

Disclaimer:

The University will use all reasonable endeavours to deliver modules in accordance with the descriptions set out below. Every effort has been made to ensure the accuracy of the information, however, the University reserves the right to introduce changes to the information given including the addition, withdrawal or restructuring of modules if it considers such action to be necessary.

### Module Outline Form

4353

Module code	SPG8095	Academic Year	2011	Offered	Yes	Stand alone	Not Available			
Short Title	Renewable Energy: Masters Project & Repo									
Module title	Renewable Energy: Masters Project and Report									
Credits	Semester 1	10	Semester 2	10	Semester 3	40	ECTS	30.0	Max Capacity	999
FHEQ Level	7	Marking Scale	PG Linear Scale				Mode	Linear		
Owning School	SAGE Faculty Office					Delivery	Standard			
Teaching Location	TBC									
Contributors										
<b>Contributor Name</b>	<b>Description</b>					<b>%</b>				
Prof. Anthony Paul Roskilly	Module Leader					10				
Reflex module staff	Other Staff					90				
External Organisations	None									
Equivalent Modules	None									
Pre-requisite Modules	None									
Pre-requisite Comments	None									
Co-requisite Modules	None									
Co-requisite Comments	None									
Programme Relationship	None									
Availability	Every Year				Study Abroad	No				
Aims	<p>To undertake an independent piece of technical research work including formulation of the problem, undertaking the necessary research work and reporting of the results.</p> <p>The student will formulate, undertake and report on a substantial design or research project in the field of renewable energy. Each project will be unique to the student. The content of the project will be discussed and agreed in collaboration with the student, their academic supervisor and their employer (where applicable.)</p> <p>Original Summary:</p>									
Outline of Syllabus	An Induction Session will be delivered at the beginning of the academic year, which students will be advised to attend for guidance.									

Intended Knowledge Outcomes	<p>A student who successfully completes this module will be able to:</p> <p>I KO1 – demonstrate how, using appropriate methodologies and a systematic approach, to undertake and write a literature review.</p> <p>I KO2 – undertake, using an appropriate research methodology or methodologies, and report on a substantial design or research project in a selected field of renewable energy.</p> <p>I KO3 – integrate and evaluate the data or other findings generated, the and explain how these influence their chosen subject area.</p>
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Intended Skills Outcomes	<p>ISO1 – critically identify and use appropriate library and web-based resources to research a given topic</p> <p>ISO2 – plan and manage a self-directed research or design project including maintaining a log book of the project</p> <p>ISO3 – critically analyse the theoretical design concepts and practical implementation associated with a particular renewable energy subject</p> <p>ISO4 – demonstrate IT skills using packages appropriate to the subject area</p> <p>ISO5 – collate, analyse and evaluate data as part of a project</p> <p>ISO6 – demonstrate the use of effective communication skills throughout the project including in preparation of the dissertation and the oral presentation.</p>
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Graduate Skills Framework	GSF Applicable	Yes	P - Present, A -Assessed, N/A Not Applicable
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Cognitive / Intellectual Skills	Critical Thinking	P	Data Synthesis	P	Active Learning	P	
	Numeracy	A	Literacy	P			
Information Literacy	Source Materials	A	Synthesise and Present Materials	A	Use of Computer Applications	A	
Self Management	Self-awareness & Reflection		N/A				
Planning & Organisation	Goal Setting & Action Planning		A		Decision Making	A	
Personal Enterprise	Innovation & Creativity	N/A	Initiative	P	Independance	P	
	Adaptability	N/A	Problem Solving	A	Budgeting	N/A	
Communication	Oral	A	Foreign Languages	N/A		Interpersonal	P
	Written/Other		A				
Team Working	Collaboration	P	Relationship Building	N/A		Leadership	N/A
	Negotiation	N/A	Peer Assessment/Review	N/A			
Application	Occupational Awareness	N/A					
Commercial Acumen	Market Awareness	N/A		Governance Awareness	N/A		
	Financial Awareness	N/A		Business Planning	N/A		
	Ethical Awareness	N/A		Social, Cultural & Global Awareness	N/A		
	Legal Awareness	N/A					

Teaching Activities
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Category	Activity	No.	Length	Student Hours	Staff Contact Hours	Comment
Guided Independent Study	Project work	1	0468:00	0468:00	0000:00	N/A

Guided Independent Study	Assessment preparation and completion	1	0120:00	0120:00	0000:00	Writing up dissertation
Scheduled Learning And Teaching Activities	Lecture	5	0001:00	0005:00	0005:00	Staff & externals presentations during Induction week
Scheduled Learning And Teaching Activities	Dissertation/project related supervision	10	0000:30	0005:00	0005:00	Discussions with project supervisor, as required.
Scheduled Learning And Teaching Activities	Workshops	1	0002:00	0002:00	0002:00	Hands-on workshop in Robinson Library
Totals				0600:00	0012:00	

Jointly Taught With None

#### Rationale of Teaching Methods and Relationship to Learning Outcomes

The lectures provide students with the research skills and project framework requirements (IKO1-2, ISO1)  
The student should select a member of staff as supervisor for their intended project who will help to establish the scope and focus of the project. Students are responsible for maintaining regular contact with their supervisor and maintaining a record of their meetings.  
Knowledge and understanding of the selected topic will be gained through all activities associated with the project. This may include, but is not limited to, literature review, background reading, research, experimentation, computer modelling and analysis, discussions, design. It will be supported by the teaching and material associated with the taught module in that subject area. (IKO3, ISO2-3, 5)  
Subject specific, cognitive, time management, IT and communication skills will be practiced and enhanced through the development and management of the project, liaison with others and the preparation of a formal dissertation and maintenance of a project logbook. (ISO4, 6)

Exams None

Exam Resits None

Exam Pairings None

Exam Pairing Resits None

Other Assessment

Component	Semester	When Set	%	Comment
Other 1	1	M	10	project specification and literature review
Other 2	3	M	90	Maximum 75 pages

Other Assessment Resits None

Zero Weighted Pass/fail Assessment None

Formative Assessments None

Assessment Rationale and Relationship

The formal project dissertation will provide students with the opportunity to demonstrate and describe their advanced knowledge and understanding of the project topic. Other skills including cognitive, key and subject specific skills will also be assessed through the formal dissertation. Skills such as time management will not be assessed via the dissertation but will need to have been utilised in order to successfully complete the project.

Exempt from Assessment Tarrif	No	Exemption date	
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Exemption from Assessment Tariff Comment	
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N/A

Hesa Data

School Code	School Name	Cost Centre Code	Cost Centre Description	Jacs Code	Jacs Subject Description	% Split
D-SJSRI	Sir Joseph Swan Research Institute	14	Earth, Marine and Environmental Sciences	J910	Energy Technologies	10
D-SFAC	SAGE Faculty Office	21	Mechanical, Aero and Production Engineering	H221	Energy Resources	90

General notes

N/A

Immunisation / Allergy screening - should be offered	Allergy Screening:	No
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Hepatitis A	No
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Hepatitis B	No
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Tetanus	No
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