop machining tools, KAO's metal work machines, quick modelling machines, simulation and modelling software
<b>Construction engineering workshop</b>	Property condition assessments, surveys, renovation building research
<b>Myötätuuli</b> <b>Kunnon syke (exercise to music, gym and testing facility)</b>	Customer-led Wellbeing services, research and development, course implementation environment
<b>Kätevä koti / Handy Home</b>	Accessible living solutions and equipment for the incapacitated, equipment testing, facility for testing devices designed for people with visual, aural and oral communication impairments.
<b>Nursing simulated learning environment</b>	Opportunity to rehearse computer generated nursing situations which are as realistic as possible
<b>Smart Facility</b>	Sports learning environment employing digital technology
<b>Digital learning environments:</b>	Real time studying

<p><b>Office365</b></p> <p><b>Moodle, ACP,</b></p> <p><b>Sharepoint</b></p> <p><b>Social media applications</b></p>	
<p><b>Innovation and enterprise centre INNOVA</b></p> <p><b>Kajak Games cooperative (Games)</b></p> <p><b>Kajability cooperative (multi-disciplinary)</b></p>	<p>Multi-sectoral enterprise and project studies with supervision, and networking. Sparring of enterprise and product development ideas.</p> <p>Innovapro and NY (Young Entrepreneur) Start-up studies</p>
<p><b>International learning environments</b></p>	<p>Internationalisation and home-ground internationalisation</p> <p>Double degrees</p> <p>Foreign exchanges</p> <p>Practical training abroad</p>
<p><b>Teaching restaurant Kisälli</b></p>	<p>Catering studies</p>
<p><b>Working life</b></p>	<p>Studying in authentic environments and situations</p>
<p><b>Robotics and automation environments</b></p>	<p>Promotes encounters between students and working life via courses, practical training and theses. Offers companies risk-free opportunity to try out new robotics and automation</p>
<p><b>Library</b></p>	<p>Information literacy teaching</p> <p>Versatile use of materials (e-materials, books)</p> <p>User support for digital thesis template</p> <p>Publishing</p>

**The teachers employ innovative approaches in teaching and test new teaching methods. To guarantee development in expertise, there are also several different types of learning environment where assignments, projects, practical training and theses are carried out. The learning environments also act as links in the integration of studying and conducting R&D activities.**

### 2.3.2 KAMK as a true beneficiary of internationalization

The aim of the KAMK'24 strategy is to make KAMK a true beneficiary of internationalisation. Among others, this means that all the degrees include an internationalisation path: teaching content takes internationalisation into account, a sufficient amount of studies are delivered in English and a sufficient amount of language and culture studies are offered. The international coordinators of each school and the international office help students to go on exchanges or do their practical training abroad.

In order to reach this strategic target, it is also necessary to develop the partner network in a suitable way for each school. The first and foremost aim is to extend the partnerships to cover several schools and to intensify cooperation not only in terms of student and staff exchanges, but also in curriculum planning and teaching, RDI activities and regional development.

Several partner universities act as international learning environments. Double degree work is being conducted with the University of Rzeszów in Poland, Hochschule Heilbronn in Germany, Lethbridge College in Canada, the Moscow State University of Technology in Russia, the University of Lesgaft and the St Petersburg University of Management and Economics.

The degree programs delivered in English: Degree in International Business (BBA) and the Degree in Sports and Leisure Management (SPORT) enable home grown internationalisation. In 2017, intake for the Degree in Tourism will continue. Support in becoming international is provided by the participa-

tion of international students in interdisciplinary studies, the international activities of the KAMO student union, and friend family activities coordinated by the international office.

### 2.3.3 Entrepreneurial KAMK

Business competence is an integral part of the competence acquired by students in each school of the university. Profitable and sustainable business/organisational leadership and management require business competence. Business competence and an entrepreneurial approach emphasises creative, social and emotional intelligence. (Aho 2015).

At KAMK, the Entrepreneurial Competence module consists of business, marketing, contract law, leadership and financial administration competence. The teaching methods take into account the development of business intelligence.

