



GENERAL INFORMATION	
DEGREE PROGRAMME	Degree Programme in Logistics
PERIOD OF EXECUTION	2013 - 2017
SCOPE	240 ECTS credits
DESCRIPTION	Studies in the degree programme create the capability for the design, development and management of logistical systems. Parts of the studies are carried out in English and, if desired, part of the studies can be carried out abroad as an exchange student. After graduation, it is possible to function as a logistics professional or in managerial positions, or as a self-employed entrepreneur in the field.
LANGUAGE OF STUDY	Finnish
CODE	TLO13S1
DEGREE	Bachelor of Engineering
DEGREE LEVEL	National Qualifications Framework level 6.
TARGET GROUP AND ADMISSION CRITERIA	Eligibility is provided by a secondary education such as, for example, with a secondary school leaving certificate, a matriculation examination, a vocational qualification, foreign qualifications, or through the route of the open university of applied sciences. All eligible candidates will be invited to the national entrance examination for the technology and transport sector. The final selection is influenced by the first selection of an individual's application, their progress at school, and the entrance examination and work experience.
STUDIES	
KEY LEARNING OUTCOMES	<p>The aim of the programme is to train future engineers to develop and lead the logistics functions within organisations. In addition, the aim is to create a good basis for further professional development in accordance with the individual's own goals.</p> <p>The learning objectives of the degree programme are based on the shared competencies and in the transferable skills of the graduates of JAMK University of Applied Sciences, as well as on the degree programmes specific learning objectives. The shared skills and transferable skills are described in the JAMK document, Basics of the Curriculum 2013-2014.</p> <p>The learning objectives of the training programme are as follows:</p> <p><b>Mathematical and scientific skills</b></p> <ul style="list-style-type: none"><li>• adopts the model of mathematical processing and logical thinking and is able to apply it to solving professional problems</li><li>• is able to take advantage of mathematics and physics to describe technical phenomena and solve problems</li><li>• masters the physical and chemical phenomena and related laws that are important within the field</li></ul> <p><b>Technological expertise</b></p> <ul style="list-style-type: none"><li>• knows the most common materials, components and equipment used in technology</li><li>• understands the operating principles of technical equipment and knows how to interpret technical documents</li></ul>

