



## COURSE SYLLABUS

# **Inquiry Methodology in Industrial Engineering and Management, 3 credits**

*Utredningsmetodik i Industriell organisation och ekonomi, 3 högskolepoäng*

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<b>Course Code:</b> TUMK11	<b>Education Cycle:</b> First-cycle level
<b>Confirmed by:</b> Dean Dec 1, 2020	<b>Disciplinary domain:</b> Technology
<b>Revised by:</b> Director of Education Feb 18, 2022	<b>Subject group:</b> IE1
<b>Valid From:</b> Jan 1, 2022	<b>Specialised in:</b> GIF
<b>Version:</b> 4	<b>Main field of study:</b> Industrial Engineering and Management

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### **Intended Learning Outcomes (ILO)**

After completing the course, the student shall

Knowledge and understanding

- show an understanding for how to carry out an initial problem formulation in a scientific work
- show an understanding for the connection between research problems, theory, and method choice

Skills and abilities

- demonstrate the ability to assess whether research purposes and questions are analyzable and relevant within the educational field

Judgement and approach

- demonstrate the ability to assess relevant scientific aspects on the basis of a theoretical and methodological perspective

### **Contents**

The course includes the following elements:

- repetition of key concepts in scientific practice
- the problem formulation phase in an academic work, that is, how to arrive at a research purpose and research questions
- method and theory choice in an academic work
- draft planning report

### **Type of instruction**

Lectures, Hand-in Assignments, and Seminars.

The teaching is conducted in English.

**Prerequisites**

General entry requirements and completed course Research Methods and Communication, 7,5 credits (or the equivalent).

**Examination and grades**

The course is graded Fail (U) or Pass (G).

Registration of examination:

Name of the Test	Value	Grading
Assignment	3 credits	U/G

**Course literature**

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

Säfsten, K., & Gustavsson, M. (2020). Research methodology: for engineers and other problem-solvers. Studentlitteratur.

The following literature will be used when the course is given in Swedish:

Patel, R. och Davidson, B. (2019). Forskningsmetodikens grunder: att planera, genomföra och rapportera en undersökning (5:e utgåvan). Förlag: Studentlitteratur. ISBN: 9789144126050