

### Introduction to Energy Engineering (20 credits)

This module is compulsory for students on a degree 'XXX and Energy Engineering' and available as an option for other engineering students. It introduces the UK and global context of energy production in the context of pressures to shift away from fossil fuels and other finite sources.

The IPCC reports on Climate Change will be introduced. Students will understand the state of the developed world's energy production capability. Overview coverage of the multitude of renewable resources will include some detailed consideration of demand and supply figures. A case study approach will be adopted including visits to appropriate sites.

Wherever possible practising engineers are involved in the team-based project work. For 2007/08 an opportunity was taken to work with Lichfield District Council (LDC) on an exercise, which they are currently taking to public consultation, involving developing an energy demonstrator within a green field site.

In 2008/09 this link was again exploited and the project was based on utilising of waste heat from Rugeley Power Station in association with a new nearby housing development for which LDC had just granted planning permission.

This philosophy of involving external clients is aimed at providing motivation to students because their output this of real interest to the council.