



MH2600 Combustion in industrial Processes 9.0 credits

Förbränning i industriella processer

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

Establishment

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

Registered at the master program TTMVM, or a BSc exam

Language of instruction

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

Intended learning outcomes

The course aims at providing the students with general knowledge about combustion and aerodynamics in industrial furnaces, familiar with best available combustion technologies. The students should be able to suggest improvements on existing furnaces to reduce fuel consumption, emissions, and GHG.

Course contents

Fundamental knowledge about combustion chemistry, thermodynamics and aerodynamics. Combustion of gaseous, liquid and solid fuels. Clean combustion to preserve the environment. Combustion process design. Homework. Laboratory work

Course literature

1. Industrial burners handbook, Edited by: Charles E. Baukal. 2003 by CRC Press LLC.
2. An Introduction To Combustion : Concepts And Applications, Stephen R. Turns, Boston McGraw-Hill, 2000.
3. Lecture materials prepared by division of energy and furnace

Examination

- PRO1 - Project Assignment, 3.0 credits, grading scale: P, F
- ÖVN1 - Assignment, 1.0 credits, grading scale: P, F
- TEN1 - Examination, 3.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Practicals, 1.5 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.