ME2069 Managing Research and Innovation 6.0 credits

Ledning av forskning och innovation

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

Establishment

On 15/04/2022, the Dean of the ITM school has decided to establish this official course syllabus to apply from autumn term 2022 (registration number M-2022-0507)

Grading scale

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

Education cycle

Second cycle

Main field of study

Industrial Management

Specific prerequisites

Achieved the requirements for a Degree of Bachelor of Science

ME2501 Perspectives on Industrial Management and ME2067 Industrial transformation and technical change (ITTEC) completed

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 students should be able to:

1. Analyse organisations and business environments with traditional organisation models for innovation and research
2. Explain, compare and critically reflect on the difference between traditional management of innovation and management of innovation in digital sectors and for innovation that intends to create sustainable products.
3. Explain, compare and critically reflect on a market-based view on knowledge and technology transfer, with an approach to knowledge based on cooperation in networks
4. Explain, compare and critically reflect on different types of product development models (e g stage/gate models compared with models for open innovation)
5. Explain, compare and critically reflect on different types of innovation processes (e.g. product, process, position and paradigm) as well as different types of innovation focus (e.g. radical vs. incremental, sustaining vs. disruptive and system oriented vs. product oriented).
6. Explain different ways to handle intellectual property and intellectual rights as well as critically reflect on important implications for innovation connected to IPR (intellectual property rights)

Course contents

Management of research and innovation focuses on how organisations create innovations and new knowledge, but also on how they use this to create profitable businesses. The aim of the course is to prepare the students for future decision-making roles in companies and other organisations, with a focus on technology and business development connected to innovations. To succeed with this, the students are given insight into models and tools that are used for reaching these aims. The course covers problems and possibilities connected to the abilities of different organisations to create sustainable competitive advantages through innovative offers based on a combination of products and services.

The contents are based on a textbook as well as a number of articles that focus on management of research and innovation. The course can be described as theoretically based but with applied analysis in focus and it is based on lectures, guest lectures and seminars, as well as a real innovation case that is provided by a company or a sector.

Examination

- PRO1 - Project, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- KON1 - Partial exam, 3.0 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.

50% of the final mark is based on the literature assignment and 50% on the project.

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.