



COURSE SYLLABUS

Research Methodology, 7.5 credits

Utredningsmetodik, 7,5 högskolepoäng

Course Code: TUMN19	Education Cycle: First-cycle level
Confirmed by: Dean Dec 4, 2018	Disciplinary domain: Technology (75%) and social sciences (25%)
Valid From: Jan 1, 2019	Subject group: IE1
Version: 1	Specialised in: G2F
	Main field of study: Industrial Engineering and Management

Intended Learning Outcomes (ILO)

After completing the course, the student shall

Knowledge and understanding

- demonstrate comprehension of scientific methods, including knowledge of the basic concepts, methods and models
- demonstrate comprehension of scientific approaches, including critical review, open reporting, argumentation and referencing
- show familiarity with scientific working methods, including problem formulation, method selection, data acquisition, data analysis, interpretation of results and reference management

Skills and abilities

- demonstrate the ability to identify, formulate and analyze problem statements
- demonstrate the ability to search, gather, evaluate and critically interpret and discuss information in problem statements
- demonstrate the ability to plan and conduct scientific investigations
- demonstrate the ability to present scientific studies orally or written
- demonstrate the ability for well-founded response and critical opposition

Judgement and approach

- demonstrate the ability to assess relevant scientific and ethical aspects
- demonstrate the ability to identify the need for additional knowledge

Contents

The course gives the students basic knowledge in inquiry and research methodology.

The course includes the following elements:

- Formulating problems, purpose and delimitations
- Layout and design of surveys
- Methods for data collection of qualitative and quantitative methods
- Interpreting and analyzing data

- Reliability and validity
- Causation
- Literature study
- Reference management
- Report writing and presentation of results

Type of instruction

Lectures, Seminars and Hand-in Assignments.

The teaching is conducted in English.

Prerequisites

General entry requirements and completed courses 120 credits in first cycle, corresponding to at least 60 credits within the major subject Industrial Engineering and Management 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).

The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Assignments	5.5 credits	U/G
Seminars	2 credits	U/G

Course literature

The literature is preliminary until one month before the course starts.

Williamson, K. (2002) Research methods for students and professionals, 2nd ed., Centre for Information Studies, Wagga wagga, NSW.