

OPERATIONS STRATEGY

ME1308 (6 credits)

Course PM

Period 2, winter term 2025

Course description and background

The aim is that the course participants on completion of the course should be prepared to participate in analysis and implementation of industrial operations strategies. The course gives an introduction to operations strategy, it highlights choice of strategy for different operations in both design and implementation, and the needs of resources for implementation. Different types of analysis models are presented. Other perspectives such as responsibility and sustainability are emphasized.

Learning outcomes

After the course, the student should be able to apply basic techniques and theoretical perspectives operations strategies by:

- 1. Describe how strategic management translates into operations/processes to optimize industries' performance.
- 2. Explain how different operations strategies can be used to implement a overall company strategy.
- 3. Identify different processes, layouts, planning and control, SCM, innovation setups and state they contribute to the strategic direction of the firm.
- 4. Use different analysis models for assessing strategies/different operations.
- 5. Describe how responsibility and sustainability can be incorporated in operations.

Course main content

The course consists of a combination of lectures, game labs and cases. The following content will be addressed in the course:

- Operations Strategies
- Complexity of manufacturing operations
- Processes and layouts
- Planning and Control
- Supply Chain Management
- People Management
- Products and Services Innovation

Eligibility

ME1314 Introduction to Industrial Engineering and Management completed

Examination and Grading

• SEM3 - Seminars, 1.0 credits, grading scale: P, F

• TENA - Examination, 5.0 credits, grading scale: A, B, C, D, E, FX, F

There are six seminars to be performed in groups. For the first seminar, the LEGO game, attendance, and active participation/discussion is required to pass. For seminars 2-6, students are assigned a case or an exercise to solve in groups and to be submitted in CANVAS in power point, word or excel format. Attendance is compulsory and active participation in the seminars' sessions is required to pass.

Further instructions will be provided by the teacher responsible of the module/seminar. The grade for SEM3 is P, F.

The final exam is in written form. Questions covering the assigned reading material will be asked at the exam and graded on a numeric scale 0-100. Final grade will be decided according to the number of points accumulated at the exam, according to the following table:

EXAM POINTS	GRADE
91-100	A
81-90	В
71-80	С
61-70	D
51-60	Е
45-50	Fx
0-45	F

The final grade for the course will correspond to TENA grade, but it will be approved only if all the expected seminars have been handed in and passed, as well as the student having attended all the mandatory sessions in the course. The grade will be on the scale A, B, C, D, E, Fx, F.

Other information

Course literature

- Slack, N., Brandon-Jones, A., Burgess, N. (2022). Operations Management. 10th Edition, Pearson.
- Engwall, M., Jerbrant, A., Karlson, B., Storm, P. (2017). Modern industriell ekonomi. Studentliteratur.
- Additional materials (e.g. articles, game instructions) will be provided by the course teachers.

Physical copies of the book are available in KTH book store. There is an option to rent the book for 6 months with a 20% discount. Further information will be provided at the start of the course. See also instructions given in lecture 1 introduction slides.

All course information is distributed in CANVAS.

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Changes may be made.

