

Energy Efficiency	
School	Engineering and Physical Sciences
Module Leader	Dr Peter Kew
Module Number	B59EE
Credits	12
Assignments	YES
Exams	YES
Student Effort ours	120
Pre-reading/Other Program-related Activities	12 hours
Formal Lectures/Workshop	26 hours
Discussions/Group Activities/Case Studies/Demonstrations	6 hours
Laboratory work	4 hours
Independent Study & Coursework	72 hours
<p>Objectives</p> <p>To provide students with an appreciation of the rationale for Energy efficiency, insight into the obstacles for achieving energy efficiency, and detailed knowledge and skills for implementing energy efficiency measures on policy, managerial, and technological levels.</p>	
<p>Content</p> <p>Lectures and workshops covering:</p> <ul style="list-style-type: none"> • Energy resources and use, need for improvements of energy efficiency, theoretical limits of energy efficiency • Energy audits to evaluate current energy consumption • Technological options to reduce heat loss • Role of human behaviour towards active energy efficiency • Past policies and policy options to encourage or enforce energy efficiency • Demand management; political, legal, economic, and technological options • Designing energy efficiency • Energy efficient transport • Energy efficiency for industrial processes 	

Understanding, Knowledge and Subject-Specific Skills

- Understanding of the current state and future potential of energy consumption and energy efficiency
- Insight into the obstacles for achieving energy efficiency
- Knowledge of current energy efficiency policies and legislation
- Knowledge of energy management
- Knowledge of technological methods to implement energy efficiency

Skills to evaluate the energy performance and identify specific needs and options for improving energy efficiency

- Skills to design energy efficiency
- Skills to implement energy efficient behaviour