

MSc Architecture: Advanced Environmental and Energy Studies

PROGRAMME HANDBOOK

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Introduction

MSc Architecture: Advanced Environmental and Energy Studies. Is a programme, which concentrates on a wide range of current Environmental issues, is run by the Centre for Alternative Technology, CAT (Europe's leading Eco centre) in the Graduate School of the Environment (GSE) but validated for full MSc status by the University of East London (UEL). The programme offers a unique combination of theoretical and practical experience that will equip students with skills that are becoming increasingly sought after in all areas of professional practice.

The programme runs as a series of 15 credit modules which all take place at CAT.

The objective of this handbook is to give full details of the MSc Architecture: Advanced Environmental and Energy Studies programme with attendance at CAT.

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The programme content and operation is validated by UEL. For the general regulations of the University as a whole visit:-

Manual of General Regulations at:-

<http://www.uel.ac.uk/qa/manual/index.htm>

For the Programme Specification visit:-

<http://www.uel.ac.uk/cite/programmes/postgraduate.htm>

For further programme information visit:-

<http://www.cat.org.uk/graduateschool> and follow links to MSc Architecture: Advanced Environmental and Energy Studies

1.0 Initial Details

Programme title: MSc Architecture: Advanced Environmental and Energy Studies
Awards offered: MSc Architecture: Advanced Environmental and Energy Studies
Post Graduate Diploma: Advanced Environmental and Energy Studies
Post Graduate Certificate: Advanced Environmental and Energy Studies
Post Graduate Associate Cert.: Advanced Environmental and Energy Studies
Programme mode: One year full time and two years part time
Maximum duration of programme: Two years part time
Minimum duration of programme: One year full time
Maximum registration period: Six years
Programme Leader: Mike Thompson.

2.0 Programme Theme

The programme examines the relationship between human beings and their environment, and in particular offers an ecological perspective on building. It ranges from the political, economic and social background of environmental issues, including global examination of energy provision and consumption and climate change to local environmental considerations affecting occupant health and well-being. Choice of materials, bioclimatic design, building methods, designing for energy efficiency and the principles and practice of renewable energies are examined through both practical work and the lecture programme.

3.0 Overall Aims

- 3.1 To allow students to undertake advanced study in specialist topics in the area of environmental and energy studies.
- 3.2 To develop students' intellectual and imaginative powers, their problem solving skills, their ability to communicate, their ability to see relationships within the subject areas learned and to perceive their field of study in a broader perspective. The teaching programme will stimulate an inquiring, analytical and creative approach, encouraging independent judgement and critical self-awareness.
- 3.3 To develop students' self-confidence and establish their ability to act on their own initiative.
- 3.4 To apply judgement to complex and unpredictable research and professional issues within the area, through case studies and group working.
- 3.5 To cultivate the ability for students to take a senior/management position in academic research or professional practice.

4.0 Admission Requirements

- 4.1 The programme is intended to cater for a broad range of interests. Students are admitted in accordance with the admission requirements in the programme specification (www.uel.ac.uk/cite/programmes/postgraduate.htm). For acceptance onto the programme the following requirements apply:-
- 4.2 First degree.
- 4.3 Students who do not possess formal qualifications but who can demonstrate that they have gained appropriate knowledge and skills equivalent to degree standard and that they will benefit from and contribute to the programme may be accepted. Students may be admitted with advanced standing through the recognition of credit or the accreditation of experiential or certificated learning according to the University of East London Accreditation of (Experiential) Learning (A(E)L) policy.
- 4.4 A student may gain admission to a programme, with advanced standing, with up to half of the credits associated with the award being achieved through accredited experiential learning, or up two thirds through accredited certificated learning. (Where a combination of experiential and certificated learning is involved up to one half of the credits for the award may be achieved through accredited experiential learning with further credits being achieved through accredited certificated learning up to a maximum of two thirds of the credits for the award).
- 4.5 The University and CAT are strongly committed to widening participation and equal opportunity for all.
- 4.6 Students must be able to understand and express themselves in both written and spoken English and some evidence e.g. TOEFL at 550 or an IELTS score of 6.0 will be required.

5.0 Programme Operation

- 5.1 The programme, delivered by staff from GSE and specialist visitors from the profession is divided into a total of 14 teaching modules which run between September and July.
- 5.2 The programme comprises of 15 modules in total (including the thesis module). Most modules are 15 credits; the thesis is 60 credits. Each 15 credit module is a five-day residential teaching event which takes place every month except December and August at CAT. There are a number of options available i.e. modules that run at the same time and students choose which to follow. Students are required to complete eight of the fourteen teaching modules on offer. Some Modules (A1, A2, A3, B1, B3, C1, and C2) may be followed by Distance Learning. See section 9 for details of each module and when it takes place.
- 5.3 The following awards are available:-
MSc: complete and pass modules equivalent to 120 credits + the thesis
PG Diploma: complete and pass modules equivalent to 120 credits
PG Certificate: complete and pass modules equivalent to 60 credits
PG Associate Certificate: complete and pass modules equivalent to 30 credits
- 5.4 Before each Module commences students may indicate whether they are attending the forthcoming event by booking online
- 5.5 The programme has two start dates; September and March.

