Environmental Risk Assessment (10 credits)

This module introduces the basic concepts of risk assessment in a range of settings using case studies from past examples of failures. Numerical statistical techniques for dealing with environmental risk prediction and Monte-Carlo simulation within project risk assessment will be applied to the area of nuclear safety.

Health and Safety Legislation will also be introduced. Detailed consideration of the understanding of Climate Change will involve statistical analysis of the data available, critical review of the literature and discussion of the energy impacts.

A useful exercise involving spreadsheet analysis of wind data is included because of its importance in understanding the variability of such an energy supply. This module is a vehicle for addressing a range of fundamental skills needed by energy engineers.