

# COURSE SYLLABUS Inquiry Methodology in Industrial Engineering and Management, 3 credits

## Utredningsmetodik i Industriell organisation och ekonomi, 3 högskolepoäng

Course Code:	TUMK11	Education Cycle:	First-cycle level
Confirmed by:	Dean Dec 1, 2020	Disciplinary	Technology
Revised by:	Director of Education Feb 18, 2022	domain: Subject group:	IE1
Valid From:	Jan 1, 2022	Subject group.	G1F
Version:	4	•	
		Main field of study:	Industrial Engineering and Management

## Intended Learning Outcomes (ILO)

After completing the course, the student shall

Knowledge and understanding

- show an understanding for how to 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 problemsolvers. Studentlitteratur.

The following litterature 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