



COURSE SYLLABUS

Module 4: Investigating and Reporting, 19.5 credits

Module 4: Investigating and Reporting, 19,5 högskolepoäng

Course Code: JM4T24	Education Cycle: Second-cycle level
Confirmed by: Council for Undergraduate and Masters Education May 2, 2023	Disciplinary domain: Social sciences (75%) and natural sciences (25%)
Revised by: Council for Undergraduate and Masters Education Oct 29, 2024	Subject group: FE1
Valid From: Spring 2025	Specialised in: A1E
Version: 2	Main field of study: General Management

Intended Learning Outcomes (ILO)

Upon completing the course the student shall be able to:

Knowledge and understanding

1. Account for core concepts in research methods and explain approaches and methods that are relevant for management research.
2. Demonstrate insight into current research and development work in Engineering Management and specialized knowledge and understanding of certain areas in Engineering Management.
3. Demonstrate specialized methodological knowledge applicable in Engineering Management.

Skills and abilities

4. Independently identify and formulate a research problem in Engineering Management.
5. In view of a given research problem, select an appropriate method for data collection and data analysis and explain the rationale for these choices.
6. Collect relevant empirical material.
7. Conduct qualitative and quantitative analysis.
8. Plan and execute a research project within a predetermined time frames.
9. Demonstrate an ability to integrate knowledge and analyze, assess, and deal with complex phenomena associated with engineering management.
10. Write an academic report with relevant use of literature, writing, and referencing style.
11. Constructively discuss their own and others' arguments and conclusions.

Judgement and approach

12. Discuss empirical studies in terms of ethics and societal impact.
13. Evaluate the possibilities and limitation of science/research.
14. Critically review academic literature in management, including the use of concepts and models.
15. Use a scientific approach by seeking, critically judging, and applying academic as well as professional knowledge.

Contents

This course represents the **fourth module** of the Engineering Management Master programme. It is designed to provide students with sufficient knowledge, skills, and experience to engage in research and development work. Through an independent project it also affords an opportunity to niche the degree, with an in-depth, empirical exploration of a topic suggested by the student. For this purpose, the course comprises the following two parts:

Research methods for General Management – training students in how to design, perform and report on scientific investigations from a management perspective, stressing the importance of ethics in business and research. Insights and training in qualitative and quantitative research methods and analyses, including literature review, choosing research strategy, defining sample/cases, reflecting on research outcomes based on methodological approaches, and elaborating ethical aspects of choices in management research.

Master thesis in General Management – providing students experience in conducting independent and in-depth study in line with academic research principles. Requiring the definition of a management topic to be contextualized and researched in an engineering-focused context. In addition to defining a problem and completing a thesis independently, students take part in seminars, defend their work and constructively discuss other students' work.

Connection to research and practice

The course focuses on the practical, methodological, and theoretical aspects of scientific research, as well as its procedures and concepts. The acquired skills and knowledge aim to provide a deeper understanding of the scientific basis of theories relevant for engineering management and strengthen academic study and writing skills. The thesis itself provides a platform for interaction with practice as students are coached to formulate relevant research questions and gather primary empirical data/material.

Type of instruction

The course includes lectures, seminars, self-studies, and group work.

The teaching is conducted in English.

Prerequisites

Bachelor's degree (i.e the equivalent of 180 credits at an accredited university) with at least 90 credits in engineering (or the equivalent). At least 10 credits at advanced level in General Management, representing courses on the Engineering Management programme at JIBS (or equivalent).

Examination and grades

The course is graded A, B, C, D, E, FX or F.

The intended learning outcomes are mainly assessed as follows:

Research methods – group literature review (ILOs: 12, and 14) representing 0,5 credits

Research methods – group research report (ILOs: 1, 3, 4, 5, and 10) representing 1 credit
 Research methods – individual quant/qual analysis (ILOs: 7, and 13) representing 1 credit
 Research methods - individual critical review (ILOs: 1, 3, 10, 12, and 13) representing 2 credits
 Master thesis (ILOs: 2, 3, 4, 5, 9, 10, 11, 12, 13, 14, and 15) representing 10,5 credits
 Master thesis process (ILOs: 4, 5, 6, 8, 10, and 11) representing 4,5 credits

The thesis will be examined through the written thesis, oral presentations, and discussions in five final seminars (defense, opposition, and active participation in three additional final seminars). This represents 70% of the total course grade, equivalent to 10.5 credits. The thesis will be individually graded.

The thesis process will be assessed through interaction with the supervisor and active participation in four tutoring seminars during the thesis writing process. This represents 30% of the total course grade, equivalent to 4.5 credits. The process will be individually graded.

Some elements of the course are graded with fail or pass (U or G). All parts of compulsory examination in the course must be passed with a passing grade before a final grade can be set. The final grade of the course is determined by the grade on the written thesis.

Registration of examination:

Name of the Test	Value	Grading
Research methods – group literature review	0.5 credits	U/G
Research methods – group research report	1 credit	U/G
Research methods – individual quant/qual analysis	1 credit	U/G
Research methods - critical review	2 credits	U/G
Master thesis	10.5 credits	A/B/C/D/E/FX/F
Master thesis process	4.5 credits	A/B/C/D/E/FX/F

Course evaluation

It is the responsibility of the examiner to ensure that each course is evaluated. At the outset of the course, the programme evaluators in the course must be contacted. In the middle of the course, the examiner should meet the programme evaluators to identify strengths/weaknesses in the first half of the course.

At the end of the course, the examiner should remind students to fill in the survey. The examiner should also call a meeting with the programme evaluators to debrief the course, based on course evaluation data and comments. The next time the course runs, students should be informed of any measures taken to improve the course based on the previous course evaluations.

At the end of each study period, JIBS' Director of Quality and Accreditation crafts a "Course Evaluation Quarter Report", presenting the quantitative results from course evaluation surveys.

The Associate Dean of Education, The Associate Deans of Faculty, Programme Directors, and JSA President and Quality receive the report.

Other information

Academic integrity

JIBS students are expected to maintain a strong academic integrity. This implies to behave within the boundaries of academic rules and expectations relating to all types of teaching and examination.

Copying someone else's work is a particularly serious offence and can lead to disciplinary action. When you copy someone else's work, you are plagiarizing. You must not copy sections of work (such as paragraphs, diagrams, tables and words) from any other person, including another student or any other author. Cutting and pasting is a clear example of plagiarism. There is a workshop and online resources to assist you in not plagiarizing called the Interactive Anti-Plagiarism Guide.

Other forms of breaking academic integrity include (but are not limited to) adding your name to a project you did not work on (or allowing someone to add their name), cheating on an examination, helping other students to cheat and submitting other students work as your own, and using non-allowed electronic equipment during.

Course literature

A reading list associated with the specific issues will be available at the start of the course.