#### Business Competence

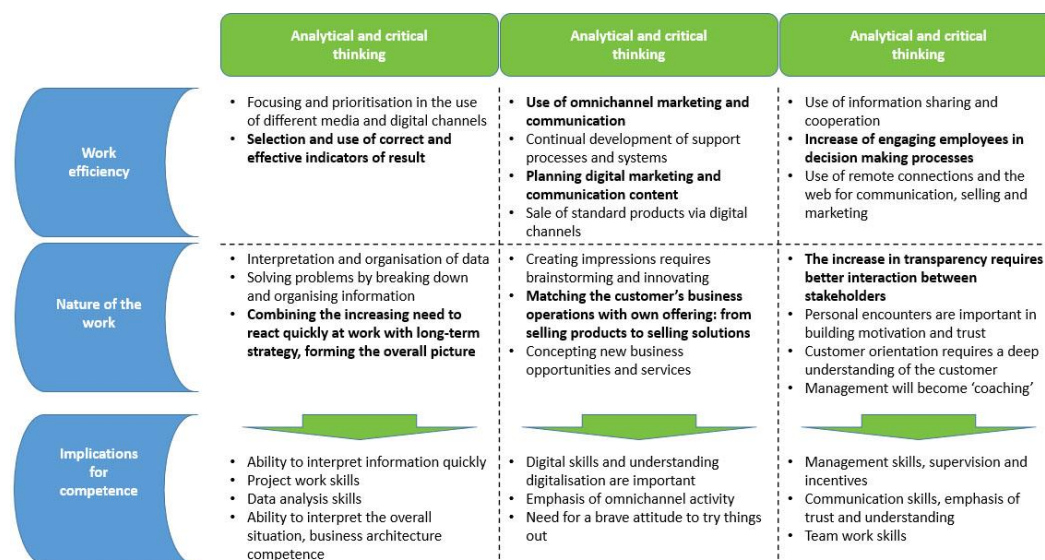


Figure 5. Entrepreneurial competence of a business expert (Aho 2015)



The entrepreneurship path provides students with the opportunity to deepen their entrepreneurial skills and experiences during their studies. The entrepreneurial path is offered to all the students in all of the schools of the university as optional studies (30 credits)

KAMK offers the NY Young Entrepreneur Start Up programme as one part of entrepreneurship studies. The programme offers a practical, low threshold learning environment for practising entrepreneurial skills. It helps students to identify their own skills and use of acquired knowledge in setting up a business or on entering the job market.

This programme provides students with their first taste of entrepreneurship. The NY Start Up course (10 credits) takes one academic year to complete during which the students set up a NY Young Entrepreneur company that operates in the market. The companies are set up by interdisciplinary teams and during the YE year, new products and services are developed for customers. The 'practice company' year gives students an idea of how working life operates and of their own ability to work as entrepreneurs.

After the entrepreneurship path, there are two student-led cooperatives at KAMK: Kajak Games (for game students) and the interdisciplinary Kajability cooperative. The cooperatives enable students to practise business operations without being an actual entrepreneur. The NYYE Start-Up studies are a good way of getting into working for a cooperative, but it is possible to join a cooperative without participating in the programme.

## 2.4 Evaluating competence and learning

Evaluation and assessment at KAMK aim to promote development since they target professional competence objectives which are determined with the aid of generic and professional competences. Students assess themselves and this assessment is used in conjunction with work based assessment, and when possible, assessment by peers. Third party assessment is emphasized in courses adapted for work studification.

Competence is identified using specific criteria. Teachers, students and working life are aware of the assessment criteria, which describe the competence the students should attain in the degree qualification. The assessment criteria are based on the national (NQF) and European qualifications framework (EQF). In addition to University of Applied Sciences' employees, work based and student representatives also participate in compiling the assessment criteria via groups (e.g. the Learning Development Group, groups associated with the self-assessment process).

Courses are graded on a scale of 0–5: excellent (5), good (4 or 3), satisfactory (2 or 1) and fail (0). Satisfactory (1–2) describes the competence needed to be able to practise a profession. It does not mean the student is unable to work but it is the minimum requirement of the degree qualification. Grade 3–4 indicates that the student's competence in the subject is good. Grade 5 shows that the student's competence is excellent. Grade 5 Excellent is the highest grade that it is possible to achieve during the degree.

A course can also be evaluated as pass/fail. In order to pass, the student must achieve a minimum of 70 % in the assessed work of the course.

Kajaani University of Applied Sciences also employs assessment criteria (so called meta-criteria) across all the schools and individual degrees. These criteria can be used as they are or they can be adapted for use in assessing individual courses. The criteria are divided into three groups: knowledge, skills and attitudes. The competences are described in each group as satisfactory, good or excellent as follows:

**EXCELLENT (5)**

*In relation to the competence objectives students can:*

**Knowledge:**

- make extensive and expert use of the concepts pertinent to their professional field and can combine these concepts.

**Skills:**

- analyse, compare, combine and select knowledge and present alternative practices
- analyse, reflect upon and critically assess their own competence and professional practices using acquired knowledge
- work independently, responsibly, flexibly and with initiative in all learning and operational environments
- select and critically assess the practices and models of their professional field and use them in their work

**Attitudes:**

- work in a customer and goal oriented manner employing a developmental approach and work in groups, promoting and developing the work of the group
- critically apply professional ethical principles in their work.

