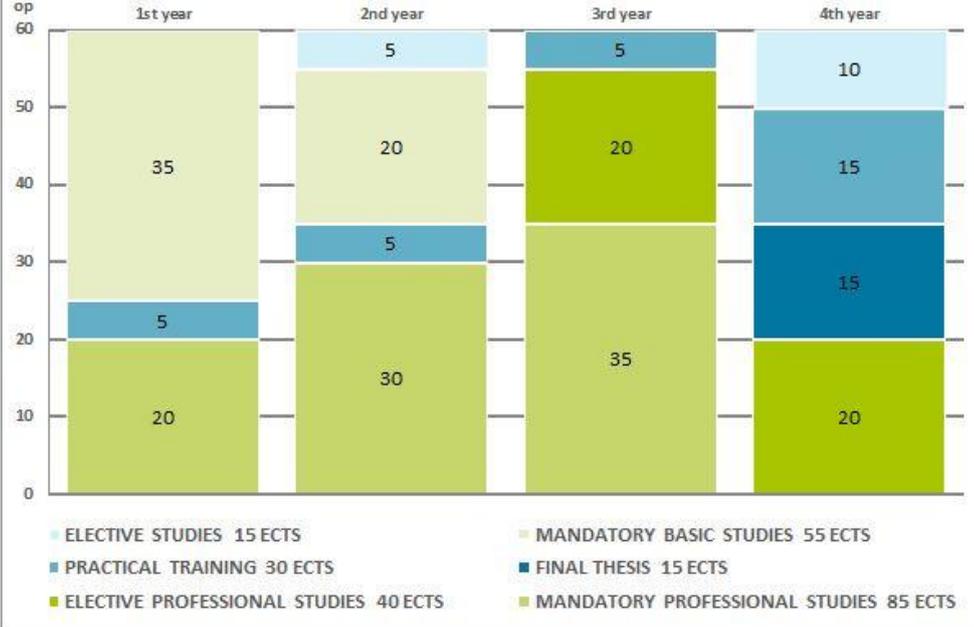




GENERAL INFORMATION	
DEGREE PROGRAMME	Degree Programme in Logistics Engineering
PERIOD OF EXECUTION	2013-2017
SCOPE	240 ECTS credits
DESCRIPTION	Degree Programme in Logistics Engineering is a four year programme which is fully conducted in the English language. Students come both from Finland and from abroad. The study programme ensures that students achieve professional skills in the fields of Logistics as well as gaining skills from selected fields of engineering, natural sciences, languages and communication. After graduation students can work as experts or managers in areas such as, for example, purchasing, transportation, materials management and information logistics.
LANGUAGE OF STUDY	English
CODE	TEL13S1
DEGREE	Bachelor of Engineering
DEGREE LEVEL	National Qualifications Framework level 6
THE TARGET GROUP AND THE ADMISSION CRITERIA	An upper secondary school certificate or vocational upper secondary diploma is required, as well as taking part in an entrance examination. The entrance examination for the Degree Programme in Logistics Engineering is arranged in Finland and in several countries abroad. The entrance examinations in countries outside of Finland are organised in cooperation with the Finnish Network for International Programmes (FINNIPS).
STUDIES	
KEY LEARNING OUTCOMES	<p>The outcome of the programme is to educate future engineers so that they are able to develop and manage logistics operations for organisations. In addition, students gain valuable background for their future professional development.</p> <p>The key learning outcomes of the programme are based on common learning outcomes for all graduates at JAMK University of Applied Sciences and learning outcomes for the Degree Programme in Logistics Engineering. Common learning outcomes have been described in JAMK's document, Principles of the Curriculum.</p> <p>The key learning outcomes of the Degree Programme in Logistics Engineering are as follows:</p> <p>Natural sciences and engineering skills</p> <p>1 Natural sciences skills</p> <ul style="list-style-type: none">• The student understands and can use mathematics and mathematical tools to solve professional problems.• The student is able to use mathematics and physics to describe and solve phenomena in technical environment.• The student understands important theories in physics and chemistry from logistics point of view. <p>2 Engineering skills</p> <ul style="list-style-type: none">• The student understands technical drawings and the principles of components and materials.• The student understands different production technologies and the use of machines.• The student understands the basic principles of electrical and automation sciences.



