



## KURSPLAN

# Kvantitativa metoder för HCI, 7,5 högskolepoäng

## *Quantitative Methods for HCI, 7.5 credits*

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<b>Kurskod:</b>	TKHR23	<b>Utbildningsnivå:</b>	Avancerad nivå
<b>Fastställd av:</b>	VD 2023-03-01	<b>Utbildningsområde:</b>	Tekniska området
<b>Reviderad av:</b>	Utbildningschef 2024-06-05	<b>Ämnesgrupp:</b>	DT1
<b>Gäller fr.o.m.:</b>	2024-08-01	<b>Fördjupning:</b>	A1N
<b>Version:</b>	5	<b>Huvudområde:</b>	Informatik

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### Lärandemål

After a successful course, the student shall:

#### Kunskap och förståelse

- demonstrate comprehension of quantitative studies by appropriate statistical terminology
- display knowledge of the concepts of exploratory vs. confirmatory factor analysis
- display knowledge of important concepts of multiple regression analysis

#### Färdighet och förmåga

- demonstrate the ability to explain the potentials and limitations of statistical methods for analysis of multivariate data
- demonstrate the ability to identify which kind of multivariate statistical analysis is appropriate for a specific problem
- demonstrate the ability to conduct multivariate statistical analyses with an appropriate statistical software
- demonstrate the ability to assess the goodness-of-fit of a multivariate model

#### Värderingsförmåga och förhållningssätt

- demonstrate the ability to assess the general usefulness/weaknesses of the statistical analyses treated in the course

### Innehåll

This course is an introductory course in quantitative methods available to master students. The goal of the course is to provide the master students with basic understanding of the role and potential of quantitative research methods, basic ability to understand and evaluate the merits and shortcomings of other researchers' (quantitative) studies, basic ability to apply certain quantitative techniques in their own research.

The course includes the following elements:

- Descriptive statistics + graphical analysis
- Sampling and survey design
- Factor analysis

- Regression analysis
- Approaches how to work with incomplete data

### Undervisningsformer

Lectures and assignments.

Undervisningen bedrivs på engelska.

### Förkunskapskrav

The applicant must hold the minimum of a bachelor's degree (i.e the equivalent of 180 ECTS credits at an accredited university) with at least 90 credits in Informatics, Computer Engineering, Computer Science, or equivalent. Proof of English proficiency is required.

### Examination och betyg

Kursen bedöms med betygen 5, 4, 3 eller Underkänd.

Poängregistrering av examinationen för kursen sker enligt följande system:

Examinationsmoment	Omfattning	Betyg
Tentamen <sup>1</sup>	5 hp	5/4/3/U
Inlämningsuppgift	2,5 hp	U/G

<sup>1</sup> Bestämmer kursens slutbetyg vilket utfärdas först när samtliga moment godkänts.

### Kurslitteratur

The literature list for the course will be provided 8 weeks before the course starts.

Discovering Statistics Using IBM SPSS Statistics (Sixth Edition)

Andy Field

ISBN-13: 978-1529630008, ISBN-10: 1529630002