- 5.6 Each module consists of lectures, seminars, workshops, practical work and individual tutorials. At the beginning of each module, students are given a Module Study Book, which contains lecture notes, relevant papers, and various items of information and administration.
- 5.7 All students are placed in a Seminar Groups, comprising of about 20-25 students and under the guidance of a member of staff. The same member of staff remains with the group throughout their time on the programme to maintain continuity.
- 5.8 Seminar groups meet during timetabled sessions and occasionally at other times and are the means whereby small group tuition can be delivered. Small group teaching ensures that individual attention is available for all students and also enables students to benefit from peer review and discussions.
- 5.9 All written work is marked by the seminar tutor who is also responsible for guidance and feedback during individual tutorial sessions. The programme leader always seconds marks a significant proportion (at least 20%) of the written work. See section 10.1.2 for full details of this process.
- 5.10 Individual tutorials are available at CAT, by email or by telephone by arrangement with each tutor.
- 5.11 Students attending at CAT arrive on Tuesday from 2pm onwards. Teaching starts on Wednesday morning and goes through to Sunday lunchtime, (see the timetable in section 7.)
- 5.12 On arrival at CAT students are issued with the Module Study Book and any additional material relevant to the module. Students are also booked into their accommodation. Any necessary administration can be completed at this point.
- 5.13 Previous coursework to be submitted on or before the dates shown in Table 1.
In particular: by person on the Tuesday of the module with an absolute deadline of 11.30 Wednesday. **by post**, to arrive at the courses office by the Tuesday of the module (see attached dates on Table 1)

6.0 Start Dates

- 6.1 Two start dates are available with the sequence of study as follows (see section 9, Programme Content and Structure, for more information):
- 6.2 **September start:** Starts with Module A1
- 6.3 **March Start:** Starts with Module C1
- 6.4 Students are required to start with either A1 or C1 in order for to become familiar with staff on the programme and to complete any outstanding administration. This also provides an opportunity for students to meet their peer group and to familiarise themselves with some of the background information provided on an additional teaching day for these modules, including a tour of the CAT site and visitor circuit.

7.0 Timetables

7.1 Daily timetable for CAT based teaching sessions

At the beginning of the start modules which occur in September and March there is an additional teaching day which takes the form of an induction session for new students. A Thesis Workshop for continuing students normally takes place on the Tuesday before the February, May and October modules. . For all other modules, students arrive on Tuesday evening for supper and depart on Sunday after lunch

S A M P L E T I M E T A B L E F O R A R E S I D E N T I A L M O D U L E										
	8.30	9.30	11.00	11.30	13.00	14.00	16.00	16.30	18.00	19.00
Monday									Supper	
Tuesday	Breakfast	Induction or Thesis w/shop	Coffee	Induction Thesis	Lunch	Induction Thesis	Tea	Induction Thesis	Supper	Student Event
Wednesday	Breakfast	Lecture	Coffee	Lecture	Lunch	Practical introduction	Tea	Lecture	Supper	Student Lecture
Thursday	Breakfast	Lecture	Coffee	Seminar	Lunch	Presentation	Tea	Lecture	Supper	Tutorials
Friday	Breakfast	Lecture	Coffee	Practical	Lunch	Practical	Tea	Practical	Supper	
Saturday	Breakfast	Lecture	Coffee	Seminar	Lunch	Presentation	Tea	Lecture	Supper	Social Event
Sunday	Breakfast	Lecture	Coffee	Lecture	Lunch	Depart				
HAND IN OF ESSAYS etc TAKES PLACE ON THE FIRST DAY OF THE MODULE										

Times are subject to modification during the Module in the interests of the need to be responsive to particular learning conditions.

8.0 Teaching methods and processes

Description of activities

Lectures: Lectures associated with a Module.

Seminars: Usually following lectures or other activity; student discussion in small groups

Presentations: Students present their essay topic to staff and students

Tutorials: One to one contact with tutor (also by E mail or telephone as required)

Practicals: Practical activity related to Module content

8.1 Programme content is taught through a series of lectures; seminars, workshops and practical activity (see section 9). Alongside the formal learning and teaching there is a great deal of opportunity for informal learning to take place through discussion.

8.2 Throughout all teaching processes, an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects of the subject area are covered. At least one day per module is spent on practical work; students choose which of these to complete from a list provided.