	<p>Logistics professional skills</p> <p>1 Purchasing and warehousing skills</p> <ul style="list-style-type: none">• The student is able to engineer and manage purchasing processes and functions.• The student is able to engineer and manage materials management and warehousing processes and systems.• The student knows and is capable to work according to requirements of international law and employment contracts. <p>2 Transportation skills</p> <ul style="list-style-type: none">• The student understand the principles and use of different transportation modes.• The student is capable to work and manage the economics of transportation and understands the importance of sustainability.• The student knows and is capable to work according to the requirements of international law and employment contracts. <p>3 Production logistics</p> <ul style="list-style-type: none">• The student understands the strategic position of production.• The student understands the principles of various production systems.• The student is capable to manage production processes and quality. <p>4 Information logistics</p> <ul style="list-style-type: none">• The student understands the role of information systems in logistics management.• The student is capable to utilise identification and positioning technologies in logistics management. <p>5 Life cycle support</p> <ul style="list-style-type: none">• The student understands the meaning of life cycle support.• The student is capable to manage maintenance operations and spare parts logistics. <p>Logistics management skills</p> <p>1 Logistics management skills</p> <ul style="list-style-type: none">• The student understands the economical and functional principles of a successful business.• The student understands the meaning of networks and the principles of network management.• The student is able to work as a manager and as an expert in international multicultural organisations.• The student understands the meaning of sustainability in logistics.
<p>PROFILE</p>	<p>The programme supports JAMK University's achievement to offer entrepreneurial skills and knowledge for students. The programme offers students the principle skills and knowledge from entrepreneurship in general and also provides the skills inherent in entrepreneurship as one possible option for the student's future career. A basic education of entrepreneurship is included in professional skills studies in logistics. The student has possibilities to increase the depth of his/her studies in the field of entrepreneurship as shown in JAMK University's Principles of the 2013-2014 curriculum document.</p> <p>The programme is closely connected to business life. The programme's development work is being carried out continuously with representatives from the business life. The programme's advisory board includes representatives from local and global companies from industry, logistics service providers, and from various authorities.</p>

	<p>The programme is international in a natural way. The whole programme is conducted in the English language. Students attend from all over the world. This gives the programme its own unique multicultural atmosphere. There are also international specialists from the fields of logistics providing annual visiting lectures for the programme.</p>																														
<p>COURSE STRUCTURE</p>	<p style="text-align: center;">ANNUAL PROGRESS OF STUDIES DEGREE PROGRAMME OF LOGISTICS ENGINEERING</p>  <table border="1"> <caption>Annual Progress of Studies Data</caption> <thead> <tr> <th>Year</th> <th>Mandatory Basic Studies (ECTS)</th> <th>Elective Studies (ECTS)</th> <th>Practical Training (ECTS)</th> <th>Elective Professional Studies (ECTS)</th> <th>Mandatory Professional Studies (ECTS)</th> </tr> </thead> <tbody> <tr> <td>1st year</td> <td>35</td> <td>5</td> <td>0</td> <td>20</td> <td>0</td> </tr> <tr> <td>2nd year</td> <td>20</td> <td>5</td> <td>5</td> <td>30</td> <td>0</td> </tr> <tr> <td>3rd year</td> <td>0</td> <td>0</td> <td>5</td> <td>20</td> <td>35</td> </tr> <tr> <td>4th year</td> <td>0</td> <td>10</td> <td>15</td> <td>15</td> <td>20</td> </tr> </tbody> </table> <p> ■ ELECTIVE STUDIES 15 ECTS ■ PRACTICAL TRAINING 30 ECTS ■ ELECTIVE PROFESSIONAL STUDIES 40 ECTS ■ MANDATORY BASIC STUDIES 55 ECTS ■ FINAL THESIS 15 ECTS ■ MANDATORY PROFESSIONAL STUDIES 85 ECTS </p>	Year	Mandatory Basic Studies (ECTS)	Elective Studies (ECTS)	Practical Training (ECTS)	Elective Professional Studies (ECTS)	Mandatory Professional Studies (ECTS)	1st year	35	5	0	20	0	2nd year	20	5	5	30	0	3rd year	0	0	5	20	35	4th year	0	10	15	15	20
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<p>COURSE CONTENT AND PERFORMANCE</p>	<p>Studies include basic and vocational studies, elective studies, practical training and the final thesis.</p> <p>Courses are described in detail in the ASIO student management system.</p> <p>The course must be completed in no more than two semesters from the start thereof. The exception is the thesis and practice, as well as for extensive courses completed in a number of semesters. If a course is not completed, the student shall re-start it.</p> <p>In the first contact lesson of a course, the learning outcomes and the content of the course are reviewed, along with the various procedures and evaluation criteria. In addition, a potential examination date is agreed upon (the immediate performance time) and the course completion date is announced, after which attempts are no longer accepted. Students have the opportunity to try and achieve the completion of a course a total of three times: during the immediate performance time for the course or in two specially determined re-examination times.</p>																														
<p>LEARNING ASSESSMENT</p>	<p>Learning outcomes are assessed in relation to the learning objectives of the course. Assessment decisions are based on the assessment criteria provided in the course descriptions. Courses are assessed on the assessment scale specified in the course description. According to its purpose, the scale may be either of five steps: 5 (excellent), 4 (very good), 3 (good), 2 (satisfactory) and 1 (adequate) or a pass (P)/fail (0). Completion of the course has been failed (fail (0)) if the student does not achieve the minimum outcomes set for completion of the course.</p> <p>The student has the right to know how the criteria apply him or her. Course performance is recorded in the transcript of records no later than one month after the declared time of completion of the course and always before the end of the school year.</p>																														



