

FAF3504 Climate Technology, Systems 7.5 credits

Klimatteknik, system

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for FAF3504 valid from Autumn 2019

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

Master of Science in Civil and Architectural Engineering or similar, with an undergraduate course in indoor environment/energy systems/building services technologies or equivalent.

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The objective of this course is to provide a deeper understanding of the building service and energy systems used for indoor environmental management in buildings with key focus on systems for ventilation, heating/cooling, lighting and management of the acoustic environment. Relevant issues are discussed with the over-arching goal of achieving high indoor environmental quality, high user well-being and satisfaction, high energy efficiency, as well as optimal overall building performance.

Course contents

Climate technology systems are discussed in the context of:

- Air handling/ventilation systems
- Heating/cooling systems
- Lighting systems
- Systems for the management of the acoustic environment
- Energy systems
- Building environmental management systems (BEMS)
- Systems for building performance measurement and assessment
- User-building interaction systems

Examination

- UPP1 Report, 5.0 credits, grading scale: P, F
- TEN1 Oral exam, 2.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.