

## M.Phil in Engineering for Sustainable Development (2011-2012)

<i>Michaelmas Term</i>	<i>Lent term</i>
Induction Week <b>Residential Field Trip</b> (Twyford Down / Stonehenge / Hindhead; relationship of roads to landscape 7/8 Oct (prov. dates) )	<b>Residential Field Trip;</b> Centre for Alternative Technology, Wales (27-30 March 2010) – subject to confirmation
<b>MOTI Management of Technology and Innovation</b> RESEARCH METHODOLOGY AND GENERIC SKILLS	<b>MOTI Management of Technology and Innovation</b> 10 <sup>th</sup> Annual Distinguished Lectures Series
<b>ESD Sem</b> Weekly group seminar discussions	
<b>Practitioner Viewpoint Series</b> (fortnightly seminars with industrial guests)	

### INNER CORE (Mandatory)

<b>ESD 100 Concepts, Vales and Change Processes</b> Professor Peter Guthrie / Dr H Cruickshank <i>(100 % cw)</i>
<b>ESD 200 Sustainability Methods and Metrics</b> Dr Dick Fenner / Dr Heather Cruickshank et al <i>(100% cw)</i>

### OUTER CORE (Choose 2 from 4 modules)

<b>ESD 300 Sustainability Assessment of Large Infrastructure Projects</b> Professor Peter Guthrie <i>(100% cw)</i>
<b>ESD 400 Economic, Legal and Regulation Issues</b> Professor N. Ashford (MIT) <i>(100% cw)</i>
<b>ESD 500 Sustainable Design and Implementation</b> Dr Dick Fenner et al <i>(100% cw)</i>
<b>ESD 600 Development Engineering</b> Dr H Cruickshank <i>(100% cw)</i>

### Elective Modules – (choose TWO modules in each Term)

#### Centre for Sustainable Development:

<b>ESD 45 Environmental Engineering (GP)</b> <i>( subject to numbers) (100% cw)</i>	<b>4D15 Sustainable Water Engineering (RAF)</b> <i>(100% cw)</i>
<b>Outer core modules not already chosen (up to 2)</b> <i>(100% cw)</i>	

#### Department of Engineering

<b>4B14 Solar-electronic power: generation and distribution ( Exam and cw)</b>	<b>4 A8 Environmental Fluid Mechanics (Exam)</b>
<b>4B19 Renewable Electrical Power (Exam)</b>	<b>4 M15 Sustainable Energy (Exam and cw)</b>
<b>4D11 Building Physics (Exam and cw)</b>	<b>4E5 International Business Economics (cw)</b>
<b>4D13 Architectural Engineering (cw)</b>	<b>4E11 Strategic Management (cw)</b>
<b>4D14 Contaminated Land and waste containment (Exam and cw)</b>	<b>4E12 Project Management (cw)</b>
<b>4E1 Technological innovation: research and practice (cw)</b>	<b>4G1 Systems Biology (cw)</b>
<b>4E4 Management of Technology (cw)</b>	
<b>4E6 Accounting and Finance (cw)</b>	
<b>4G4 Biomimetics (cw)</b>	
<b>4I7 Electricity and the Environment (cw)</b>	

#### Judge Business School

<b>TP1 Introduction to Technology Policy (cw)</b>	<b>TP4 Complexity and Negotiations (Easter Term) (cw)</b>
<b>TPE7 Political Economy of Technology Policy (cw)</b>	<b>TP 6 Uncertainty and real options in system Design (cw)</b> <i>(subject to December role play dates)</i>
<b>MM10 Globalisation and Big Business (cw)</b>	<b>TPE8 Systems Dynamics (cw)</b>
	<b>MM ESD Globalisation (part 2) (cw)</b>

#### Cambridge University

<b>ESD A1 Environmental Design in Architecture 1 (cw)</b>	<b>ESD-CE2 Sustainability and Chemical Engineering (cw)</b>
	<b>ESD A2 Environmental Design in Architecture 2 (cw)</b>

Students are allowed a free choice of 4 of the above modules (2 per term), at the discretion of the Course Director, and subject to resource constraints based on minimum numbers of students required to offer each module.

**12,000 to 15,000 word DISSERTATION; April to August 2012**