- 8.3 Seminar groups consist of about 20 to 25 students under the direction of one member of staff and involve detailed discussion on subjects related to and extending from the lecture series. Questions on the lecture topics is normally available to assist in this process. Individual tutorials mainly to discuss feedback are available and normally occur at the end of the CAT based day or at other times by arrangement with personal tutors.
- 8.4 There are two forms of Coursework assessment for the programme:-
- Summative: work is handed in, marked and the marks recorded (this applies to Essay, Critique of Paper and Report). The Presentation is marked and marks recorded at the time of delivery
 - Formative: work is done with appropriate staff and students and comments are made, discussion takes place and criticism is made. There is no marks associated with this assessment.
- 8.5 Coursework for summative assessment hand in must be made on the date indicated in Table 1 of section 9.4 and signed in by a member of staff. It may be necessary to send in work by post. Failure to comply with this requirement and complete associated paper work will mean the work is not accepted. See section 9.4 for full details of the hand-in times and procedure
- 8.6 Practical teaching is conducted in small groups of 8 to 12 students; the coursework related to the practical work is formatively assessed at the end of the practical session. Formative assessment applies for those Modules A1, A2, A3, B1, B2, B3, C1 and C2 takes the form of a review of the work done during the Practical day (Friday) Practical work ends at 16.00 hrs and students in a group present their work and discuss the results with a practical staff. The nature of the Practicals is configured to facilitate this approach.
- 8.7 All students are expected to present their work to the group and to participate in discussions. Being able to present the results of student work is considered an important element of the education process; developing confidence in presenting, listening to presentations and critical questioning are useful professional skills. If the module at which the presentation is required is not attended then the Presentation must be made on a CD. See section 9.4 for details.
- 8.8 The major requirement of the MSc programme is the Thesis, which is tutored on an individual basis. The process of starting the thesis occurs during the sixth module with an initial Thesis presentation. Two members of staff are responsible for coordinating the thesis module. All members of staff are available for Thesis Supervision; students are allocated a personal Thesis Supervisor when the thesis research has been agreed.
- 8.9 At least two days per year are dedicated to research methods when specialist research staff are available to assist students with their unique research requirements.

9.0 Programme Content and Structure

Students on this programme choose to complete any 8 out of the 14 teaching modules on offer. Teaching modules are worth 15 credits. The thesis is 60 credits (a credit is equivalent to a total of 10 hours of student activity both formal contact and private study). Students are required to complete the thesis module in order to be awarded an MSc.

Programme Content and Structure Diagram

CONTENT	ACTIVITY	CREDITS	HOURS
MODULE A1: SEPTEMBER Environment and energy in world context; Economics and law; Sustainability in Architecture. Issues and responses to Climate Change Renewable energy overview.	Lectures Seminar Presentations Tutorials Practicals	15	150
MODULE A2: OCTOBER Climate and micro climate; Thermal Comfort; interaction between the building, its occupants and climatic conditions. Climatic influences in design. Heat transfer; energy conservation; thermal capacity; thermal performance of buildings. Principles Solar Electric	Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE A3: NOVEMBER Principles of ventilation; Ventilation and cooling; Dampness and condensation; breathing walls. Building services: an environmental perspective. Water provision and sewage disposal Waste disposal; Brown fields and Contaminated land. Principles of Solar water	Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE B1: JANUARY Principles of light: artificial and natural; Daylight factor; Sunlight and solar gain in buildings. Principles of Hydro and Biomass	Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE B2: JANUARY Environment, Politics and Economics (Not available by Distance Learning)	Lectures Seminars Presentations Tutorials	15	150
MODULE B3: FEBRUARY Occupant health and well being; Urbanisation and Health; Noise; Hazardous building materials; Eco- refurbishment; Indoor Air Quality. Principles of Wind power	Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE B4: FEBRUARY Computer Applications Option Computer methods of environmental analysis and simulation Evaluation of computer methods (Not available by Distance Learning)	Lecture Seminars Presentation Web based activity	15	150

CONTENT	ACTIVITY	CREDITS	HOURS
MODULE C1: MARCH Environmental Evaluation and Assessment; Embodied energy and Life Cycle Analysis Energy and Nuclear power. Low Carbon housing; Intelligent building	Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE C2: APRIL Society and Environment; Land use Planning, Environmental Impact Assessment and Management; Transport issues. Post Occupancy Evaluation	Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE B4 (Repeat): APRIL Computer Applications Option Computer methods of environmental analysis and simulation Evaluation of computer methods (Not available by Distance Learning)	Lecture Seminars Presentation Web based activity	15	150
MODULE C3: MAY Materials examined with an environmental agenda: timber, concrete, straw, earth, composites Practical studies on timber, concrete, straw, earth, composites (Not available by Distance Learning)	Lectures Seminars Presentations Tutorials Practical analysis	15	150
MODULE A4: JUNE Design and Evaluation Group working Design in an environmental context Testing, analysis and evaluation (Not available by Distance Learning)	Project introduction Lectures Design Seminars Presentations Tutorials	15	150
MODULE A5: JULY Fabrication and Experimentation Group Working Fabrication and experimentation Testing, analysis and evaluation (Not available by Distance Learning)	Lecture Seminars Presentation Practical	15	150
MODULE A6: JULY Renewable Energy Engineering Advanced renewable energy engineering design and practice on Solar Thermal (Not available by Distance Learning)	Part Lectures Seminars Presentations Tutorials Practicals	15	150
MODULE A7: JULY Renewable Energy Engineering Advanced renewable energy engineering design and practice on Solar PV (Not available by Distance Learning)	Lectures Design Seminars Tutorials Practicals	15	150
THESIS	Independent research, workshops, tutorials	60	600

9.1 Programme Dates and Activity

The diagram below lists the dates and activity on the programme. The start times are shown in bold with formal teaching taking place in one year (full time) or two years (part time). After the period of formal tuition, students are writing up their thesis for the hand in as indicated. This is followed by the formal reading of the thesis which may include some rewriting where necessary.

