



# ME2311 Leadership and Organizational Change 6.0 credits

Ledarskap och industriellt förändringsarbete

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for ME2311 valid from Autumn 2014

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Industrial Management

## Specific prerequisites

For students admitted to the Master's programme in Industrial economics and management, TIEMM

The courses ME1306, ME1308 should be completed.

# Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

On completion of the course, the students should be able to:

- Account for dominating perspectives within leadership research and the development of the research field
- Orally and in writing explain chosen theories in relation to leadership at different organisational levels
- Account for dominating perspectives within research about industrial organizational change and the development of the research field
- Account for and be able to analyse how technological changes in an industrial organisation give impulses to different changes
- Critically analyse changes within industrial and technology intensive operations from a system perspective
- Analyse and describe differences and similarities between: changes that aim at developing the organisation's inherent culture and abilities, changes that arise for example at mergers and purchases, and changes such as concept driven changes (such as Lean Production and Total Quality Management)
- Describe different change strategies such as continuous improvements, radical changes, gradual changes and top down/bottom up, and account for the importance of the leadership at various types of changes
- Apply selected leadership theories in written analysis of fictitious and realistic cases within industrial and technology intensive operations
- Apply basic methods in communication such as constructive feedback, active listening and appreciative inquiry (appraising approach)
- Formulate a personal leadership philosophy from theory and practice
- Formulate a problem with theoretical as well as practical relevance within the areas of leadership and change
- Show awareness of ethical and sustainability aspects (including gender equality and diversity) of how knowledge of leadership and change are applied

## Course contents

This course intends to prepare students for management and leadership tasks in technology intensive operations. This since the majority of newly graduated Masters of Engineering will have a leading role in complex and customer adapted system deliveries, design of production systems, improvement work and quality development, product development and product care, and commercialisation of new technology and new technology-based business models. This implies tasks, such as for example industrial purchasing and supplier collaboration, industrial sales, cooperation within product development and funding of technology intensive investments in relation to customers, suppliers, funders, cooperation partners and

competitors. In working life, engineers are continuously involved in work groups whose task is to change and develop the industrial company's activities and probably function as project manager and/or manager with responsibility to coordinate people and also have formal staff liability. For the interplay between technology and economics to function in an efficient and successful way, it is thus central that the engineering work, in addition to deep technical and business area skills, is characterised by a skilled leadership. This to be able to create preconditions for a well functioning cooperation between people and a visionary competence provision – all important strategic challenges for the development and competitiveness of industrial organisations. Furthermore, leaders and executives have a far-reaching responsibilities to use their authorities in a reflective and ethically aware manner – which implies to handle and integrate questions about gender equality, diversity and sustainability in the daily work.

The task of a Master of Engineering is also often to carry out both incremental and radical change management, both within the framework of continuous industrial leadership and technology intensive development work. Change management in technology intensive environments implies a mixture of different knowledge and skills. Firstly, knowledge and understanding of the industrial context and activities are required, as these are crucial to be able to identify which changes that are needed in order to reach the goals, and to meet the need for change. Secondly, it is necessary to know how to handle and lead complex restructuring, implying the handling of social relations, trust, participation and learning within work groups with highly skilled key persons for the organisation. The knowledge within all these fields must be based both on practical experiences and on current research.

This course has three modules and is carried out during two quarters, throughout the autumn semester.

1. Leadership. This module focuses on giving the students knowledge of different perspectives on leadership and how these perspectives all in all give an advanced understanding of management processes in industrial companies. Students will also have the possibility to train the communicative skills that are a cornerstone in the personal leadership, by applying basic methods in communication such as constructive feedback, active listening and appreciative inquiry (appraising approach). On the basis of theory and practice, each student will formulate a personal leadership philosophy.
2. Change analysis and change planning. From an industrial leadership perspective, change is dynamic and to a limited extent possible to plan. Change is a learning process in itself, where not only goals, but also working methods are reviewed and re-formulated. Systematic methods for improvement and project work are needed in order to understand the preconditions that have facilitated the present, and the ability to look forward to using that knowledge to clarify and once more state goals and aims and decide how these can be achieved in a realistic way. In a change management role that involves the staff liability, skills and knowledge of the formal framework that regulates the labour market are also needed. The importance of this increases during periods when an organisation is either phasing out or transforming technology intensive businesses. Which management processes must be adapted or developed to support a sustainable change and improvement? How can the change management be carried out in an ethical, inclusive and sustainable way?
3. Change management and leadership: This part focuses on research-based perspectives, methods and models of how one carries out changes in technology-based organisations. Focus will be on leadership, based on social relations between different stakeholders, on how one to build trust and participation, a joint understanding and social cohesion. It also is important to bring up the need for continuous professional development (for

change management) and education of co-workers in new processes and systems, after the change has been introduced.

4. In all modules realistic cases will be used, from several industrial sectors (e.g. telecom, pharmaceutical development and manufacturing industry). The cases can be provided thanks to the department's cooperation with SLA (Swedish Learning Association) and CMA (Change Management Awards).

The different research perspectives are introduced, by articles from leading scientific magazines in Industrial economics and organisation, being a part of the reading list.

## Course literature

Vetenskapliga artiklar samt en lärobok, exakt vilka meddelas vid kursstart. // Scientific articles and a text book; will be announced at the beginning of the course.

## Examination

- INL1 - Assignments, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- INL2 - Assignments, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- SEM1 - Seminars, 1.0 credits, grading scale: P, F
- SEM2 - Seminars, 1.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.