ME2015 Project Management: Leadership and Control 6.0 credits

Projektledning: Ledning och styrning av projekt

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 autumn term 2019 (registration number M-2019-0774).

Grading scale

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

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

ME1003 Industrial Management, Basic Course

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:

To pass E show that you can...

1. 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.
2. Formulate project aims that are user related, realistic, solution neutral, and assessable.
3. Describe, choose and use tools for detailed time planning, risk management, project budgeting and project monitoring in a project's execution.
4. Describe the relation between projects and their external environment as well as carry out a stakeholder analysis for a specific project.
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, carried out and improved.
6. 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.

For higher grades A-D
Furthermore show that you:

7. Discuss the main properties of different types of technology-intensive projects: business projects, development projects and innovation projects.
8. Argue for why and in what way knowledge of project management can be used to raise competitiveness in modern industrial concerns.
9. Explain the structure of standardised project models and their use in industrial and technology-intensive activities.

10. Explain the structure of methods for agile project management and its use in industrial and technology-intensive activities.

11. Analyse the relationship between project organisations and permanent organisations in industrial and technology-intensive environments as well as discuss available solutions to the problems embedded in this relationship.

12. Analyse the advantages and disadvantages that project work implies for the individual, as well as discuss how these can be handled in an efficient way.

Course contents

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employees in both companies and administration, in both continuous activities that research and development. 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 emergence of projects as a central working method is mirrored by an even clearer 'professionalisation' of the project manager role. Those who continuously have the responsibility for large industrial projects are often professional project managers, and they have in addition to their first-cycle studies also a deep understanding of so-called project management theory, which is the research-oriented basis of the project work. Project management theory includes many models that can be used for successful generation organisation, management and team leadership of/in projects. These models must be used at the same time with discretion and reflection. Recent research in project management, for which the Department of Industrial Economics and Organisation is nationally and internationally renowned, therefore also emphasises the importance of leadership, organisation, ethics and a sustainable working environment in the development of industrial project work. Accordingly, this course focuses on giving the students understanding of how project management is developed, documented and spread in the interplay between academic research and practical applications.

The course focuses on management and working methods in business, development and innovation projects in technology-intensive companies. During the course, the research-based project management theory is combined with case studies from different technology-intensive sectors and research and development work. Strong emphasis is placed on how the surrounding conditions influence the project management as well as at the role of the client.

Examination

- KON1 - Partial exam, 1.5 credits, grading scale: P, F
- KON2 - Partial exam, 1.5 credits, grading scale: P, F
- INL1 - Assignments, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN2 - Unsupervised examination, 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.

TEN2 is an optional assessment module to achieve a higher grade than E in the course.

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.