

# Risk and resilience in supply chains Risk och resiliens i försörjningskedjor

7.5 credits

Ladok Code: 42I09C

Version: 1.0

Established by: The Teaching Committee 2012-05-25

Valid from: Autumn 2012

Education Cycle: Second cycle

Main Field of Study (Progressive Specialisation): Logistics (A1N)

Disciplinary Domain: Technology

Prerequisites: Meets the requirements for admission to Master's degree in logistics, quality engineering, textile management

or chemistry / environmental

Subject Area: Industrial Engineering and Management

**Grading Scale:** ECTS-credits

#### Content

- Theories and methods of managing risk and vulnerability in supply chains
- The concept of resilience and its impact on organizations' survival. What constitutes resilience
- How risk outlook is affected by various factors such as globalization, outsourcing, concentration, regionalization, customer requirements, legislation, e-commerce and demographic changes
- Preventive security at different levels
- Decisions under risk and uncertainty
- How genuine uncertainty (eg asymmetric information) is handled through risk sharing, risk reduction and risk transfer

## **Learning Outcomes**

The student should be able to:

- master the concepts of risk and resilience
- understand the theoretical frameworks, methods, and some research in risk management
- analyze and develop control models for supply chains with regard to risks and vulnerabilities
- use methods of risk and vulnerability of the supply chain and in-depth customer and vendor relationships
- apply principles of risk evaluation and selection of prevention and consequence-competitive practices
- publicize the importance of optimizing flows and planning with regard to risks and vulnerabilities become a natural part of the logistical work
- analyze and advise on resilience and continuity planning in supply chain
- apply risk and resilience framework in CSR issues

# Forms of Teaching

Teaching methods are

- lectures.
- mentoring and seminars to case studies

Instruction is in English.

# **Forms of Examination**

The course will be examined through the following examination elements:

Midterm seminar

Learning outcomes:

Credits: 1

Gradingscale: Fail (U) or Pass (G)

Project report and final seminar

Learning outcomes:

Credits: 3

Gradingscale: ECTS-credits

Examination
Learning outcomes:

Credits: 3.5

Gradingscale: ECTS-credits

Examination is a written examination and project work. The written exam at the end of the course examines the student's ability to have met the training objectives, particularly with respect to the theoretical background of risk and resiliens ramverket and to perform analyzes in the field. The project work is performed in groups during the course. It presents an in-depth study of a particular part of the course and dealing with an application or case study related to training objectives. They typically include risk assessment study of how risk management is organized in a textile value chain, assessment of risk control and analysis of organizations' resilience. A written project report is being planned and discussed at the seminar and subsequently submitted and presented at a seminar. For approval, a well-written and technically accurate report, along with a persuasive oral presentation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

### **Literature and Other Teaching Materials**

Hollnagel, E. m.fl. (2006), Resilience engineering – concepts and precepts. Ashgate, Aldershot

Sheffi, Y, (2005) The Resilient Enterprise Overcoming Vulnerability for Competitive Advantage. The MIT Press, London. ISBN 978-0-262-69349-3

#### Student Influence and Evaluation

Head of department and course leader is responsible for students' views on the course systematically and regularly collected. The results of the evaluations, performed oral or written, are the basis for course design.

### Miscellaneous