Mode. (One year or two years)	Formal tuition during these dates		No formal tuition between these dates	Assessment during these dates	
	Modules A1 – C 3 (start dates, years in bold)	Thesis (start after sixth module)	Thesis Writing	Thesis Hand in	Field and Award Boards
1 year	Mar 08 – Feb 09	Up to Mar 09	Mar 09 – Jul 09	Jul 09	Feb 10
2 year	Mar 08 – Feb 10	Up to Mar 10	Mar 10 – Jul 10	Jul 10	Feb 11
1 year	Sept 08 – July 09	Up to Sept 09	Sept 09 – Jan 10	Jan 10	Jul 10
2 year	Sept 08 – July 10	Up to Sept 10	Sept 10 – Jan 11	Jan 11	Jul 11
1 year	Mar 09 – Feb 10	Up to Mar 10	Mar 10 – Jun 10	Jul 10	Feb 11
2 year	Mar 09 – Feb 11	Up to Mar 11	Mar 11 – Jul 11	Jul 11	Feb 12
1 year	Sept 09 – July 10	Up to Sept 10	Sept 10 – Jan 11	Jan 11	Jul 11
2 year	Sept 09 – July 11	Up to Sept 11	Sept 11 – Jan 12	Jan 12	Jul 12
1 year	Mar 10 – Feb 11	Up to Mar 11	Mar 11 – Jun 11	Jul 11	Feb 12
2 year	Mar 10 – Feb 12	Up to Mar 12	Mar 12 – Jul 12	Jul 12	Feb 13

9.2 Intermission

Each year is divided into two Semesters:-

Semester A September - January

Semester B February – August

Students may intermit (which means effectively suspending attendance on the programme) for any one semester up to a maximum of two years. There will be no fee payable during intermission and the normal student privileges are not available during this period. .

9.3 Module Descriptions

In this section detailed specifications for each module are given.

Module Title: Environment and energy in world context	Module Code: A1 September (UEL Code CEM 158) Level: M Credit: 15 ECTS credit: NA	Module Leader: Mike Thompson Additional Tutors: David Hood Lotte Reimer Damian Randle Ranyl Rhydwen Melissa Taylor Kara Millen Jason Hawkes Ruth Stevenson Alison Pooley Tim Helweg-Larsen Blanche Cameron
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give a wide overview of global environmental and energy issues • To examine what is meant by Sustainability • To evaluate the impact of economics and law in the environmental context • To establish the basic principles of Renewable Energy systems • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture areas: Environment and Energy in a Global context, World Resources, Economics and Law, Sustainability in Architecture, Issues related to and responses to Climate Change, Renewable Energy. Practical Activity: <i>(May be updated throughout the programme and subject to availability)</i> Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication		
Learning Outcomes for the Module At the end of this module, students will: <i>Theoretical knowledge and understanding</i> <ol style="list-style-type: none"> 1. Be able to identify and explain the key issues arising from 3 or 4 topics of the module 2. Be able to analyse these issues in relation to global environmental and energy issues <i>Thinking skills</i> <ol style="list-style-type: none"> 3. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 4. Be able to consider the economic limitations of the implementation of an environmental agenda 5. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject 6. To be able to think in an innovative and creative way <i>Subject-based practical skills</i> <ol style="list-style-type: none"> 7. To be able to make an oral presentation of a cogent argument in public 		

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of each module is taught through lectures, practicals, workshops, presentations, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day during each module is spent on practical work; students choose from a list which of these to complete. Coursework usually consists of an Essay and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, Tutorials and Practical work Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Brown, R., and Gillespie, T. *Microclimatic Landscape Design* Wiley 1995
World Commission on Environment and Development, *Our Common Future*, O.U.P., 1991
Bolin, B. et al., *The Greenhouse Effect, Climate Change and Ecosystems*, John Wiley, 1986
HMSO (pub.), *This Common Inheritance: Britain's Environmental Strategy*, 1990
Houghton, J and Jenkins, G, *Climate Change: The IPCC Scientific Assessment*, C.U.P., 1991
McClaren, D. et al., *Tomorrows World*, Earthscan, 1998
Twidell, J. and Weir, T., *Renewable Energy Resources*, Spon, 1997
Boyle, G et al *Energy Systems and Sustainability* Oxford university Press 2004
Boyle, G *Renewable Energy* Oxford University Press 2004
Evans, M., *Housing, Climate and Comfort*, Architectural Press, 1980
Patel, M., *Wind and Power Systems*, CRC Press, 1999
Tickell J *From the fryer to the fuel tank* Eco-logic Books 1998
Sperling, D and Cannon *The Hydrogen Energy Transition* 2004
McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002
Girardet, H *Cities People Planet* Wiley Academy 2004

