

## **Industrial Energy Management**

- ▶ Chemical and Energy Engineering CEE

### **Industrial Energy Management**

The students are able to calculate the global warming due to anthropogenic CO<sub>2</sub> emission. They can calculate and assess the efficiency of power stations for fossil and renewable energies. They can apply economical calculations to compare the product costs for electricity using different energy systems. They can evaluate measures for the reduction of energy consumption and fossil CO<sub>2</sub> emissions considering specific boundary conditions.

- ▶ Global data of energy consumption
- ▶ Historical development of energy consumption
- ▶ Mechanism of global warming, increase of CO<sub>2</sub>-concentration in atmosphere
- ▶ Steam turbines, gas turbines, coupled gas and steam turbines, internal combustion engines
- ▶ Measures for reduction of NO<sub>x</sub>, sulfur and soot emissions,
- ▶ Thermal waste treatment
- ▶ Economical calculations for electricity production with power stations using black coal, lignite, natural gas, biogas, waste and uranium, wind power, hydro power and photovoltaic,
- ▶ Development of energy consumption in traffic, industry and private households,
- ▶ Measures to decrease CO<sub>2</sub> emissions

Combustion Engineering

Written exam 120 min, 4 CP

Prof. Dr.-Ing. E. Specht, Dr.-Ing. J. Sauerhering

handsout for download

Bitte einloggen

Um alle Links und Download-Bereiche sehen zu können,  
melden Sie sich bitte mit Ihrem Universitätsaccount an.

Lehre

- ▶ Advanced Heat and Mass Transfer
- ▶ Ansys
- ▶ Apparatechnik
- ▶ Bachelor- und Masterarbeiten
- ▶ Industrial Energy Management
- ▶ Process Engineering of Metals and Ceramics
- ▶ Spielregeln für Beruf und Karriere
- ▶ Thermische Prozesstechnik/ Wärmetechnik
- ▶ Verbrennungstechnik
- ▶ Wärme- und Stoffübertragung
- ▶ Wärmekraftanlagen

› **Zur Anmeldung...**