**GOOD (3–4)**

*In relation to the competence objectives students can:*

**Knowledge:**

- systematically use the concepts of their professional field
- name, describe and discuss with reasoning the basic knowledge pertinent to their professional field.

**Skills:**

- select appropriate practices based on acquired knowledge and guidance
- assess and reflect upon their competence and professional practices
- work independently and responsibly on various tasks in all learning and operational environments
- can appropriately apply practices and models suitable in their professional field

**Attitudes:**

- work in a customer and goal oriented manner employing a developmental approach
- work in a group to reach jointly agreed targets
- give reasons for their actions based on professional ethical principles.

**SATISFACTORY (1–2)**

*In relation to the competence objectives students can:*

**Knowledge:**

- appropriately use the key/individual concepts of their professional field
- name and describe the basic knowledge pertaining to their professional field.

**Skills:**

- work in an appropriate manner though some uncertainty may be still be visible
- work under supervision in an appropriate manner in various learning and operational environments
- use the practices and models of their professional field in an appropriate manner

**Attitudes:**

- work in a professional manner in customer situations
- work in a group taking other group members into account
- work according to professional ethical principles.

(Also see appendix 2.)

**In addition there are separate assessment criteria for practical training and the thesis.**

**Kajaani University of Applied Sciences employs so called meta-criteria or university of applied sciences level competence assessment criteria. Meta-criteria can be used as they are, or adapted for assessing individual courses. The criteria are divided into three groups: knowledge, skills and attitudes.**

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## **Curriculum description**

Course competence objectives

Recommended previous studies

Course content (core content listed here)

Assessment criteria (excellent, good, satisfactory or pass/fail)

Module to which the course belongs

## **Update annually:**

Name of teacher/person in charge

Recommended and compulsory reading

Assessment methods (implementation) and criteria (course)

Registration period

Unit in charge

Further information for students

Practical training and work based cooperation

International contacts

Method of implementation

Forms of study and teaching methods

Language of teaching

Timing

Group(s)

Places

Teacher(s)

Degree(s)

Venue

Scale of assessment

Alternative ways of accomplishing the course

Date of exams

Organisation of course content

**Meta-assessment criteria at KAMK:**

<b>SATISFACTORY</b>	<b>GOOD</b>	<b>EXCELLENT</b>
<b>grade 1-2</b>	<b>grade 3-4</b>	<b>grade 5</b>
<u><i>In relation to the competence objectives students can:</i></u>	<u><i>In relation to the competence objectives students can:</i></u>	<u><i>In relation to the competence objectives students can:</i></u>
<b>Knowledge:</b>	<b>Knowledge:</b>	<b>Knowledge:</b>
<p>appropriately use the key/individual concepts of their professional field</p> <p>name and describe the basic knowledge pertaining to their professional field.</p>	<p>systematically use the concepts of their professional field</p> <p>name, describe and discuss with reasoning the basic knowledge pertinent to their professional field.</p>	<p>make extensive and expert use of the concepts pertinent to their professional field and can combine these concepts.</p>
<b>Skills:</b>	<b>Skills:</b>	<b>Skills:</b>
<p>work in an appropriate manner though some uncertainty may be still be visible</p> <p>work under supervision in an appropriate manner in various learning and operational environments</p> <p>use the practices and models of their professional field in an appropriate manner</p>	<p>select appropriate practices based on acquired knowledge and guidance</p> <p>assess and reflect upon their competence and professional practices</p> <p>work independently and responsibly on various tasks in all learning and operational environments</p> <p>can appropriately apply practices and models suitable in their professional field</p>	<p>analyse, compare, combine and select knowledge and present alternative practices</p> <p>analyse, reflect upon and critically assess their own competence and professional practices using acquired knowledge</p> <p>work independently, responsibly, flexibly and with initiative in all learning and operational environments</p> <p>select and critically assess the practices and models of their professional field and use them in their work</p>

<p><b>Attitudes:</b></p> <p>work in a professional manner in customer situations</p> <p>work in a group taking other group members into account</p> <p>work according to professional ethical principles.</p>	<p><b>Attitudes:</b></p> <p>work in a customer and goal oriented manner employing a developmental approach</p> <p>work in a group to reach jointly agreed targets</p> <p>give reasons for their actions based on professional ethical principles.</p>	<p><b>Attitudes:</b></p> <p>work in a professional manner in customer situations</p> <p>work in a group taking other group members into account</p> <p>work according to professional ethical principles.</p>
<p><b>Appropriate approach →</b></p>	<p><b>Reasoned approach →</b></p>	<p><b>Developmental approach</b></p>

[Teachers' Peppi instructions](#)