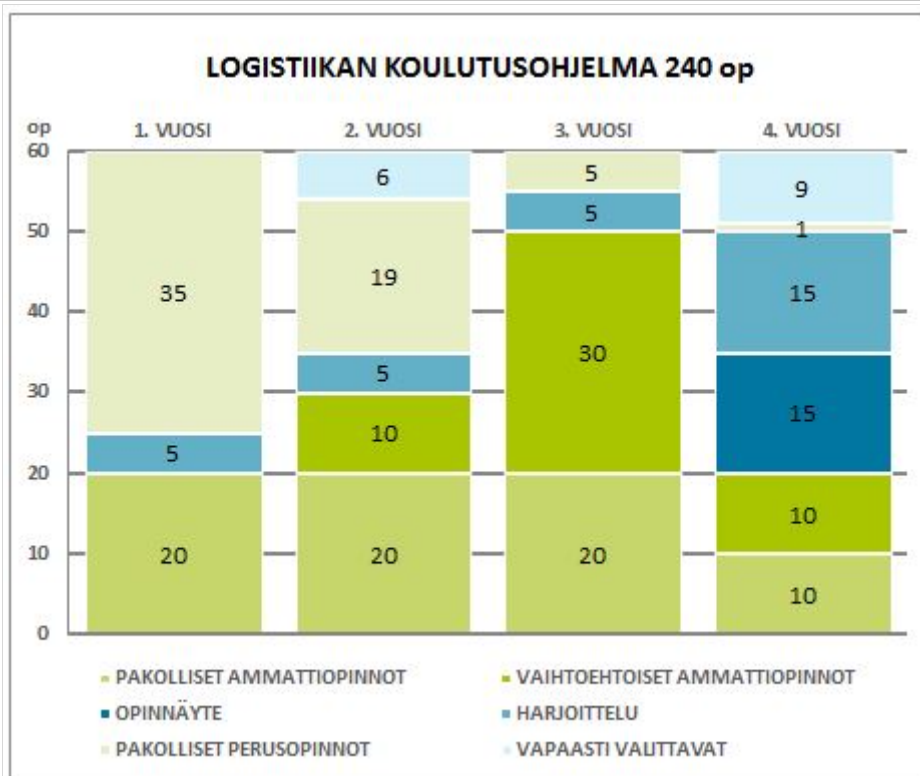


	<p><b>Procurement skills</b></p> <ul style="list-style-type: none"><li>• is able to lead, develop and make purchases in promoting the competitiveness of the organisation</li></ul> <p><b>Storage and material handling expertise</b></p> <ul style="list-style-type: none"><li>• has the ability to lead and develop storage and materials handling in a logistics chain</li><li>• is able to design warehouses and internal logistics platforms</li></ul> <p><b>Expertise in transportation</b></p> <ul style="list-style-type: none"><li>• understands the use of and admission criteria for modes of transport</li><li>• is able to design and develop transportation systems and services</li></ul> <p><b>Expertise in production logistics</b></p> <ul style="list-style-type: none"><li>• understands the forms of production and their suitability as part of the company's strategy</li><li>• has the ability to lead and develop production processes and their quality and manoeuvrability</li></ul> <p><b>Expertise in information systems</b></p> <ul style="list-style-type: none"><li>• is able to utilise and develop information systems in logistics operations</li><li>• is able to utilise and develop the location, identification and data collection systems for logistics operations</li></ul> <p><b>Economic skills</b></p> <ul style="list-style-type: none"><li>• understands business-related operational and financial principles</li><li>• is able to design and develop profitable operations from a business perspective</li></ul> <p><b>Leadership skills</b></p> <ul style="list-style-type: none"><li>• understands the principles of the networks and network management</li><li>• understands the meaning of a customer-orientated approach and can consider this in the decision-making process</li><li>• knows the principles of sustainable development and is able to take them into account in the decision-making process</li><li>• knows the main legislation and contractual requirements of the field</li><li>• is able to work as a supervisor or also as an expert in multicultural organisations</li></ul>
<p><b>PROFILE</b></p>	<p>The degree programme supports JAMK's goal to be the most entrepreneurial-orientated university in Finland. In addition to the professional knowledge and skills, the aim of the study process is to ensure that the student is familiar with the basics of entrepreneurship and is familiar with business opportunities as a logistics industry service provider and developer. Individuals should be able to realise entrepreneurship as a career option and should be able to achieve the options that have supported it in their own studies.</p> <p>In the degree programme, the entrepreneurial basic skills are included in the vocational studies of the logistics training. The learning process as a whole emphasises self-management and internal entrepreneurship. Students can improve their skills in entrepreneurial-related matters through the propagation models described in the JAMK document: "Basics of Curriculum 2013-2014".</p> <p>The degree programme implements the models of action described in the JAMK document: "Basic of Curriculum 2013-2014", for the further development of internationalisation. Some courses are carried out in English and are partly carried out by foreign experts. Students have the opportunity to choose a specialisation option</p>

from the course offerings on the English language Degree Programme in Logistics (TEL). About half of students in the English language degree programme are foreigners, which helps to form a truly international and multicultural learning atmosphere.

The education process responds well to the expectations of working life for the competence needs of graduating logistics engineers. For the purpose of high quality implementation and outcome, continuous improvement is being achieved in close cooperation with business life representatives.

## 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 studies have a close connection to working life throughout the learning process, and working life connections systematically expand as the learning process progresses. The key elements in maintaining and developing working life connections during the course of one's studies is practical training, guest lecturers or courses carried out by corporate representatives, company visits, project works carried out for companies, and theses based on corporate assignments.

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;



	<p>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.</p>
<b>LEARNING ASSESSMENT</b>	<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>
<b>ACCREDITATION AND RECOGNITION OF PRIOR LEARNING (RPL)</b>	<p>The procedures for accreditation are described in the Degree Regulations and in the Study Guide.</p>
<b>MODE OF STUDY</b>	<p>The programme forms a full-time study process. Studies are divided into courses, which are carried out through contact hours, independent exercises, group exercises, projects, and skills testing using various methods.</p> <p>Studies include project work for businesses, as well as practical training carried out in three parts that links education and working life effectively with each other. Project work that is carried out for companies is an important element not only from the perspective of the development of competence but also from the point of view of the maintenance and development of contracts with working life. Design work is mainly related to part of the implementation of the courses, but separate working life assignments are also executed without a direct connection to the completion of a course. In these implementations, the student can choose to include the performance of the assignment in elective studies to the extent agreed. Students participate in R&amp;D&amp;I project implementations for the degree programme, where possible. As part of practical training, students carry out the work tasks that are assigned to them by the employer and the special learning objectives and learning tasks that are assigned to them for the practical training period. Students look for practical training placements independently and more than 90% of the practical training is done in the ordinary course of the employment relationship.</p> <p>Theses are working life-oriented, which adhere to a variety of assignments that emerge from working life itself, thereby further expanding the student's working life connections. More than 90% of theses that are completed in the degree programme are carried out based on working life assignments and, as a rule, the student is employed by the assignment's client.</p>
<b>PROFESSIONAL GROWTH AND KNOW-HOW</b>	<p>The curriculum is built on competence areas, courses and joint degree programme-based learning objectives. The learning process is carried out with a basis on competence areas which consist of courses. Joint and degree programme-based qualifications are attached to competence areas in the form of courses.</p>



