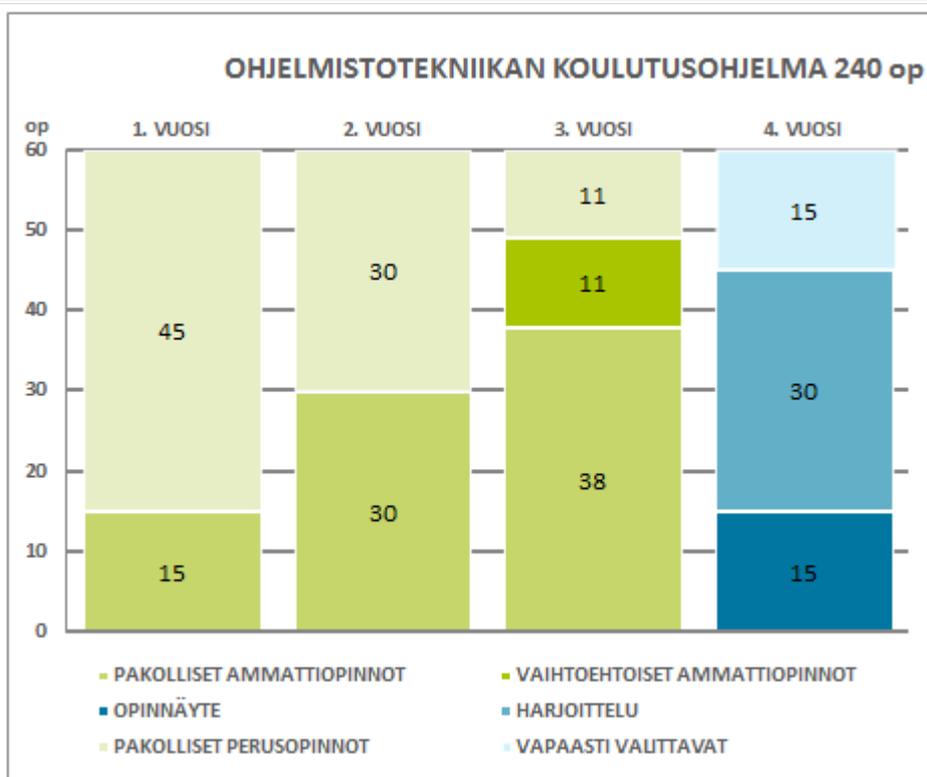




GENERAL INFORMATION	
DEGREE PROGRAMME	Degree Programme in Software Engineering
PERIOD OF EXECUTION	2013-2017
SCOPE	240 ECTS credits
DESCRIPTION	<p>Do you want to make software for PC equipment, web browsers or mobile phones? Do you want to work in an inspiring and modern environment, in which you can make a wide range of games and other projects? If your answer to either of these questions is yes, then the JAMK's Degree Programme in Software Engineering is a good choice for you.</p>
LANGUAGE OF STUDY	Finnish
CODE	IIO13S1
DEGREE	Bachelor of Engineering
DEGREE LEVEL	National Qualifications Framework level 6.
TARGET GROUP AND ADMISSION CRITERIA	http://www.jamk.fi/koulutus/hakijanoppaat
STUDIES	
KEY LEARNING OUTCOMES	<p>The profession requires programming skills. These will be built up on a sufficient basis of mathematical and natural scientific knowledge. Different programming languages and methods allow for smooth working on software projects. Students can also direct their studies to low level design and programming.</p> <p>Students are encouraged to internationalise through various exchange student activities. Entrepreneurship is for all students within the criteria of their studies and students can integrate the work that they carry out into their studies. Students who intend to start their own business, are able to include in their studies, efforts supporting entrepreneurship and obtain support from the Departments own entrepreneurial coach.</p> <p>The Degree Programme in Software Engineering aims to train experts in programming e.g., for mobile and network programming. The course of studies provides a good level of competence for mastering the most common programming languages, programming techniques, development tools, and environments.</p>
PROFILE	<p>The Degree Programme in Software Engineering aims to train experts in programming for mobile, web and game programming. The course of studies provides a good level of competence for mastering the most common programming languages, development tools and environments, and programming methodology skills.</p> <p>The language used in the ICT industry is English, and teaching materials are largely in English. As a result of student exchanges, student oral language proficiency levels will improve and an academic term in the English language ensures basic ICT skills for all students.</p>

COURSE STRUCTURE



(the figure is explained for students in English)

COURSE CONTENT AND PERFORMANCE

The course includes basic and vocational studies, elective studies, specialization training, and a graduation thesis.

The course shall be completed within two semesters from its beginning. The exception is the graduation thesis, practical training, special working life oriented project studies, as well as extensive courses implemented in a number of semesters. In cases where a course remains incomplete, the student shall re-start it.

In the first contact lesson of a course, a review is carried out of the course's learning objectives and content, along with the different procedures and evaluation criteria; additionally, the possible examination date is agreed upon (the immediate time at which this will be carried out) and the course completion date is announced, after which no further attempts are accepted. Students have the opportunity to try to complete a course a total of three times: during the immediate performance of the course or in two specially determined resit exam times.

LEARNING ASSESSMENT

Learning outcomes are assessed in relation to the course's learning objectives. Assessment decisions are based on the evaluation criteria provided in the course descriptions. Courses are assessed on the assessment scale that is specified in the course description. According to its purpose, the scale may be one of five steps: 5 (excellent), 4 (very good), 3 (good), 2 (satisfactory) and 1 (adequate) or a pass (P) or fail (0). The course has been failed (with a fail (0)) if the student does not achieve the minimum outcomes that are set for the completion of the course.



