

COURSE SYLLABUS

Research Track: In-depth Project Work in Supply Chain **Operations Management**, 7.5 credits

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Course Code: TRES22 **Education Cycle:** Confirmed by: Dean Mar 1, 2022

Valid From: Aug 1, 2022

Version:

Disciplinary domain:

Technology IE1

Subject group: Specialised in: A1F

Main field of study: Production Systems

Second-cycle level

Intended Learning Outcomes (ILO)

After a successful course, the student shall

Knowledge and understanding

- display methodological knowledge applicable to supply chain operations management
- demonstrate comprehension of certain areas related to supply chain operations management
- demonstrate comprehension of current research and development work in supply chain operations management

Skills and abilities

- demonstrate skills of scientific methods and approaches when planning and conducting project tasks or a study within predetermined time frames
- demonstrate the ability to describe, analyse and reflect on complex phenomena associated with supply chain operations management
- demonstrate the ability in speech and writing to report clearly and discuss conclusions and the knowledge and arguments on which they are based

Judgement and approach

- demonstrate an understanding of the complexity of collecting data in an industrial setting, adhering to scientific and ethical issues
- demonstrate an understanding of the role social, environmental and economic sustainability plays in an industrial setting and also demonstrate awareness of the interplay between efficiency requirements and need for renewal in this setting
- demonstrate the ability to identify one's own need of further knowledge

Contents

This course is preparatory for a future research career focusing on collaborative research projects. It is a continuation of the course Research track: Industrial Placement in Supply Chain Operations Management and prepares the student for final project work. Its purpose is to give

the student knowledge in how to independently work with research in co-production within an academic research project. The student will gain experience in how to design and execute a research study. Specific emphasis is on developing data analysis skills.

Assignments within the course are dependent on the purpose of the individual research project that the student joins, the conditions at the industrial placement(s) and the student's own interests. It includes joining and contributing knowledge to an ongoing project.

The course includes:

- Project planning
- Literature review
- Empirical and theoretical data analysis
- Report writing

Type of instruction

The students work individually but in close collaboration with other members of the research project. Each student may follow different plans, but everyone will have to participate in a common introduction on campus and/or via the learning platform; common reflection sessions; and a final presentation on campus.

The teaching is conducted in English.

Prerequisites

Passed courses of at least 90 credits within the major subject industrial engineering and management, mechanical engineering, civil engineering, computer engineering (or the equivalent), and 15 credits in mathematics, and completed course Research track: Industrial Placement in Supply Chain Operations Management, 7.5 credits. Proof of English proficiency is required.

Examination and grades

The course is graded 5,4,3 or Fail.

The final grade for the course is based on a balanced set of assessments. The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Assigments	6 credits	5/4/3/U
Written and oral presentation	1.5 credits	5/4/3/U

Other information

The course is an elective course for the master's programme in Supply Chain Operations Management within the frame of a research project at the School of Engineering or other related institutions. Should more students than there are available projects elect the course, it is up to the examiner to distribute the places. This is done based on a combined assessment of the

students' progress during the first year of studies and fit with the specific topic of the project.

Course literature

Course literature and other suitable teaching aids are decided upon for each individual project depending on its focus area within the main field of study.