



## KURSPLAN

# Leading Advanced Socio-Technical System, 7,5 högskolepoäng

*Leading Advanced Socio-Technical System, 7.5 credits*

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<b>Kurskod:</b>	TATS22	<b>Utbildningsnivå:</b>	Avancerad nivå
<b>Fastställd av:</b>	VD 2021-03-01	<b>Utbildningsområde:</b>	Tekniska området
<b>Reviderad av:</b>	Utbildningschef 2022-10-31	<b>Ämnesgrupp:</b>	IE1
<b>Gäller fr.o.m.:</b>	2023-01-01	<b>Fördjupning:</b>	A1F
<b>Version:</b>	2	<b>Huvudområde:</b>	Produktionssystem

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### Lärandemål

After a successful course, the student shall

Kunskap och förståelse

- display knowledge and understanding of the characteristics of socio-technical systems in an operations management context
- display knowledge and understanding of different perspectives on leading daily work, change and innovation processes in socio-technical systems

Färdighet och förmåga

- demonstrate the ability to design activity centered systems in operations.
- demonstrate skills in leading and participating in collaborative work including reflecting, reporting, and discussing the findings using contemporary presentation tools.

Värderingsförmåga och förhållningssätt

- demonstrate the ability to embrace interdisciplinary approaches, take different perspectives on socio-technical systems and critically reflect on the impact these have on economic, social and environmental sustainability
- demonstrate the ability to critically analyse how machines and humans interact and adapt in work processes
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for ongoing learning.

### Innehåll

The course includes theories and methods for leadership using a socio-technical perspective. The following are examples of concepts and terms included in the course.

- leadership and complexity
- change and transformation
- learning in organizations

- dealing with uncertainty
- activity centered design
- introducing new advanced technology
- team effectiveness

### Undervisningsformer

Lectures, joint and self-led seminars and project 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), and 15 credits in mathematics, and completed course Leading Sustainable Operations, 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
Exercise	1 hp	U/G
Formative assessment	1 hp	U/G
Individual assignment	2 hp	5/4/3/U
Group project	3,5 hp	5/4/3/U

### Kurslitteratur

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