

SYLLABUS

System design and CFD simulation 7.5 credits F7019T

System och komponentsimulering

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2021-02-17**

System design and CFD simulation 7.5 credits F7019T

System och komponentsimulering

Second cycle, F7019T

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Energiteknik	Energy Technology

Main field of study

Mechanical Engineering

Entry requirements

Selection

The selection is based on 30-285 credits

Course Aim

The student should acquire the following skills in the course:

1. Knowledge and understanding

- developed in-depth knowledge of simulation technic (CFD as well as system analysis).

2. Skills and abilities

- be able to model, simulate and evaluate various processes
- be able to plan and solve qualified tasks.
- explain completed tasks in writing (Swedish / English).
- trained to solve assignment in groups.

3. Ability of assessment and attitude

- Developed your ability to engineering thinking
- Be able to critically assess results from CFD-Simulations

Contents

Application of different software's through different project assignments.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Lectures and project work.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Passed project works examined by written project report.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course F7019T is equal to MTM171

Course offered by

Department of Engineering Sciences and Mathematics

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Project work	G U 3 4 5	7.5	Mandatory	A07	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Head Faculty Programme Director Niklas Lehto 2021-02-17

Syllabus established

by Department of Applied Physics and Mechanical Engineering 2007-02-06