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials, Practicalcs</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Essay writing Presentation preparation</p>

Module Title: Climate, Comfort and Building Performance	Module Code: A2 October (UEL Code CEM 159) Level: M Credit: 15 ECTS credit: NA	Module Leader: Mike Thompson Additional Tutors: Lotte Reimer Jason Hawkes Melissa Taylor Kara Millen Alison Pooley Ruth Stevenson Blanche Cameron
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give detailed knowledge of the interaction between the building, its occupants and climatic conditions. • To examine the principles of heat transfer and the thermal performance of buildings • To establish a good working knowledge of the principles of Solar Electric systems. • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture topics: Climate, Topography, Condensation, Thermal Comfort, Climate Influences on Design, Solar Electric Systems, Heat transfer, Thermal Performance, Thermal Mass, Building Regulations, Energy Performance Ratings Practical Activity: (<i>May be updated throughout the programme and subject to availability</i>) Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication Practical experience of the thermal interaction between the human body and environment by means of a sauna		

Learning Outcomes for the Module At the end of this module, students will: <i>Knowledge</i> <ol style="list-style-type: none"> 1. Have a broad knowledge of climate and human and building interactions 2. Be aware of the physics and regulatory issues of the thermal performance of buildings 3. Be familiar with the principles of Solar Electric power systems. <i>Thinking skills</i> <ol style="list-style-type: none"> 4. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 5. Be able to critically evaluate the wider implications of how human beings interact with their environment 6. To be able to think in an innovative and creative way 7. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject
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Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through lectures, practicals, workshops, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day during each module is spent on practical work; students choose from a list which of these to complete. Coursework consists of an Critique of Paper.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars and Tutorials Summative through Critique of Paper</p> <p>The Critique of Paper should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables.</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Critique of Paper 100%</p>
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Indicative Reading for this Module:

Brown, R., and Gillespie, T. *Microclimatic Landscape Design* Wiley 1995
 Bolin, B. et al., *The Greenhouse Effect, Climate Change and Ecosystems*, John Wiley, 1986
 Houghton, J and Jenkins, G, *Climate Change: The IPCC Scientific Assessment*, C.U.P., 1991
 McClaren, D. et al., *Tomorrows World*, Earthscan, 1998
 Twidell, J. and Weir, T., *Renewable Energy Resources*, Spon, 1997
 Boyle, G et al *Energy Systems and Sustainability* Oxford university Press 2004
 Boyle, G *Renewable Energy* Oxford University Press 2004
 Evans, M., *Housing, Climate and Comfort*, Architectural Press, 1980
 Santamouris, M. *Energy and Climate in the Urban Built Environment* James and James 2001
 Baker, N., *Passive and Low Energy Building Design for Tropical Island Climates*, Commonwealth Science Council, 1987
 Givoni, B., *Man, Climate and Architecture*, Applied Science, 1976
 Olgyay, V., *Design with Climate*, Princeton, 1973
 World Commission on Environment and Development, *Our Common Future*, O.U.P., 1991
 HMSO, *This Common Inheritance: Britain's Environmental Strategy*, 1990
 Thomas, R *Photovoltaics and Architecture* Spon Press 2001
Planning and Installing Photovoltaic Systems Earthscan 2005
 McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials,</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Critique of Paper writing</p>

Module Title: Ventilation and Cooling; Water and Waste	Module Code: A3 November (UEL Code CEM 160) Level: M Credit: 15 ECTS credit: NA	Module Leader: Melissa Taylor Additional Tutors: Kara Millen Judith Thornton Alison Pooley Mike Thompson Jason Hawkes Lotte Reimer Blanche Cameron Ruth Stevenson
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give knowledge related to the principles and practice of passive building services systems including dampness and condensation. • To establish a good working knowledge of the principles of solar water energy systems. • To establish and understanding of water supply, waste disposal and contaminated land • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture topics: Principles of Ventilation, Cooling Techniques, Energy Building Services: an environmental perspective, Dampness and condensation; breathing walls; Solar Resource, Solar Water Heating, Water and Waste, Waste Solutions, Flooding, , Brown Fields, Contaminated Land Practical Activity: (<i>May be updated throughout the programme and subject to availability</i>) Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication		

<p>Learning Outcomes for the Module</p> <p>At the end of this module, students will:</p> <p><i>Knowledge</i></p> <ol style="list-style-type: none"> 1. Have knowledge of the general principles of ventilation, cooling, condensation and passive building services. 2. Have an understanding of issues related to water, waste and land use. 3. Be aware of the principles of Solar Water systems. <p><i>Thinking skills</i></p> <ol style="list-style-type: none"> 4. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 5. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject 6. To be able to think in an innovative and creative way <p><i>Subject-based practical skills</i></p> <ol style="list-style-type: none"> 7. To be able to make an oral presentation of a cogent argument in public
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Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through lectures, practicals, workshops, presentations, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day during each module is spent on practical work; students choose from a list which of these to complete. Coursework usually consists of an Essay and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, Tutorials and Practical work Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting: Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Clements-Croombe, D., *Naturally Ventilated Buildings*. SPON, 1997
Planning and Installing Solar Thermal Systems Earthscan 2005
 Quaschnig, V *Understanding Renewable Energy Systems* Earthscan 2005
 Trimby P *Solar Water Heating* CAT 1998
 Laughton C *Tapping the Sun: A solar water heating guide* CAT 2004
 Norton *Heating water by the Sun* 2000
 McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time: 50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials, Practical</p>
<p>Student Learning Time: 100 hours</p>	<p>Background reading Essay writing Presentation preparation</p>

