



## KURSPLAN

# Designing Supply Chain Operations, 7,5 högskolepoäng

*Designing Supply Chain Operations, 7.5 credits*

---

<b>Kurskod:</b>	TSCS21	<b>Utbildningsnivå:</b>	Avancerad nivå
<b>Fastställd av:</b>	VD 2021-03-01	<b>Utbildningsområde:</b>	Tekniska området
<b>Reviderad av:</b>	Utbildningschef 2022-06-10	<b>Ämnesgrupp:</b>	IE1
<b>Gäller fr.o.m.:</b>	2022-08-01	<b>Fördjupning:</b>	A1F
<b>Version:</b>	2	<b>Huvudområde:</b>	Produktionssystem

---

### Lärandemål

After a successful course, the student shall

#### Kunskap och förståelse

- demonstrate comprehension of supply chain operations design
- demonstrate comprehension of various processes and different ways of arranging them
- demonstrate comprehension of the balance between efficiency requirements and the need for renewal

#### Färdighet och förmåga

- demonstrate skills of evaluating design options in supply chain operations
- demonstrate the ability in speech and writing to report and discuss own conclusions on designing the operations

#### Värderingsförmåga och förhållningssätt

- demonstrate the ability to evaluate different design alternatives with respect to economic, social and ecological sustainability
- demonstrate an understanding of the consequences of decisions in supply chain operations design

### Innehåll

The course covers how the resources and processes of operations are designed. The course takes a process perspective on how the overall form, arrangement and nature of transforming resources impact the flow of transformed resources as they move through the operation. It also covers the relations between operations and the supply network in relation to economic, social and ecological sustainability.

The course includes:

- Process design; various types of process, and how these are designed
- Layout and flow; how different ways of arranging facilities impact the flow through the

operation

- Process technology; the impact developments in technology have on the effectiveness of operations
- Supply chain design; the relation between the external and internal supply chains, sourcing, distribution.

### Undervisningsformer

Lectures, seminars, course work.

Undervisningen bedrivs på engelska.

### Förkunskapskrav

Passed courses of at least 90 credits within the major subject industrial engineering and management, mechanical engineering, civil engineering, computer engineering (or the equivalent), 15 credits in mathematics, and completed course Introduction to Supply Chain Operations Management, 7,5 credits. Proof of English proficiency is required.

### Examination och betyg

Kursen bedöms med betygen 5, 4, 3 eller Underkänd.

The final grade for the course is based on a balanced set of assessments. The final grade will only be issued after satisfactory completion of all assessments.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Examination	4 hp	5/4/3/U
Kursarbete	3,5 hp	5/4/3/U

### Kurslitteratur

The literature list for the course will be provided two months before the course starts.

Title: Supply Chain Management: Strategy, Planning, and Operation (2019), 7th Edition

Author: Sunil Chopra. Pearson.

Publisher: Global Edition.