	<p>The extent of studies, the planned timing and qualifications, which are built during the training, are described in the Study Guide.</p>
<b>QUALIFICATION REQUIREMENTS AND REGULATIONS</b>	<p>The profession does not have specific qualification requirements that are based on legislation.</p>
<b>ADDITIONAL INFORMATION</b>	<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>
<b>GRADUATION</b>	<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>
<b>EMPLOYMENT AND FURTHER STUDIES</b>	
<b>EMPLOYMENT OPPORTUNITIES</b>	<p>More than 80% of Logistics students are employed immediately after graduation. Tasks represent a wide variety of industries and organisation sizes. The most common job titles immediately after the completion of an individual's studies are, for example, an acquisition engineer, warehouse manager, transportation designer, project engineer, sales engineer and logistics officer. Approximately two to three percent of graduates begin or continue as entrepreneurs.</p>
<b>OPPORTUNITIES FOR POST-GRADUATE STUDIES</b>	<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> <p>JAMK's Department of Logistics is the only Finnish university of applied sciences to implement a Master's degree-level education in logistics. The capacity of the programme is 60 ECTS credits and it takes place on the job, as multiform study. This programme can be applied for when an individual has a minimum of three years of work experience after achieving their Bachelor's degree.</p>



<b>OTHER INFORMATION</b>	
<b>HEAD OF THE DEGREE PROGRAMME</b>	Sami Kantanen, Head of Department and R&D Manager, phone +358 (0) 40 825 7405. Programme coordinator, Petri Vauhkonen, lecturer, phone 050 595 0446 e-mail: firstname.lastname@jamk.fi
<b>PROGRAMME PLANNING PROCESS</b>	The curriculum is built up as a cooperative process alongside employers and trade associations in the logistics sector, as well as with students who graduate from the degree programme. Once the learning objectives and competences that have been created by the degree are known, the views of involved parties are utilised. Viewpoints have been mapped through advisory committee work and discussion sessions. In addition, the degree programme has used the results of the logistics industry foresight projects which were carried out during the autumn of 2011 and spring 2012. The project examined the future skills needs of the logistics sector. The project involved interviews with 26 key individuals from 24 different organisations. The interviewees were selected from industrial, commercial and public sector organisations. Furthermore, student reflections on the latest practical training report were used in the design work to determine the extent to which the studies will benefit and support them in performing their tasks.
<b>SCHOOL</b>	JAMK University of Applied Sciences School of Technology, Degree Programme in Logistics Rajakatu 35, 40200 Jyväskylä
<b>QUALITY MANAGEMENT</b>	<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>The degree programme collects feedback from all courses mid-way through the course. The idea is to support not only the implementation of the future design of the course, but also to affect the implementation that is still going on and to provide immediate feedback to students. The teacher in charge of the implementation of the course in question is responsible for collecting the feedback. Mid-course feedback is archived together with the plans for the completed courses at the end of the course. Occasionally, feedback is also collected from randomly selected courses in order to support the design of future implementations. These courses are selected by the Head of Department and R&amp;D Manager, together with the programme coordinator.</p> <p>In the degree programme, the feedbacks are dealt with in expert teams comprising of the teaching staff. Corrective measures are worked out on an individual level as well as amongst the team members. People show good practices experienced by them to other team members to apply them in their own implementations. Feedback information is also expressed in the staff meeting at the Department of Logistics. 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>
<b>PEDAGOGICAL PRINCIPLES</b>	The degree programme is implemented in accordance with the pedagogical principles established by the University of Applied Sciences Academic Board. For more information: <a href="http://www.jamk.fi/english/aboutus/facts/pedagogical-principles">http://www.jamk.fi/english/aboutus/facts/pedagogical-principles</a>
<b>ETHICAL PRINCIPLES</b>	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. For more information: <a href="http://www.jamk.fi/english/aboutus/facts/ethicalprinciples">http://www.jamk.fi/english/aboutus/facts/ethicalprinciples</a>



<b>LAST UPDATE</b>	20.12.2012
<b>CURRICULUM APPROVED</b>	21.12.2012 Heikki Malinen, Vice Rector