ACCREDITATION AND RECOGNITION OF PRIOR LEARNING (RPL)	The procedures for accreditation are described in the Degree Regulations and in the Study Guide.
MODE OF STUDY	<p>Studying in a logistics engineering programme is classed as full time studying. The programme is divided into courses. Each course may include contact lessons, individual and project assignments, cases or project works and exams or other measurements of learning.</p> <p>In study tours, project works and training, students get along with business life. Some courses include project works in which students are asked to solve practical challenges for companies. Some courses also have study tours to companies. Practical training is also carried out within companies. Practical training is carried out over three periods. Students are responsible for finding training placements for themselves. Most of the training is carried out in normal work relationship during the summertime. In addition, a bachelor thesis in the final part of studies is normally carried out in the business environment. These modes of studying include close co-operation with business life during the study period. This makes it easier for students to find professional jobs after graduation.</p> <p>There is an international study tour during the third year of studies. During this study tour students together with lectures get to know to logistics business and educational environment of selected area.</p> <p>For Finnish students of the programme, there is an exchange period abroad during the fourth year of their studies.</p> <p>Most of the courses use the virtual learning environment to support the learning process of students.</p>
PROFESSIONAL GROWTH AND KNOW-HOW	<p>Studies are structured in terms of learning areas, courses, and JAMK's common and programme specific learning achievements.</p> <p>The contents of the courses, planned schedules and learning outcomes are described in the study guide.</p>
QUALIFICATION REQUIREMENTS AND REGULATIONS	There are no degree-specific qualification requirements and regulations.
ADDITIONAL INFORMATION	<p>A free-form field, which is reserved for essential information and which may not be cleared from the description. Additional information about the course, its accession to a particular path, the corresponding implementation in English, and other items may be indicated here.</p> <p>The students may be charged separately for any material costs corresponding to real acquisition or production costs of study material, tools, equipment, or supplies that remain in the student's possession after the education is completed. If a student obtains similar material from other sources, he or she will not be charged the material costs (Government Decree 1230/2009 § 2).</p> <p>Bachelor's degree programme is free for the students.</p>
GRADUATION	The prerequisite for receiving the certificate of Bachelor's degree is that students complete the studies of their degree programme during the study period in accordance with the personal learning plan (PLP).



	JAMK University of Applied Sciences provides students with a certificate of completion of the Bachelor's degree (210, 240, or 270 ECTS credits). To the certificate are attached the academic transcripts.
EMPLOYMENT AND FURTHER STUDIES	
EMPLOYMENT OPPORTUNITIES	The programme works continuously in close co-operation with business life to ensure that the content of the programme fully fits with the present and future requirements of international logistics business life. Students may work in various fields in which professionals in logistics are needed: in industry, business, services, banks and education.
OPPORTUNITIES FOR POST-GRADUATE STUDIES	<p>After graduation and after about three years of a phase of normal 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 Master's degree. Students can also continue their studies by applying for areas such as, for example, the Master's degree programmes in universities or for an equivalent training programme. After one's Bachelor's studies have been completed, it is, of course, also possible to continue in foreign institutions of higher education on the various Master level degree programmes.</p> <p>JAMK 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 of universities (§ 37/558/2009). All further studies must be applied for separately.</p> <p>Students have the option of continuing their studies at the master's level, and after that they can progress all the way to a PhD.</p>
OTHER INFORMATION	
HEAD OF THE DEGREE PROGRAMME	Head of Department of Logistics, Sami Kantanen, tel. +35840 825 7405 Head of Programme Logistics Engineering, Tommi Franssila, tel. +35840 594 6847
PROGRAMME PLANNING PROCESS	Logistics Engineering Programme has close co-operation with selected business life representatives and authorities. Advisory board meets 1-2 times in a year. Main focus for advisory board working is to ensure that curriculum of Logistics Engineering programme supports the skills and knowledge that working life requires in the future when students will graduate. Advisory board also plans co-operation methods for the programme and the business life such as practical training placements, final thesis ideas, excursions, project works, assignments and visiting teachers. Advisory board consist of members of industrial companies, global transportation companies and authorities in addition to head of logistics department and head of the programme. In addition to this the results of Delphi-system which is used in Logistics Master programmes curriculum planning is used in Logistics Engineering programmes planning as well.
SCHOOL	JAMK University of Applied Sciences School of Technology, Degree Programme in Logistics Engineering Rajakatu 35, 40200 Jyväskylä
QUALITY MANAGEMENT	<p>JAMK University of Applied Sciences uses the quality management system audited by the Finnish Higher Education Evaluation Council (FINHEEC). The education is developed on the basis of feedback gathered from students.</p> <p>The programme was audited by the international audit group in autumn 2012.</p>



	<p>In every course, mid-term feedback is collected. By using this feedback the lecturer has the opportunity to develop a course already during the ongoing semester. The final feedback is collected from a selected range of courses.</p> <p>The principles of the curriculum are approved by the JAMK University of Applied Sciences Board of Education and 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. More information: http://www.jamk.fi/english/aboutus/facts/pedagogical-principles</p>
ETHICAL PRINCIPLES	<p>The students and staff of the University of Applied Sciences operate jointly in accordance with the accepted ethical ideas (Academic Board 5.12.2007). More information: http://www.jamk.fi/english/aboutus/facts/ethicalprinciples</p>
LAST UPDATE	<p>20 December 2012</p>
CURRICULUM APPROVED	<p>7 January 2013 Heikki Malinen, Vice Rector</p>