Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

Syllabus

TN0032.1 Combustion Techniques for Solid Fuels, 7.5 credits

Fastbränsleteknik

The course is given as course independent of study programme

Syllabus discontinued 7 December 2010

Version 1 in Slukurs. Corresponds to version 1 in Ladok

Syllabus approved

26 May 1997

The version applies to students admitted from spring 1999 to autumn 2011

The version is not a module version

Subjects

Technology

Education cycle

First cycle

Modules

Title	Code	Credits
Single module	0101	7.5

Advanced study in the main field

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

Swedish

Prior knowledge

The equivalent of: 5 Swedish University Credits (SUC) of intermediate (B-level) courses in Solid biofuels; and 10 SUC of basic (A-level) courses in Chemistry for forestry students; or 10 SUC of basic courses in Solid biofuels; and 5 SUC of basic courses in Combustion chemistry within the Engineer programme in Energy technology at the University of Umeå

Objectives

The course will providethe students with basic knowledge of different combustion techniques for solid fuels. Having completedthe course the students will have:
- good knowledge of combustion techniques and optimisation of combustion of solid fuels
- good knowledge of different types of combustion plants for solid fuels
- good knowledge of environmental effects during combustion of solid fuels
- knowledge of economic aspects concerning choice of combustion techniques for solid fuels

Content

The course considers the theory of combustion technology, where heat balances and optimisation for optimum effectively and emissions are included. In addition, construction and function of different heating plants for solid fuels, including their economy, are discussed. Different systems for fuel supply and flue gas cleaning are also considered. Finally, environmental aspects like emissions, working environment, etc. connected with the combustion of solid fuels, and measuring methods for emissions, are treated.

Implementation

Lectures ca 40 h
Exercises ca 40 h (compulsory)
Study tours ca 20 h (compulsory)

Examination

Requirements for examination

Written examination and written exercises.

Approved written examination and participation in compulsory parts of the course.

- If the student fails a test, the examiner may give the student a supplementary assignment, provided this is possible and there is reason to do so.
- If the student has been granted special educational support because of a disability, the examiner has the right to offer the student an adapted test, or provide an alternative assessment.
- If changes are made to this course syllabus, or if the course is closed, SLU shall decide on transitional rules for examination of students admitted under this syllabus but who have not yet passed the course.
- For the examination of a degree project (independent project), the examiner may also allow the student to add supplemental information after the deadline. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

Additional information

- The right to take part in teaching and/or supervision only applies to the course date to which the student has been admitted and registered on.
- If there are special reasons, the student may take part in course components that require compulsory attendance at a later date. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

Responsible department

Department of Forest Biomaterials and Technology

Supplementary Information

Finalized by: Programnämnden för skogsvetarprogrammet