Module Title: Principles of light: artificial light; Sunlight; Daylight factor. Biomass and Hydro Electric power	Module Code: B1 January (UEL Code CEM 161) Level: M Credit: 15 ECTS credit: NA	Module Leader: Mike Thompson Additional Tutors: Melissa Taylor Lotte Reimer Kara Millen Alison Pooley Blanche Cameron Ruth Stevenson Jason Hawkes
Pre-requisite: None	Excluded Combination: None.	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give knowledge related to natural and artificial lighting • To give a wide overview of the availability and use of Hydro Electric power systems • To establish a good working knowledge of the principles of bio fuels and their alternatives • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture topics: Principles of Lighting, Artificial Lighting, Natural Lighting; Daylight, Sunlight and Solar Gain, Solar Shading, Principles of Biomass, Biofuels, European Biomass and CHP, Principles of Hydro Electric Power Practical Activity: (<i>May be updated throughout the programme and subject to availability</i>) Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication		

Learning Outcomes for the Module At the end of this module, students will: <i>Knowledge</i> <ol style="list-style-type: none"> 1. Have knowledge of the general principles natural and artificial lighting 2. Have detailed knowledge of the properties of Sunlight 3. Be aware of the principles of Biomass and Hydro Electric systems <i>Thinking skills</i> <ol style="list-style-type: none"> 4. Be able to place this specialised knowledge in the context of wider issues in the environmental debate 5. Be able to conduct a critical analysis and evaluate the relative importance of conflicting aspects of the module 6. To be able to think in an innovative and creative way <i>Subject-based practical skills</i> <ol style="list-style-type: none"> 7. To be able to make an oral presentation of a cogent argument in public

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content the module is taught through lectures, practicals, workshops, presentations, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day during the module is spent on practical work; students choose from a list which of these to complete. Coursework usually consists of an Essay and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, Tutorials and Practical work Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Boyle, G et al *Energy Systems and Sustainability* Oxford university Press 2004
 Boyle, G *Renewable Energy* Oxford University Press 2004
 Hopkinson, R. and Kay, J., *The Lighting of Buildings*, Faber, 1972
 Baker, N. and Steemers, K., *Daylighting Design*, James and James, 1999
 CIBSE, *Code for Interior Lighting*, 1994
Planning and Installing Solar Thermal Systems Earthscan 2005
 Quaschnig, V *Understanding Renewable Energy Systems* Earthscan 2005
 Hopkinson, R. and Kay, J., *The Lighting of Buildings*, Faber, 1972
 Baker, N. and Steemers, K., *Daylighting Design*, James and James, 1999
 McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials, Practical</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Essay writing Presentation preparation</p>

Module Title: Environmental Politics and Economics	Module Code: B2 January (UEL Code CEM 153) Level: M Credit: 15 ECTS credit: NA	Module Leader: Judith Thornton Additional Tutors: Ruth Stevenson Kelvin Mason Paul Chatterton George Monbiot David Fleming Lotte Reimer
Pre-requisite: None	Excluded Combination: None	

Main Aim(s) of the Module:

- To give a wide overview the political constraints related to environmental issues
- To enhance theoretical knowledge of environmental economics and the constraints related to this.
- To give detailed knowledge of the interaction between politics and economics in the environmental context

Main Topics of Study:

Lecture and Seminar topics: Environmental economics, government versus anarchism, personal responsibility and climate change, communicating the environmental message, the role of direct action.

Seminars will consider the major themes of global politics, economics and then develop a focus on the issues relating to the UK.

Practical Activity: (*May be updated throughout the programme and subject to availability*) Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication

Learning Outcomes for the Module

At the end of this module, students will:

Knowledge

1. Have a broad knowledge of environmental and energy issues in relation to the political and economic landscape

Thinking skills

2. Be able to consider the political and economic limitations of the implementation of an environmental agenda
3. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject
4. To be able to think in an innovative and creative way

Subject-based practical skills

5. To be able to make an oral presentation of a cogent argument in public.

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of each module is taught through lectures/seminars, presentations, and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. Coursework usually consists of an Essay and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, and Tutorials Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting: Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Environmental Economics; An Introduction. B Field. McGraw Hill.
 Do it yourself; a handbook for changing our world. The Trapeze Collective. Pluto Press.
 Cannibals with forks; the triple bottom line of 21st century business. John Elkington. Capstone.
 Limits to Growth. The 30 year update. Meadows, Randers and Meadows. Earthscan.
 Hopkins, R. (2008) The Transition Handbook: >From Oil Dependency to Local Resilience, Green Books
 Monbiot, G (2007) Heat: How to Stop the Planet Burning, Penguin Books
 Jensen, D and McMillan, S (2007), As the World Burns: 50 Things You Can Do to Stay in Denial, Seven Stories Press
 Thoreau, H. D. (2007) Walden and Civil Disobedience, Longman.

