



COURSE SYLLABUS

Forskningsmetod och design

Research methods and design

7,5 ECTS credit points (7,5 högskolepoäng)

Course code: IY2601

Educational level: Second cycle

Course level: AXX

Field of education: Technology

Subject group: Industrial Engineering and Management

Subject area: Industrial Economics and Management

Version: 4

Applies from: 2017-08-01

Approved: 2017-05-24

1 Course title and credit points

The course is titled Research methods and design/Forskningsmetod och design and awards 7,5 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

2 Decision and approval

This course is established by Dean 2017-04-06. The course syllabus was revised by Head of Department of Industrial Economics and applies from 2017-08-01.

Reg.no: BTH-4.1.1-1049-2017

3 Objectives

The aim of the course is to provide students with basic knowledge of theory of science and research methods for both quantitative as well as qualitative studies in industrial economics and management. A part of this is to be able to formulate research problems, argue for sample as well as research approach and design, and be able to critically assess various research designs. After the course, the student should have the knowledge to conduct and report a research project.

4 Content

The course mainly cover formulation of research problems and questions firmly based in previous research. The course also covers application of and motivation of research strategies and scientific deduction and syntheses with an emphasis on quantitative methods but also qualitative methods.

5 Aims and learning outcomes

Knowledge and understanding

On completion of the course the student should 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

Skills and abilities

On completion of the course the student should be able to:

- 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

Values and attitudes

On completion of the course the student should be able to:

- Be able to critically assess and analyze research design in the various research paradigms and assess how they can be applied in studies in industrial economics and management

- Be able to describe and explain limits in tests of hypotheses and quantitative data analysis

6 Learning and teaching

Teaching through lectures and seminars.
English

7 Assessment and grading

Examination of the course

Code	Module	Credit	Grade
1710	Written assignment 1	2 ECTS	G-U
1720	Written assignment 2	2 ECTS	G-U
1730	Written assignment 3	3.5 ECTS	A-F

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

8 Course evaluation

The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the results of these feed back into the development of the course.

9 Prerequisites

60 ECTS credit points in industrial economics, business administration/management, engineering or equivalent.

10 Field of education and subject area

The course is part of the field of education and is included in the subject area Industrial Economics and Management.

11 Restrictions regarding degree

The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

12 Course literature and other teaching material

Course literature

Ghuari, Peter, Gronhaug, Kjell (senaste upplagan). Research methods in business studies. Prentice Hall
Stenbock Hult, B., (senaste upplagan). Kritiskt förhållningssätt -en vetenskaplig, etisk attityd och ett högskolepedagogiskt mål. Lund: Studentlitteratur.

Reference literature

Hair, Jr, Joseph F., William C., Babbitt, Barry J., Andersson, Ralph E. (senaste upplagan). Pearson International Edition.

Other learning resources

Scientific papers.

