ME1306 Industrial Project Management 7.5 credits

Industriell projektledning för I

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

Establishment

On 11/04/2019, the Dean of the ITM school has decided to establish this official course syllabus to apply from spring term 2020 (registration number M-2019-0787).

Grading scale

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

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

Participated in ME1314 Introduction to Industrial Engineering and Management

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to:

1. Describe the main perspective of the general organizational theory and trends in terms of structural, human resource, political and symbolic research perspectives and supplementary perspective such as leadership, gender, intersectionality and entrepreneurship
2. Analyse practical management cases by means of these perspectives and demonstrate how different perspectives lead to different conclusions but also can complete one another
3. Describe the general structure of the project management theory as both a practical and a scientifically emerging field of knowledge, in which practitioners must be able to handle complex assignments related to technology, finance, sustainability, ethics and social progress.
4. Formulate project aims that are user connected, realistic, solution neutral, and assessable.
5. Formulate and analyse practical problems in industrial enterprise by means of project management tools and theoretical models. Using these tools and models, give recommendations on how the control of a project can be prepared, be carried out and be improved.
6. Explain the relation between project organisations and permanent organisations and describe which solutions that are on the problems that are embedded in this relation
7. Describe the main assignments and the areas of responsibility for a project manager over the whole life cycle of the project in industrial and technology-intensive environments as well as analyse one's own learning and knowledge development in relation to this

Course contents

Projects are an ever more common working method in all social sectors, intended and used for handling of assignments that cannot be solved in solid hierarchical organisations. In practice, most of today´s science and technology students will somehow be involved in project-based work within only a few years after graduation from higher education. Several of the largest employers of recent engineering graduates have completely or partly changed to be project-based organisations, which suggets that daily production is also organised as projects.

The project is a working method that completes in several ways and differs from classical forms for industrial organisation, while it is well based in both classical and present-day research about organisation, leadership and management. A project is a structural solution to handling of temporary and unique assignments, which a project implies a focus on planning and follow up. But the management and control of the project requires also understanding that are retrieved from the general organisational research; an understanding of human resource management, political processes, company culture and leadership.

The course focuses on management and working methods in business, development and innovation projects in technology-intensive companies. The project form and its use are based in an extensive presentation of central perspectives in organisation, leadership and the management research. During the course, the structural theory of project management is compared to political and cultural perspectives and case studies. Strong emphasis is placed on how the surrounding conditions influence the project management as well as at the role of the client. Besides going from a general introduction to the common organisation,

leadership and management research and the project management theory of today, the education includes for example project planning, project organisation, financial control, procurement, the leadership of the project manager and a number of case studies from project in different activities. Guest lecturers with extensive practical experience from the project management area participate as guest lecturers.

Examination

- SEM1 - Seminar, 2.0 credits, grading scale: P, F
- INL1 - Term Paper, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- KON1 - Control Exam, 2.0 credits, grading scale: A, B, C, D, E, FX, 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.

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

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.