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time: 50 hours</p>	Lectures/Seminars Practicals, Tutorials
<p>Student Learning Time: 100 hours</p>	Background reading Essay writing Presentation preparation

Module Title: Occupant health and well being; Principles of Noise and Windpower	Module Code: B3 February (UEL Code 162) Level: M Credit: 15 ECTS credit: NA	Module Leader: Blanche Cameron Additional Tutors: Melissa Taylor Ruth Stevenson Jason Hawkes Lotte Reimer Alison Pooley Mike Thompson Tom Woolley Kara Millen
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give knowledge of the principles related to problems associated with occupant well being and exposure to other hazards together with noise effects and control in buildings. • To establish a good working knowledge of the principles of wind power generation • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture topics: Urbanisation and Health;, Indoor Air Quality, Hazardous Building materials, Basic Principles of Noise, Noise Control, Eco Refurbishment, Basic principles of Wind Power Practical activity: (<i>May be updated throughout the programme and subject to availability</i>) Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication		

Learning Outcomes for the Module At the end of this module, students will: <i>Knowledge</i> <ol style="list-style-type: none"> 1. Have knowledge of the general principles related to problems associated with occupant well being, and exposure to other hazards together with noise effects and control in buildings 2. Have a good working knowledge of the principles of Windpower <i>Thinking skills</i> <ol style="list-style-type: none"> 3. Be able to place this specialised knowledge in the context of wider issues in the environmental debate 4. Be able to conduct a critical analysis and evaluate the relative importance of conflicting aspects of the module 5. To be able to think in an innovative and creative way <i>Subject-based practical skills</i> <ol style="list-style-type: none"> 6. To be able to make an oral presentation of a cogent argument in public

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through lectures, practicals, workshops, presentations, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day during the module is spent on practical work; students choose from a list which of these to complete. Coursework usually consists of an Essay and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, Tutorials and Practical work Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Quaschnig, V *Understanding Renewable Energy Systems* Earthscan 2005
 Holdsworth, W. and Saley, A., *Healthy Buildings*, Longmans, 1992
 Mant, D. and Gray, J., *Building Regulation and Health*, BRE Report, 1986
 Gammage, R. and Berven, B. eds, *Indoor Air and Human Health*, Lewis, 1996
 Patel, M., *Wind and Power Systems*, CRC Press, 1999
 Croombe, D., *Noise Buildings and People*, Pergamon, 1977.
 Burns, W., *Noise and Man*, John Murray, 1973
 Curwell, S.R. and March, C.G., *Hazardous Building Materials*, Spon, 1986.
 Day, C., *Places of the Soul*, 1990
 Hermannsson, J., *Green Building Resource Guide*, Tauton Press, 1997
 Shoard, M., *This Land is Ours*, Temple Smith, 1987
 Smith, P *Architecture in a climate of change* Architectural Press 2005
 Cuff, Dana *The Provisional City: Los Angeles stories of architecture and urbanism* The MIT Press 2001
 McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials, Practicalcs</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Essay writing Presentation preparation</p>

Module Title: Computer Simulation of Buildings	Module Code: B4 February (repeated in April) (UEL Code 163) Level: M Credit: 15 ECTS credit: NA	Module Leader: Bobby Gilbert Additional Tutors: Simon Tucker Ranyl Rhydwen
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To provide an overview of the computer simulation of buildings • To provide an in depth practical exploration of at least one aspect of building simulation • To give practical experience in the operation and use of some relevant computer programs 		
Main Topics of Study: Lecture topics: Computer simulation of buildings, data for simulation, modelling strategies, lighting, computational fluid dynamics, practical examples. Practical activity: Simulation project		

<p>Learning Outcomes for the Module</p> <p>At the end of this module, students will:</p> <p><i>Knowledge</i></p> <ol style="list-style-type: none"> 1. Have a broad knowledge of the computer simulation of buildings with regard to their environmental performance <p><i>Thinking skills</i></p> <ol style="list-style-type: none"> 2. Be able to place this knowledge in the context of wider issues in the environmental debate 3. To be able to synthesise practical and theoretical aspects of building simulation in order to analyse building environmental performance 4. To be able to think in an innovative and creative way <p><i>Subject-based practical skills</i></p> <ol style="list-style-type: none"> 5. Have developed skills in the use of one or more computer programs to conduct analyses of the thermal and lighting performance of buildings <p><i>Skills for life and work (general skills)</i></p> <ol style="list-style-type: none"> 6. Have become familiar with working in groups as required throughout the module.
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Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through lectures, a computer workshop, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. The computer workshop allows students to focus on one particular aspect of this wide ranging topic in depth while lectures and seminars provide a wide overview. Coursework consists of a Essay and an individual Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, and Tutorials Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting: Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Augenbroe, G. *Trends in building simulation, Building and Environment* 37, pp 891-902, Elsevier 2002
 Baker, N. and Steemers, K., *Daylighting Design*, James and James, 1999
 Evans, M., *Housing, Climate and Comfort*, Architectural Press, 1980
 CIBSE Guide, *Volume A - Design Data*, The Chartered Institute of Building Services Engineers, Staples Printers, St Albans, England 1986
 CIBSE *Building energy and environmental modelling*, CIBSE Application Manual AM11, The Chartered Institute of Building Services Engineers, London 1998
 Girardet, H *Cities People Planet* Wiley Academy 2004
 Lomas, K.J., Eppel, H., Martin, C.J. and Bloomfield, D.P. *Empirical validation of building energy simulation programs*, Energy and Buildings 26, pp 253-275, Elsevier 1997
 McMullan, R *Environmental Science in Building* 6th Edition Palgrave 2007
 Porteus, C. and McGregor, K., *Solar Architecture in Cool Climates*, James and James, 2005

