

Course syllabus

Internationell projektkurs matematisk modellering International Project Course -Mathematical Modelling

FMAN50, 3 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED F/Pi **Date of Decision:** 2023-04-18

General Information

Elective for: Pi3

Language of instruction: The course will be given in English

Aim

Be able to understand the modeling process of a given mathematical modelling project in cooperation with other students and to gain necessary knowledge to finish a project.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

Gain necessary knowledge to finish a given mathematical modelling project.

Competences and skills
For a passing grade the student must

- Carry through a project in a group.
- Carry through some part of a given mathematical modelling project.
- Present in oral and written form the conclusions of the project.

Contents

A problem in mathematical modelling

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: Written and oral presentation of a project.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

- FMAF25 Mathematical Modelling with Statistical Applications, Project
- FMAB40 Mathematical Modelling

Assumed prior knowledge: Equivalent to the 6 first terms of the Engineering

Mathematics program.

The number of participants is limited to: No The course overlaps following course/s: FMSN05

Reading list

• For each project the necessary literature is given.

Contact and other information

Director of studies: Anders Holst, studierektor@math.lth.se

Course coordinator: Niels Christian Overgaard,

niels christian.overgaard@math.lth.se

Course homepage: https://canvas.education.lu.se/courses/22789

Further information: Project in cooperation with students from different universities in Europe at ECMI-modelling week. ECMI-European Consortium for Mathematics in Industry, see http://www.ecmiindmath.org. ECMI modelling week is given in August

at one of the ECMI universities.