

# MSc in Industrial Engineering - Logistics Management Magisterutbildning i industriell ekonomi - logistik

60 credits

Ladok Code: KMAGI Version: 4.2 Level: Second cycle Approved by: The Teaching Committee 2011-06-17 Valid from: Autumn 2011 Valid for:

# **General Objectives**

Second level education shall essentially build on the knowledge that students acquire in first level education or corresponding knowledge. Second level education shall involve a deepening of knowledge, skills and abilities relative to first level education and, in addition to what applies to first level education, shall

- further develop the students' ability to independently integrate and use knowledge,
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable independence or for research and development work.

(The Higher Educations Act, Chapter 1, Section 9)

#### Objectives

Objectives: The education is designed in a manner which will enable the student to, upon graduation:

- have developed an ability to integrate knowledge learnt throughout the education,
- be able to analyse and solve complex and reality-based problems within internal and external logistics,
- be able to function in a professional role as adviser at management-level in internal and external logistics, and management of supply chains,
- be able to identify and describe problems within internal and external logistics,
- be able to choose a suitable method for modelling and solving logistics problems,
- relate to logistics problems in a scientific manner,
- be able to account for the significance of logistics in different supply- and demand chains and different kinds of operations, such as production and distribution,
- be able to understand and handle the interplay between logistics and design, construction and marketing and information technology.

#### Content

The education is designed to be preparatory for PhD studies, but is also adjusted to future work in logistics and supply chains up to and including the strategic level in the leading functions of operations.

Through studies of all activities influencing the total value chain from a logistical perspective, the student will be able to plan, develop and manage all major phases of the supply chain, such as supply, productions and distribution. The student will be trained to analyse and solve complex and reality based problems in internal and external logistics in order to function well in professions up to and including the strategic level in a company.

An important part of the education concerns new techniques and new methods within information and communication technology and telecommunications, which are important prerequisites for efficiency and effectiveness in value chains. After the training the student will be able to choose suitable methods for modelling and solving logistical problems. The student will study the interchange with product development, design, marketing and information technology. The student will be trained in applying modern principles and methods for the design of value chains aimed to satisfy end costumers needs and desires.

#### Courses:

- Demand Chain Management I Theory and Models, 7,5 ECTS
- Logistics for World Trade, 7,5 ECTS
- Demand Chain Management II Application and Change Management, 7,5 ECTS
- Logistics Support Systems 7,5 ECTS
- Risk Management, 7,5 ECTS
- Logistics and Transport Economics, 7,5 ECTS
- Thesis Work, 15 ECTS

# **Admission Requirements**

- Bachelor's degree in Industrial Engineering, 180 credits, or equivalent.
- Basic courses in logistics.
- Verified knowledge of English corresponding to the course *English B* in the Swedish Upper Secondary School *or* a Bachelor's degree from a university in Sweden, Denmark, Norway, Finland or Iceland.

For further information about English language proficiency, please view: www.hb.se/wps/portal/engtest

# Degree

Degree of Master of Science (One Year) with a major in Industrial Engineering - specialisation Logistics.

Degree certificates are issued upon application on a special form. More information is available at www.hb.se.

# **Student Influence and Evaluation**

Student Influence and Evaluation: Every course in the programme is evaluated (see to the university policy on course evaluation). The head of the programme is responsible for regularly and in a systematic fashion collecting the student's opinions on the education. The head of the programme, along with the prefect, is also responsible for evaluating the whole programme on a yearly basis. The evaluation is carried out in cooperation with the programme's teacher, the students and professional representatives. The evaluation is documented in writing and brought back to the students.

# Miscellaneous

Study language: English

The language of instruction is English.