



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Sustainable Technologies		
Module Code	UBGLW7-15-M	Level	Level 7
For implementation from	2018-19		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Geography and Environmental Management
Department	FET Dept of Geography & Environmental Mgmt		
Contributes towards	Environmental Consultancy [Sep][FT][Frenchay][1yr] MSc 2018-19 Environmental Consultancy [Sep][PT][Frenchay][2yrs] MSc 2018-19		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p><b>Educational Aims:</b> See Learning Outcomes.</p> <p>In addition to the Learning Outcomes, this module will develop students' ability to critically review the range of technologies in relation to the provision of heating, powering and cooling of domestic and business buildings.</p> <p><b>Outline Syllabus:</b> The syllabus includes:</p> <p>UK energy policy. UK energy regulatory framework.</p>

## STUDENT AND ACADEMIC SERVICES

Carbon accounting and management.

Emissions trading. Renewables obligation.

Renewable energy subsidies; the feed in tariff and the renewable heat incentive.

The code for sustainable homes.

The following power generation and supply systems: fossil fuel; nuclear; solar; wind; tidal and hydro; wave; biomass.

Information to include the history of development of the particular technology, the level of maturity and degree of penetration in the UK marketplace now, and its potential for the future, the technology itself including relevant energy equations and/or chemical interactions.

Design, installation and life cycle cost evaluation of micro-technologies.

Preparing for and presenting a defended poster.

**Teaching and Learning Methods:** Nominal hours:

Directed learning (lectures, seminars, field trip): 32 hours

Directed independent learning: 40 hours

Independent learning: 38 hours

Assessment: 40 hours

The learning base of this module will be provided in the form of lectures, seminars and a field trip.

Student centred activities will include, preparing for and presenting a defended poster.

This module will be supported by the web based virtual environment, "Blackboard".

Case studies will be presented by academics with environmental consultancy experience.

Scheduled learning includes lectures, seminars and a field trip.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion etc.

### Part 3: Assessment

#### Formative assessment

A field trip will form the basis of information from which a poster will be prepared and defended as a mock to the later summative assessed defended poster. Students will mark each other's work using the same marking schedule used to assess the summative defended poster. Verbal feedback will be also be provided by the module leader occurring as a set of recommendations for improvement of performance.

#### Summative assessment

Component A – Defended poster (50% of module mark)

Component B – 3000-word sustainability report (50% of module mark)

The students will be required to undertake research on their chosen topic and prepare a poster for presentation. Poster outline guidance is provided both in booklet form and via academic and technical support. Students will have the opportunity of preparing and presenting a mock poster to their peers and the module leader for feedback purposes. The students, in presenting their posters, will have to demonstrate an in depth understanding of their chosen sustainable technology, the relevant policy and law, and show competence in key presenting, communication and analytical skills.

The students will be required to undertake research on their chosen topic and prepare a 3,000-word energy report which must be to professional technical standards with thorough source attribution and clarity in communication.

## STUDENT AND ACADEMIC SERVICES

First Sit Components	Final Assessment	Element weighting	Description
Report - Component B	✓	50 %	Sustainability report (3000 words)
Poster - Component A		50 %	Defended poster
Resit Components	Final Assessment	Element weighting	Description
Report - Component B	✓	50 %	Sustainability report (3000 words)
Poster - Component A		50 %	Defended poster

Part 4: Teaching and Learning Methods																					
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Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p><a href="https://uwe.rl.talis.com/modules/ubglw7-15-m.html">https://uwe.rl.talis.com/modules/ubglw7-15-m.html</a></p>																				