



Renewable Energy Sources 3 hp

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Grundnivå

Progression: 1-30

Huvudområde: Energiteknik, grundnivå, har endast gymnasiala förkunskapskrav (GIN)

Kursplanen är fastställd av styrelsen för Sektionen för ekonomi och teknik (2006-12-05) och gäller studenter antagna sommaren 2007.

Kursens inplacering i utbildningssystemet

The course is a single subject course.

Behörighetskrav

Basic eligibility requirements. The requirement for Swedish language is waived for students who otherwise fulfil eligibility requirements by virtue of previous studies outside Sweden.

Kursens mål

The student will:

- be able to define and describe renewable energy.
- be able to understand the energy situation in the World and the problems with energy system of today.
- get knowledge of the most important renewable energy sources, like solar heating, solar photovoltaics, biomass energy, hydro power and wind power.
- be able to do basic calculations in energy technology.
- be able to give suggestion and example on how we can implement renewable energy sources in a country, municipality and company.
- get understanding and knowledge of the possibilities for the renewable energy sources today and in the future.
- get knowledge about how to analyse the environmental, economical and technical aspects of implementing renewable energy.
- be able to judge how the renewable energy sources can contribute to a long-term sustainable development.

Kursens huvudsakliga innehåll

Solar heating, solar photovoltaic, bio energy, hydro power, wind power and other renewable energy sources: Technology, condition for use and practical applications. Integration and economics of renewable energy. Influence on nature, environment and health.

Undervisning

The teaching consists of lectures, laboratory work and study tours. Parts of the course can be studied as a project.

Examination

Som betyg för hel kurs används något av uttrycken Underkänd, Godkänd eller Väl godkänd.

The examination consists of a written examination and approved reports from laboratory work and project.

The overall grades of fail, pass and pass with distinction will be awarded for the course.

Upon completion of a course, the student has the right to sit an examination up to a maximum of four times.

Kursvärdering

I kursen ingår kursvärdering. Denna ska vara vägledande för utveckling och planering av kursen. Kursvärderingen ska dokumenteras och redovisas för studenterna.

Kurslitteratur

Godfrey Boyle, Renewable Energy, Second Edition, Oxford University Press

Complementary photo copies.