



COURSE SYLLABUS

Forskningsmetodik i industriell ekonomi Research methodology in industrial economics 7.5 credits (7,5 högskolepoäng)

Course code: IY2596

Main field of study: Industrial Economics and Management

Disciplinary domain: Technology

Education level: Second cycle

Specialization: XXX - Second cycle, in-depth level of the course cannot be classified

Subject area: Industrial Engineering and Management

Language of instruction: English

Applies from: 2018-08-01

Approved: 2018-03-01

1. Decision

This course is established by Dean 2016-05-16. The course syllabus is approved by Head of Department of Industrial Economics 2018-03-01 and applies from 2018-08-01.

2. Entry requirements

Bachelor degree in science in engineering including a degree project of 7,5 hp, 15 hp mathematics on basic/advanced level, 5 hp industrial economics and organization, business administration or the equivalent, English B and 2 years of work experience.

3. Objective and content

3.1 Objective

The aim of this course is to provide students with knowledge of theories of science and research methodology for both qualitative and quantitative studies in industrial economics. This includes formulating research problems, process selection and design of the research approach and design, as well as critically evaluate different research designs. The student will, after this course, have acquired the knowledge of how to conduct and report a scientific study.

3.2 Content

The course covers formulation of research problems and questions firmly based in previous research. The course also covers application of and motivation of research strategies and scientific induction/deduction and syntheses enclosing both quantitative methods but also qualitative methods.

4. Learning outcomes

The following learning outcomes are examined in the course:

4.1 Knowledge and understanding

On completion of the course, the student will be able to:

- Have a general knowledge about research design in the naturalism, positivism and pragmatist paradigms and their underlying philosophical meanings applicable in industrial economics and management.
- Have theoretical and practical knowledge about how to plan, conduct, analyze and present qualitative and quantitative research in industrial economics and management.
- Have knowledge about research methods and ethics.

4.2 Competence and skills

On completion of the course, the student will be able to:

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- Be able to analyze and discuss the relation between philosophy, theory of science and various scientific Paradigms.
- Be able to analyze and discuss the foundations of research design in the naturalistic and positivistic research paradigms as well as their pros and cons
- Be able to critically assess different research designs and methods and analyze strengths and weaknesses as well as problematize their applicability
- Be able to identify and define problems related to collection of data and prepare tests of hypotheses
- Be able to analyze collected data with adequate statistical methods

- Be able to conduct statistical data analysis and test of hypotheses with statistical software
- Be able to present research methodology in a scientific adequate way
- Know the basis of analysis of qualitative data
- Know how to write scientific reports based on the content of the course
- Know how to use statistical software relevant for the course

4.3 Judgement and approach

On completion of the course, the student will be able to:

- Be able to critically assess and analyze research design in the various research paradigms and assess

5. Learning activities

The teaching language is English. Teaching through online-based lectures, seminars or discussions.

6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
I810	Written report 1	1.5 credits	GU
I820	Written report 2	1.5 credits	GU
I830	Take-home examination	4.5 credits	AF

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.

In order to achieve a final grade on the course all examinations need to have been passed (G, G and E). In order to achieve a final grade D-A the written reports needs to have been passed (G,G) together with a grade D-A on the take-home exam.

The course information for each course revision should include the assessment criteria and make explicit in which modes of examination that the learning outcomes are assessed.

7. Course evaluation

The course evaluation should be carried out in line with BTH:s course evaluation template and process.

8. Restrictions regarding degree

The course can form part of a degree but not together with another course the content of which completely or partly corresponds with the contents of this course.

9. Course literature and other materials of instruction

Ghuari, Peter, Gronhaug, Kjell (latest edition). Research methods in business studies. Prentice Hall

A selection of articles provided by the course instructor.

Referenslitteratur:

Pallant, J. (latest edition). SPSS survival manual. McGraw-Hill Education (UK).