



COURSE SYLLABUS

Inquiry Methodology in Industrial Engineering and Management, 3 credits

Utredningsmetodik i Industriell organisation och ekonomi, 3 högskolepoäng

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| Course Code: TUMK11 | Education Cycle: First-cycle level |
| Confirmed by: Dean Dec 1, 2020 | Disciplinary domain: Technology |
| Revised by: Director of Education Feb 18, 2022 | Subject group: IE1 |
| Valid From: Jan 1, 2022 | Specialised in: GIF |
| 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 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