JAMK UNIVERSITY OF APPLIED SCIENCES

DEGREE-AWARDING EDUCATION
(BACHELOR’S, MASTER’S)
PRINCIPLES OF THE CURRICULA

2019

Approved by the JAMK University of Applied Sciences Student Affairs Board on 6 November 2018
1 INTRODUCTION

These principles of the curricula apply to all degree programmes at JAMK University of Applied Sciences which lead to a bachelor’s or master’s degree (School of Masters’).

2 STARTING POINTS FOR CURRICULAR WORK

The starting points for curricula of degree-awarding education are the basic mission of education according to polytechnics legislation, the Bologna Declaration, the Government Programme as well as the regional preparation for education needs.

The JAMK University of Applied Sciences applies competence level descriptions according to the European Qualification Framework (EQF), as well as the Act (93/2017) and decree (120/2017) on the national qualifications framework (NQF). The EQF level corresponding to the competence of a bachelor’s degree is 6 and of a master’s degree 7.

The education planning takes into consideration the selections of the Strategy of the JAMK University of Applied Sciences 2016–2020, policies regarding the development of working life and field, the Degree Regulations and the quality system. The education is developed and the curriculum created according to the operations management system. The education process is carried out according to the Pedagogical principles and the principles of instruction and guidance that have been approved by the JAMK University of Applied Sciences’ Academic Board.

The competence-based curricula correspond to the competence needs of the future working life, and they are internationally comparable, student-oriented, flexible, and open, thereby offering a possibility for not only a degree-awarding education, but also for strengthening continuous learning (open higher education, Diplomas of Higher Education, labour force training, continuing education, Summer School, other forms of additional education).

3 GUIDANCE AND ASSESSMENT

Implementation of the curriculum is started by the identification and recognising of the competence acquired by the student, as well as studification of work.

The development of competence is supported during education by diverse and systematic counselling services provided throughout the entire study period, as well as by a personal learning plan (PLP) based on continuous enhancement-led evaluation. The counselling is carried out according to the principles of instruction and guidance approved by the JAMK University of Applied Sciences Student Affairs Board.

The assessment of competence is based on learning objectives, quality and criteria, and self-evaluation by the student plays an important role in the process.

4 PLANNING AND PERSONS IN CHARGE OF THE DEGREE PROGRAMME

The curriculum of a degree programme describes: (a) what competence the graduate has gained, (b) how the professional growth and know-how is expressed and assessed as the learning outcome of the student, (c) how the education has been planned in the unit and together with vocational higher education and other networks and the working life and (d) who has been in charge of the planning
work. The starting point of the degree programme supports the student’s learning process, which has been taken into account in the planning of competence areas (modules) and the structuring of assessment.

The separate curriculum prepared for each degree programme describes, according to the ECTS principles, the followings things on a public website: the name of the degree programme, degree title, scope, implementation period, level and study field of the degree, starting group code, forms of study, structure of studies, description of the degree, key learning outcomes, professional growth and know-how, working life cooperation and learning, accreditation, student counselling, rules concerning the assessment of study attainments, eligibility and admission criteria, student exchange, graduation and degree-related qualifications, professional profiles of graduates with examples, education planning, and the person in charge.

