

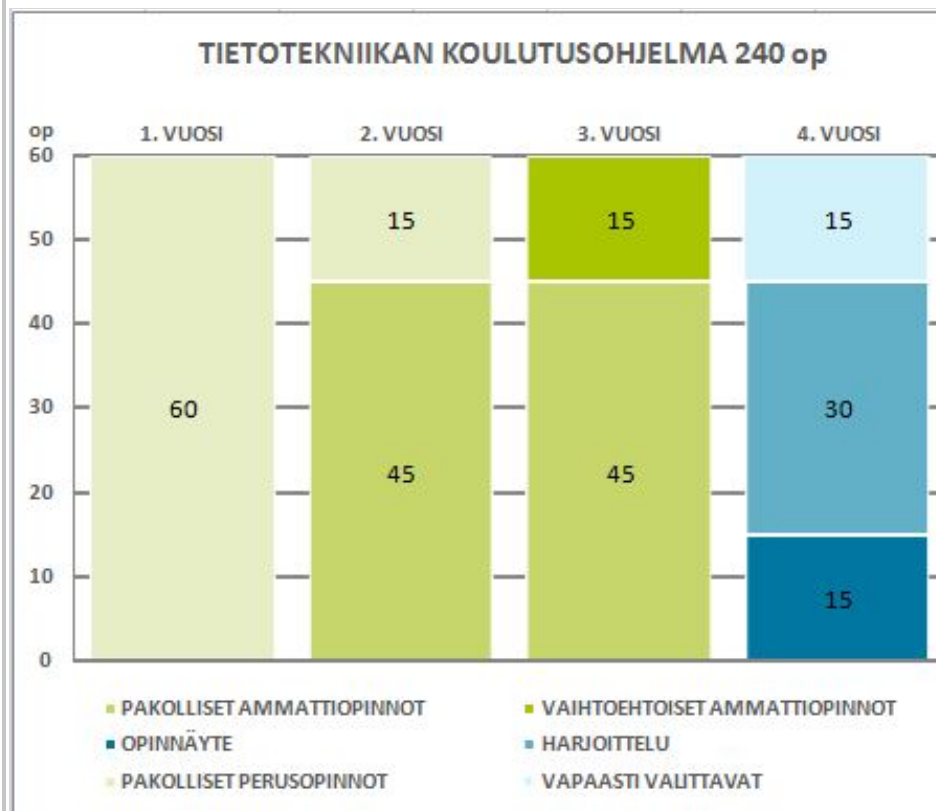


GENERAL INFORMATION	
DEGREE PROGRAMME	Degree Programme in Information Technology
PERIOD OF EXECUTION	2013-2017
SCOPE	240 ECTS credits
DESCRIPTION	<p>Do you want to be a pioneer or would you rather languish at the back? If your answer is that you are a pioneer, you have found your degree programme. In our Degree Programme in Information Technology you can achieve interesting results in various areas of working with computer networks using cutting-edge hardware and software. We have the best laboratories in Finland, which are designed for use in education and research.</p>
LANGUAGE OF STUDY	Finnish
CODE	IIT13S1
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>After completion of the Degree Programme, students have the basic skills and competencies in communications, programming and operating systems that are related to data network technology, as well as the ability to acquire and apply new technology-related information. There are also optional joint study modules, through which students can direct their skills in a particular competence area. Upon completion of these modules, and depending on their choice, students will be able to broaden their knowledge of computer networks in companies and their IT operations, their design, management and their information security. The practical training that is carried out in working life, as well as laboratory work and projects in which working life-orientated assignments are carried out, help to develop competencies so that they can function in work assignments.</p> <p>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 a joint study module that supports entrepreneurial activities, and they will also be able to obtain support from the department's own entrepreneurial coach.</p>
PROFILE	<p>The Degree Programme in Information Technology is focused on computer networks. In particular, the training programme emphasises the core network technologies, service management and information security at the operator level. Graduates of the degree programme will master the view of the data network entity in terms of various implementation options, backup systems, and information security. In addition, they will be able to determine the technical parameters without going into the hardware, software, or manufacturer levels.</p> <p>The innovation of the Degree Programme in Information Technology is the SpiderNet laboratory, which is an education environment for the practical teaching of network technologies that stands alone from the network at JAMK University of Applied Sciences and which instead works with Lutakko. In a separate educational</p>

environment students can safely set up servers and build into them services and configure network parameters for workstations and servers. This is a unique learning environment in Finland.

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.

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	<p>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> <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>The main method for the performance of the studies is as follows: contact and distance learning</p> <p>As a rule, studies include additional close contacts, in which the knowledge base of the subject area is thoroughly discussed, and the practical tasks and tools of the subject area are practised. For example, course exercises can be carried out in the form of distance learning. In the practical training periods, students are part of the target company's staff.</p>
PROFESSIONAL GROWTH AND KNOW-HOW	<p>The degree programme curriculum is built on competence areas as well as on common and degree programme specific competencies. The learning process is performed by competence areas which consist of courses. General and degree programme specific competencies are attached to competence areas and courses in which the development of competence throughout the student's education takes place. Competencies are described as process charts on three development levels: the basic level of competence, the developing level of competency, and the advanced level of competency. On the basis of those development levels, the learning objectives and contents of the competence areas and courses are formed. Competency develops in the competence areas from the student at the basic level to the student at the advanced level, which provides the skills for the expertise of a developing engineer in working life.</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>Upon graduation, students can operate in areas such as, for example, maintenance, or design and marketing positions, in companies that produce or utilise data network technology companies and also in public sector organisations. Data network engineers can work in domestic and international companies as a project engineer and manager or as an independent entrepreneur.</p>
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	<p>Mika Rantonen, programme coordinator, +358 (0) 40 716 7269, firstname.lastname@jamk.fi</p>
PROGRAMME PLANNING PROCESS	<p>The aim of the Degree Programme in Information Technology is to produce engineers who meet the needs of business life. Based on this, the learning objectives of the Degree Programme have been defined on the basis of the current and future needs of business life, benefiting from input from company staff, experts in the field, and public and prospective studies. Together with the programme coordinator, the Head of Department is responsible for monitoring the progress of the planning of the learning objectives in the Degree Programme in Information Technology and for the management of resources. Learning objective are divided into competence areas and into the competencies therein and are included into the structure of the degree programme in the form of various courses.</p>
SCHOOL	<p>JAMK University of Applied Sciences School of Technology, Degree Programme in Information Technology Piippukatu 2, 40100 Jyväskylä</p>
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>



	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.
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