FME3547 Advanced Quantitative Methods in Entrepreneurship and Innovation Research 5.0 credits

Avancerad kvantitativ metod i forskning om entreprenörskap och innovation

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 applies from Autumn semester 2022 accourding to ITM School decision on 2021-12-22, M-2021-2442

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Admitted doctoral student.
Completed course in Statistics, Probability Theory and Quantitative Method of at least 12 ECTS, of which 5 credits should be at postgraduate level.

Language of instruction

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

Intended learning outcomes

After having completed the course, participants should have abilities to

- identify appropriate quantitative methods in adressing different types of research questions, and assess their applicability
- orient themselves within the realm of contemporary quantitative research methodology
- assess methodological choices in contemporary quantitative research on entrepreneurship and innovation

Course contents

The course provides an overview of quantitative research methods, with particular focus on applications in studies of entrepreneurship and innovation. Basic understanding of quantitative methods, including training in statistics and propability theory, are expected prerequisites. Participants are given an opportunity to broaden and deepen their understanding of what tools that are available for common research problems, with emphasis on specification, estimation, interpretation and valuation of various forms of mathematically formulated models. The overall ambition is for course participants to gain useful overview of how data can be analysed using economtric models and machine learning tools, with emphasis on methods that are used in contemporary state-of-the-art research on entrepreneurship and innovation.

The central sections of the course are constituted by presentations and exercises introducing important concepts and techniques. Prioritization of what techniques that are treated at greater depth is to some extent determined by participants' interests and needs.

Examination

- INL1 - Assignment, 3.5 credits, grading scale: P, F
- SEM1 - Seminars, 1.5 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.