5 COMPETENCE ACHIEVED IN THE DEGREE PROGRAMME, STRUCTURE AND CONTENTS

5.1 General attributes

The general attributes of all bachelor’s and master’s degree graduates have been defined based on the competence descriptions of levels 6 and 7 of the European Quality Framework (EQF), the Act (93/2017) and decree (120/2017) on the National Qualifications Framework (NQF), as well as the common entrepreneurship competence qualifications description of the JAMK University of Applied Sciences (core curriculum 2011), and the recommendation of Arene ry for the general attributes of universities of applied sciences (23 Feb 2010). The general attributes lay the foundation for operating in working life, cooperation, and development of expertise. In their studies, all bachelor’s and master’s degree students of the JAMK University of Applied Sciences form these General Attributes (GA) that are (a) Learning and information management competence, (b) Entrepreneurship, innovation and working community competence and (c) Internationalisation and communications competence (see Table 1).
<table>
<thead>
<tr>
<th>General attributes</th>
<th>Learning outcome; student pursuing a bachelor's degree (EQF 6, NQF 6)</th>
<th>Learning outcome; student pursuing a master's degree (EQF 7, NQF 7)</th>
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<td>1. Learning skills</td>
<td>• evaluates and develops their competence and is prepared for continuous learning&lt;br&gt;• acquires, processes and evaluates the information, theories, concepts, methods and principles within their field in a critical manner&lt;br&gt;• assumes responsibility for the group’s learning and to share the matters learned</td>
<td>• evaluates and develops their expertise diversely and in a goal-oriented manner, and is prepared for continuous learning&lt;br&gt;• acquires, processes, produces and evaluates information in a critical manner and from the perspectives of various fields&lt;br&gt;• assumes responsibility for the group’s goal-oriented learning</td>
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<td>2. Information management competence</td>
<td>• carries out research and development projects applying the information and methods of the field, as well as practical skills acquired&lt;br&gt;• solves problems in a new way, creatively, developing the work methods&lt;br&gt;• obtains information that is relevant in view of the development challenge or problem at hand and makes decisions based on it</td>
<td>• is familiar with the ethical principles of data collection and use&lt;br&gt;• recognises the significance of open science and research for the development of society, and is able to apply the principles of open science and research in their work&lt;br&gt;• is able to acquire, process and evaluate information and combine information from various fields in a relevant manner</td>
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<td>3. Entrepreneurship, innovation and working community competence</td>
<td>• builds customer-driven, sustainable and economically profitable solutions in his/her networks&lt;br&gt;• takes responsibility for their actions and their consequences&lt;br&gt;• displays courage to try new things and manages the risks involved</td>
<td>• works independently and in a collaborative manner in demanding expert and management roles or as an entrepreneur in the field&lt;br&gt;• develops and creates new operations which are customer-driven, sustainable, and financially profitable&lt;br&gt;• is able to manage projects and applied research, development and innovation projects&lt;br&gt;• is familiar with the methods of research and development operations used for the development of the field, work environment and working life&lt;br&gt;• is able to produce new information and renew operating methods combining competences from various fields&lt;br&gt;• has the specialised problem solving abilities required for the development of working life</td>
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<td>4. Work community competence</td>
<td>• acts in a collaborative manner as a member of student and work communities and other groups in compliance with the principles of professional ethics and furthers the performance and well-being of the group&lt;br&gt;• organises work duties, workflows and decision-making and works in expert duties in a systematic and goal-oriented manner&lt;br&gt;• shares their expertise and makes use of the expertise of others.</td>
<td>• applies the principles of professional ethics of their own field&lt;br&gt;• promotes the implementation of sustainable development principles and social responsibility&lt;br&gt;• develops the operation and occupational wellbeing of the work community&lt;br&gt;• is able to create networks and partnerships&lt;br&gt;• manages things, people and networks, and develops new strategic approaches proactively&lt;br&gt;• participates and manages operations which have social impact, based on ethical values</td>
</tr>
<tr>
<td>5. Internationalisation and communications competence</td>
<td>• operates in a multicultural environment in cooperation with others&lt;br&gt;• operates independently in working life communication situations using the second domestic language and at least one foreign language</td>
<td>• communicates fluently using the second domestic language and at least one other language in their work assignments and the development of the operations, as well as in international contexts&lt;br&gt;• operates in international operating environments</td>
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5.2  **Degree programme competence**

The **degree programme competence** is described in each curriculum. The competences are described in the form of intended learning outcomes. Learning outcomes describe what kind of information and understanding, as well as theoretical, practical and applied skills, the student will possess after the completion of the degree and what the student will know, understand and can do as the outcome of the learning process.

A degree programme may apply for accreditation. In this case the general attributes of the university of applied sciences and the competences required by the accreditation criteria will be applied as necessary.