	<p>Students have the right to know how the evaluation criteria are applied to their skills. Course performance is recorded in the transcript of records no later than one month after the declared point of completion for the course and always before the end of the academic year.</p>
ACCREDITATION AND RECOGNITION OF PRIOR LEARNING (RPL)	<p>The procedures for accreditation are described in the Degree Regulations and in the Study Guide.</p>
MODE OF STUDY	<p>As a rule, studies include additional close contacts in which, in a guided manner that is thoroughly discussed, the knowledge base of the subject area and the practical tasks and tools of the subject area are practiced. For example, course assignments can be carried out in the form of distance learning. In the project management course, where groups are working on working life assignments, one day a week is reserved for creating a project for a client company or organisation, and the team has their own room with their computers to use. In the practical training phase, students are part of the target company's staff, learning about the company's practices and methods of working.</p>
PROFESSIONAL GROWTH AND KNOW-HOW	<p>The curriculum of the degree programme is built from joint competencies taken from working life and from the University of Applied Sciences. The competence areas consist of courses and joint study modules formed from them to which the common and degree programme-specific competencies are attached. The students make their own choices in line with their career plans within the competence areas courses such as, among other things, through learning tasks and methods, the thesis, and training environments that promote professional skills. The competence areas of the degree programme are those transferable skills that are common for all students of the JAMK University of Applied Sciences, in addition to which there are the core competences of Mathematics and Science, ICT, Software Engineering, and Electrical and Technical Equipment, which are common for all students taking part on the Degree Programme in Software Engineering.</p>
QUALIFICATION REQUIREMENTS AND REGULATIONS	<p>The profession does not have specific qualification requirements that are based on legislation.</p>
ADDITIONAL INFORMATION	<p>Students may be charged separately for the cost of materials where such costs correspond to real life acquisitions or production costs in terms of teaching materials, tools, equipment, or supplies that remain in the student's possession after their education has been completed. If a student obtains similar materials from other sources, he or she is not charged for the cost of materials (Government Decree 1230/2009 2 §).</p> <p>Bachelor's degree programme is free for students.</p>
GRADUATION	<p>The requirement for the receipt of the certificate of Bachelor degree is that students complete the studies for their degree programme during the study period in accordance with the personal learning plan (PLP).</p> <p>JAMK University of Applied Sciences provides students with a certificate of completion of the Bachelor's degree (210, 240 or 270 ECTS credits). A transcript is attached to the certificate.</p>



EMPLOYMENT AND FURTHER STUDIES	
EMPLOYMENT OPPORTUNITIES	<p>Employment levels in the field are good, even if the field is sensitive to economic conditions. Students who graduate from the Degree Programme may be employed in many different tasks. Early career assignments often have an emphasis on software design, coding and testing. Later careers can progress to team or project manager duties, or marketing and management positions.</p> <p>Typical tasks include:</p> <ul style="list-style-type: none">- Web or client server solutions for programming databases- Database design and implementation- Design and implementation for software testing- Programming embedded systems- Design and programming for information network management tools- Maintaining servers and application development- Mobile device programming- Game programming
OPPORTUNITIES FOR POST-GRADUATE STUDIES	<p>After graduation and after about three years of a working life phase, the students of a Bachelor's degree programme can continue their studies in a Master's degree programme. The Master's degree at the University of Applied Sciences is a university level Master's degree. Students can also continue their studies by applying for courses such as, for example, the Master's degree programmes at universities or for an equivalent training course. After the completion of Bachelor's studies it is, of course, also possible to continue in foreign institutions of higher education on the Master's level degree programmes.</p> <p>The University of Applied Sciences also offers continuing education opportunities for specialisation studies, learning agreement type in-service training, as well as in working life based continuing education. If a student graduates from the Master's degree programme, he or she can get the opportunity to continue their studies in the scientific or artistic studies at universities (37 §/558/2009). All further studies must be applied for separately.</p>
OTHER INFORMATION	
HEAD OF THE DEGREE PROGRAMME	Hannu Luostarinen, Head of Department, 0400 444 941, firstname.lastname@jamk.fi
PROGRAMME PLANNING PROCESS	Central Finland's regional strategies provide a general view of the future development of the region and have therefore been received as the starting point for the planning of the degree programme. More detailed information on the needs of businesses has been received from the work of the Advisory Committee of ICT Department.
SCHOOL	JAMK University of Applied Sciences School of Technology, Degree Programme in Software Engineering Piippukatu 2, 40100 Jyväskylä
QUALITY MANAGEMENT	<p>JAMK University of Applied Sciences is using the quality management system that has been audited by the Finnish Higher Education Evaluation Council (FINHEEC). Education is developed on the basis of course feedback collected from students.</p> <p>In the middle of each course is given the possibility for providing free-form feedback, on the basis of which implementation of the last half of the course can be corrected and if necessary, to take a new direction. Achieving these goals is ensured by</p>



	<p>comparing the objectives against student competence (in terms of self-assessment, screen tests, and exercises).</p> <p>The principles of the curriculum are approved by the JAMK University of Applied Sciences Academic Board and by the Vice Rector of the degree programme specific curriculum.</p>
PEDAGOGICAL PRINCIPLES	<p>The degree programme is implemented in accordance with the pedagogical principles established by the University of Applied Sciences Academic Board.</p> <p>For more information: http://www.jamk.fi/english/aboutus/facts/pedagogical-principles</p>
ETHICAL PRINCIPLES	<p>The students and employees of JAMK University of Applied Sciences operate jointly according to the accepted (by JAMK Academic Board on 15.12.2010) ethical principles.</p> <p>For more information: http://www.jamk.fi/english/aboutus/facts/ethicalprinciples</p>
LAST UPDATE	20.12.2012
CURRICULUM APPROVED	21.12.2012 Heikki Malinen, Vice Rector