

Course syllabus

# Bygglogistik och inköp Construction Logistics and Purchasing

VBEN25, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED V

**Date of Decision:** 2023-03-21

### **General Information**

Elective for: V4-bf

Language of instruction: The course will be given in Swedish

#### Aim

The aim of the course is to give the students a basic understanding in construction logistics both internally on the construction site and externally for the delivery of materials and equipment. Resource management, site planning, purchasing, effect of different production systems and health and safety considerations are important parts of the course. In addition the student shall acquire a basic understanding for the termonologi in logistics such as supply chain management and total cost analysis.

## Learning outcomes

*Knowledge and understanding*For a passing grade the student must

- Have a basic knowledge about logistical principles and their applicability in the construction sector.
- Have a basic knowledge about supply chain management in construction.
- Have an understanding about the effect of construction logistics on health and safety and other environmental aspects such as waste management, technical properties and moisture problems.
- Have an understanding of the connection between construction logistics and quality management.

- Have an understanding of the connection between adopting different production systems and construction logistics.
- Have a basic understanding about purchasing in construction including an ethical approach such as fair trade and working conditions.

Competences and skills

For a passing grade the student must

- Be able to apply logistical models in a construction setting.
- Be able analyse the logistics of the construction site including supply chain management and site management.
- Be able to plan deliveries of materials and other resources.
- Be able to analyse purchasing och procurement of materials, supliers and subcontractors.

Judgement and approach

For a passing grade the student must

- Relate to the relationship between construction logistics, production planning, site management and supply chain management.
- Relate to how different production methods and systems affect the logistics of the construction site.
- Relate to the strategic meaning of purchasing processes on the activities within a construction company and on its social responsibility process.

#### **Contents**

The course covers construction logistics with focus on construction activities. Areas that are covered are about planning construction activities, production planning andsite management. Further topics is construction supply chain management, production systems and methods. Purchasing processes is the other central part of the course with focus in their strategic importance and connection to ethics and corporate social responsibility.

#### **Examination details**

**Grading scale:** TH - (U,3,4,5) - (Fail, Three, Four, Five)

**Assessment:** Grade is based on written examination. Additionally a project work and presentation are part of the examination. The exam will be a home exam with open books.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

#### Admission

#### **Admission requirements:**

Course registration VBEF15 Technique for Construction Management

The number of participants is limited to: No The course overlaps following course/s: MTTN01

## Reading list

- P Jonsson, S-A Mattsson: Logistik 3 uppl. Studentlitteratur, 2016, ISBN: 9789144110776.
- Hansson, B. m.fl.: Byggledning: Produktion. Studentlitteratur, 2017, ISBN: 9789144105734.

• Hansson et. al.: Byggledning Produktion, Övningsbok. Studentlitteratur, 2017, ISBN: 978-91-44-10569-7.

## **Contact and other information**

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Course homepage: http://www.bekon.lth.se/utbildning/grundutbildning/