5.3  **A degree programme is formed by competence areas (in the future, modules) and courses**

The intended learning outcomes of individual modules and courses are derived from the general attributes and the intended learning outcomes of the degree programme. The competence targeted through the modules can consist of various combinations of courses (e.g. cross-institutional studies, online studies, Future Factory, MOOCs, Yritystehdas Oy).

The structure, scope, planned timing and outcomes of the studies that are formed during the education, are described in more detail in the Study Guide ([http://opinto-oppaat.jamk.fi/fi/opinto-opas-amk/tutkinto-ohjelmat-ja-opintotarjonta/](http://opinto-oppaat.jamk.fi/fi/opinto-opas-amk/tutkinto-ohjelmat-ja-opintotarjonta/)).

The formation of a student's competence in JAMK's bachelor’s and master’s degree programmes is described below (see Figure 1).

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**FIGURE 1.** Graduate attributes of the university of applied sciences, degree programme competence,
module learning outcomes and courses.

The learning outcomes of modules and courses are defined so that they are linked to the learning outcomes of the degree programme and/or the common graduate attributes of the university of applied sciences, whose achievement is assessed during studies. Courses are described in accordance with ECTS principles.

The scope of an individual course is at least 3–5 ECTS credits (JAMK board decision 9 October 2012).

5.4 Degree programme contents

The bachelor’s degree programme is formed by the following competence modules with their ASIO codes: **Shared bachelor competence** (P = general basic studies), **the professional core competence of the degree** (S = professional studies, H = practical training, O = thesis), **complementary competence** (W = elective professional studies, V = elective studies, H = part of the practical training).

JAMK’s master’s degree consists of **shared master competence** common to all master’s level students, **degree-specific expert core competence** (S = advanced professional studies, O = thesis) and **complementary competence** (W = elective professional studies, V = elective studies).

The professional studies (= S, bachelor’s degree) and advanced professional studies (master’s degree) are modules which construct the core competence of the degree. They consist of quite extensive modules which make up the professional expert competence and the core of the degree.

The elective professional studies (W) are fairly extensive study modules which form the supplementary competence for the degree, or advance the core competence. Competence which advances the core competence of the degree is developed through elective professional studies and elective studies (V). The supplementary competence allows the student to build a unique degree. The elective professional studies and elective studies can consist of transdisciplinary modules, like the JAMK Future Factory operating model, entrepreneurship studies offered by Yritystehdas Oy, or the course offering within another degree programme. For bachelor’s degrees, the scopes of elective professional studies courses are 15–30 ECTS credits per module. Supplementary competence studies can also consist of studies carried out elsewhere, such as EduFutura, the CampusOnline course offering, or studification of work. In this case, the level of competence must correspond to the EQF level 6 for bachelor’s degrees or level 7 for master’s degrees, and learning results must correspond to the competences produced by the degree programme.

According to the Universities of Applied Sciences Act (941/2017, section 8 a), a student may expand their degree to include studies offered by another institution of higher education. This requires that cooperation between the institutions has been agreed on, and the studies have been incorporated into the student’s Personal Learning Plan at JAMK.

Every bachelor’s degree programme offers all students the common basic studies (29 ECTS credits), which are:

1. Development as an Expert (5 cr)
2. Entrepreneurship (3 cr)
3. Innovation week (2 cr.)
4. Communication Skills (3 cr)
6. **English for Working Life (4 cr)**
7. **Swedish for Working Life (4 cr)**
8. **ICT Skills (3 cr)**
9. **Research and Development (5 cr)**

**6. CURRICULAE AS PART OF REINVENTING HIGHER EDUCATION**

The reinvented higher education is an international community that is digital, virtual, versatile and entrepreneurial and facilitates lifelong learning. Learning is based on student-centred learning, learning tasks, learning partnerships and the application of state-of-the-art technology. The focus of learning will move in a student-centred direction that activates students, to study modules smaller than degrees and to learning by employed persons. The renewed university will take care of people’s skills throughout their career. (the JAMK strategy 2016–2020)

Each degree programme supports the implementation of the goals defined in JAMK’s strategy 2016–2020 in its own operating environment and interest group work. The degree programmes' learning environments make use of multidisciplinary and community-based operating methods. The themes that cut across JAMK’s strategy are the renewal of learning, the development of new business and entrepreneurship and the internationally acknowledged quality. These themes are implemented in all areas of JAMK’s activity and are the subject of joint development by the entire University of Applied Sciences.

