



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Informationssystem för logistik och försörjningskedjor

Supply Chain Information Systems

MTTN20, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED I

Date of Decision: 2023-04-14

General Information

Elective Compulsory for: MLOG2

Elective for: E5, I5-lf, M5-lp

Language of instruction: The course will be given in English

Aim

The purpose of the course is to provide understanding and skills for how to assess, select, implement and use information systems for supply chains, such as Enterprise Resource Planning (ERP) systems and different types of systems for design, planning, and control of supply chains. The students shall be familiar with selected systems and their advantages and disadvantages, through guest lectures, laboratory sessions and industrial projects. The students will work in groups with mapping and analyses of the overall system architecture as well as specific application areas.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- have gained knowledge and understanding of supply chain information systems and their applicability
- have gained knowledge and understanding of systems architecture, selection, implementation and use of supply chain information systems
- have reached an understanding of the skills and abilities that are required to evaluate different types of supply chain information systems

Competences and skills

For a passing grade the student must

- be able to critically evaluate the pros and cons of different types of supply chain information systems
- be able to identify critical success factors for the implementation of supply chain information systems
- be able to map and analyse system architectures and specific application software in real life situations

Judgement and approach

For a passing grade the student must

- have acquired the ability to evaluate the importance and impact of information systems for supply chain efficiency
- have developed insights into how different types of supply chain information systems work

Contents

The course consists of lectures, guest lectures, laboratory sessions, and group projects. The lectures will introduce the students to various types of information systems for supply chains. Guest lectures present specific information systems within selected areas by software vendors as well as experience from industrial users of the systems. Laboratory sessions are conducted to deepen the students' knowledge and understanding of these systems applications and introduce them to the user interfaces. The students will also carry out group projects in collaboration with industrial partners.

The course will deal with the following themes:

- Benefits and drawbacks of information systems in the context of supply chains
- System architecture and functionality
- Content and applicability of different types of supply chain information systems
- Implementation aspects

Examination details

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

Assessment: Project work in groups, and individual assignments. Compulsory attendance may occur in certain parts.

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.

Parts

Code: 0115. **Name:** Project.

Credits: 6. **Grading scale:** UG. **Assessment:** Satisfactorily completed projects.

Code: 0215. **Name:** Individual Assignment.

Credits: 1,5. **Grading scale:** UG. **Assessment:** Approved individual assignments.

Admission

Admission requirements:

- And at least two of the following courses: MTTN25 Materials Handling, MIOF10 Production and Inventory Control, MTTN70 International Physical Distribution, and MTTN80 Supply Chain Management.
- MTTF01 Logistics or MTTF25 Fundamentals of Logistics and Operations Management

The number of participants is limited to: No

Reading list

- Literature will be communicated later.

Contact and other information

Examiner: Jan Olhager, jan.olhager@tlog.lth.se

Course coordinator: Magnus Harfeldt-Berg, magnus.harfeldt-berg@tlog.lth.se

Course homepage: <http://www.tlog.lth.se>