UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Research Methodology and Communication A1F

6 credits

Course code: VP761A
Version number: 4
Valid from: 1 January 2026
Ratified by: Curriculum Committee for Engineering Science
Date of ratification: 22 May 2025

1. General information about the course

The course is provided by the University of Skövde and is named Research Methodology and Communication A1F (Forskningsmetodik och kommunikation A1F). It comprises 6 credits and is a second-cycle course. The level of progression is A1F.

The course is a part of the main field of study in Virtual Product Realization. The disciplinary domain of the course is Technology.

2. Entry requirements

A Bachelor's degree equivalent to a Swedish kandidatexamen of 180 credits, within the main fields of integrated product development, production engineering, automation engineering, mechanical engineering or information technology (or the equivalent) and passed course VP741A Scientific Theory in Industrial Informatics A1N (or the equivalent).

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6 or English level 2 (or the equivalent). This is normally demonstrated by means of an internationally recognized test, e.g. IELTS or TOEFL.

3. Course content

This course will focus upon the use of methods for research about information and communication technologies. Designing and enquiry, methods for data collection, and dealing with data analysis and reporting will be taught and practiced.

By working with experimental design, surveys, evaluations, case studies, and fieldwork experiments students learn to apply research methodologies and to critically examine existing reports. The focus is on the following parts: read and critically evaluate reports, systematically approach research problems and examine resultsand understand the basic ideas through some underlying assumptions behind a report.

4. Objectives

After completed course the student should be able to:

- evaluate advance level scientific work/articles with regard to research methodology and ethics,
- explain and discuss key positions in the philosophy of science,
- describe and discuss the potential and limitations of science and its role in society,
- present and discuss important concepts, approaches and techniques used for planning, data collection and data analysis in a scientific investigation and
- argue for a relevant research approach for a given research problem within a specific area,
- contrast objectivity and subjectivity, and understand different forms of bias and how these can negatively impact research and research results.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

The examinations of the course consist of the following modes of assessment:

- **Supervised written examination**
  4 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Written assignment**
  1 credit, grades: G/U
- **Presentation**
  1 credit, grades: G/U

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of supervision, lectures, project work and seminars/group discussions.

The teaching is conducted in English.

7. Course literature and other educational materials

Briony, J. O. (2006). *Researching Information Systems and Computing*. London: Sage. ISBN 978-14129-0223-6.

Research papers will be distributed at the lectures and seminars.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.