Special areas of strength (Bioeconomy, Education expertise and business, Multidisciplinary rehabilitation, Applied cybersecurity) and new rising fields (Automation and robotics, Tourism) have been selected for JAMK. These are based on the needs of the operating environment, JAMK’s strong expertise and gathering the expertise of cooperation partners into nationally competitive centres of excellence. The areas of strength are reflected into the curricula of the various fields in different ways, and they lay the foundation for the curricula, making learning a solid part of the development of field and RDI activities.

**6.1 Renewal of learning**

Students who graduate from JAMK are provided with the digital skills and learning skills required by future working life and the expertise required for employment and entrepreneurship. The learning outcomes of the curriculum are targeted at future working life challenges.

Alongside the JAMK learning environments, studying is increasingly carried out through online studies, open learning environments, and connected to working life, various innovation and learning platforms, and RDI and partner networks, such as EduFutura, CampusOnline, international networks, and RDI activities integrated into learning. The degree programmes provide students with the opportunity to strengthen their working life and innovation competence and their working life contacts by producing shared, multidisciplinary, multi-stage and working life-oriented study modules, such as studies based on the Future Factory operating model, increasing flexibility and diversifying the students’ own choices.

Student-centredness is improved by offering an increased amount of choice and various study methods. The studying takes place throughout the year and is increasingly independent of time and place. Recognition of prior learning (RPL) and studification of work decrease the amount of
overlapping studies and the duration of studies, and allow the students to create their unique study process.

6.2 Development of new business and entrepreneurship

The degree programme supports JAMK’s aim to be an entrepreneurship-oriented institute of higher education, encouraging the students to innovation operations, learning about entrepreneurship, and creating entrepreneurship.

The students’ research, development and innovation competences are developed throughout their learning process. Their thesis can be related to working life development challenges or the implementation of research, development and innovation projects, even internationally, particularly towards the final stages of the studies. In addition to JAMK’s entrepreneurship studies, all students can participate in the course offering of Jyväskylän Yritystehdas Oy as part of their studies. They can also develop their innovation and entrepreneurship competence by participating in labs and projects within the Future Factory operating model.

Theses are mainly made based on working life development needs. The elective professional studies and the practical training can also be carried out at RDI projects. Entire courses or learning tasks of the courses can be carried out at the research and development projects carried out in cooperation with the education and businesses. The most important thing is to agree on the RDI work before the thesis or practical training period begins.

6.3 Internationalisation

The degree programme supports JAMK’s aim to make its operating environment more international.

All degree programmes offer modules in English, and the degree programmes recognise themes of sustainable development, ethicality and global responsibility. The aim is to make the quality of the education internationally recognised.

Students can internationalise during their studies according to their personal learning plan. The internationalisation may take place at the base university through so-called internationalisation at home, or they can carry out part of their degree abroad, either by studying or carrying out practical training. Studies completed abroad will be included in the student’s PLP and will be planned together with the career tutor and international coordinator and their full accreditation for awarding credits will be ensured in accordance with the ECTS system.

Foreign degree and exchange students create a multi-cultural and genuinely international studying atmosphere. Foreign teachers and experts bring international special competence into the teaching. Language and culture studies, studies in English and various projects and events promote the international competence.

6.4 Continuous learning opportunities

According to our strategy, the focus of the development of the education is on implementing education models which benefit degree education but are narrower in scope and meet the competence needs of working life more quickly. Degree programmes can also have shared modules (e.g. master’s studies, shared and/or transdisciplinary studies), or the modules can be utilised in the
range of advanced competence studies of other degree programmes and continuous learning and international business course offering.

A modular curriculum allows individual study paths in both degree education and competence updating. The working life orientation and modularity of the curricula also meets the challenge of economic efficiency and social responsibility, ensuring that a sufficient, yet limited amount of studies are offered.