

## **NUCLEAR TECHNOLOGY EDUCATION CONSORTIUM**

### **N04 DECOMMISSIONING, RADIOACTIVE WASTE AND ENVIRONMENTAL MANAGEMENT**

#### **Summary**

A suitable introduction to the basics of nuclear decommissioning, lower activity radioactive waste and environmental management for students with no experience of the nuclear industries in the U.K.

The module aims to introduce and develop subject knowledge and theoretical, conceptual and analytical skills in technical, environmental and policy issues and principles associated with nuclear decommissioning and waste management (principally lower activity wastes) and the environmental management thereof in the UK.

On completion, students should be able to:

- Discuss the scientific, environmental and socio-political issues affecting the decommissioning of nuclear facilities and legacy nuclear waste management.
- Acquire, evaluate and use the principal sources of data on issues affecting the decommissioning of nuclear facilities and nuclear waste management
- Critically evaluate decommissioning management.
- Critically appraise the waste management principles applicable to nuclear decommissioning

#### **Syllabus**

The principle elements of this module relating to nuclear decommissioning and the associated areas of lower activity radioactive waste and environmental management will cover:

- Decommissioning and decommissioning strategies
- Policy, governance, social and political issues
- Regulatory aspects
- Best Practicable Environmental Options
- Environmental Impact Assessment
- Environmental safety cases
- The waste hierarchy and waste minimisation
- Waste storage and disposal
- Site characterisation of contaminated land and remediation
- Sustainable practice on nuclear sites
- A decommissioning exercise

**Please note that this module does not include pre-printed lecture material: these will be found on the relevant Blackboard site.**