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time: 50 hours</p>	Workshops, Lectures, Seminars Tutorials
<p>Student Learning Time: 100 hours</p>	Background reading Report writing Presentation preparation

Module Title: Environmental Assessment, Management and Performance In Buildings	Module Code: C1 March (UEL Code CEM 150) Level: M Credit: 15 ECTS credit: NA	Module Leader: Mike Thompson Additional Tutors: Lotte Reimer Melissa Taylor Jason Hawkes Alison Pooley Kara Millen Ruth Stevenson Blanche Cameron
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Pre-requisite: None	Excluded Combination: None
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Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give knowledge of the principles related to environmental assessment. • To consider aspects of energy distribution, carbon markets and the role of Nuclear power • To enhance theoretical knowledge with practical applications
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Main Topics of Study: Lecture topics: Environmental Impact of Buildings, Environmental ethics. Assessments Methods, Embodied Energy and Life Cycle analysis; Energy Distribution, Energy and Nuclear power, The Intelligent Building; Low or Zero Carbon housing, Practical Activity: <i>(May be updated throughout the programme and subject to availability)</i> Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication

Learning Outcomes for the Module At the end of this module, students will: <i>Knowledge</i> <ol style="list-style-type: none"> 1. Have knowledge of the general principles concerned with environmental assessment methods. 2. Be aware of issues related to energy distribution, and the role of Nuclear power 3. Be familiar with the properties of intelligent buildings, and low carbon housing <i>Thinking skills</i> <ol style="list-style-type: none"> 4. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 5. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject 6. To be able to think in an innovative and creative way <i>Subject-based practical skills</i> <ol style="list-style-type: none"> 7. To be able to make an oral presentation of a cogent argument in public
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Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through lectures, practicals, workshops, presentations, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day of the module is spent on practical work; students choose from a list which of these to complete. Coursework usually consists of an Essay and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, Tutorials and Practical work Summative through Essay.</p> <p>The Essay should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables. The individual 8 minute presentation based on a topic covered during the module is normally made during the next attended module or sent in by post if appropriate</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Essay 80% Presentation 20%</p>
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Indicative Reading for this Module:

Woolley, T., *Green Building Handbook*, Actac, 1997
 Day, C., *Places of the Soul*, 1990
 Baldwin R. et al, *BREEAM: An Environmental Assessment for Office Designs*, BRE, 1998
 Rao, S. et al, *Ecohomes: The Environmental Rating for New Homes*, BRE 2000
 Anderson, J. et al, *The Green Guide to Housing Specification*, BRE, 2000
 Hermannsson, J., *Green Building Resource Guide*, Tauton Press, 1997
 Friends of the Earth, *The Good Wood Guide*, Friends of the Earth Publications, 1996
 McDonough, W and Braungart, M *Cradle to Cradle* North Point Press 2002
 Wackernagel, M and Rees, W *Our Ecological Footprint* New Society Publishers 1996
 Girardet, H *Cities People Planet* Wiley Academy 2004
 Papernek, V *The Green Imperative* Thames and Hudson 2003
 Fox, Warnick *Ethics and the built environment* Routledge 2000

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials, Practical</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Essay writing Presentation preparation</p>

Module Title: Environmental and Sustainability Assessment, Management and Post Occupancy Evaluation	Module Code: C2 April (UEL Code 151) Level: M Credit: 15 ECTS credit: NA	Module Leader: Ruth Stevenson Additional Tutors: Mike Thompson Kara Millen Melissa Taylor Alison Pooley Jason Hawkes Lotte Reimer Blanche Cameron
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To give knowledge of the principles related to land use, planning, environmental and sustainability assessment in relation to society. • Be familiar with a variety of environmental and sustainability assessment and management techniques. • To develop knowledge of the need for and practice involved in post occupancy evaluation. • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture topics: Society and Environment; Cities and Communities; Land Use and Planning; Environmental Impact Assessment and Management; Environmental Affects of Agriculture, Environmental issues in Transport; Post Occupancy Evaluation Practical Activity: (<i>May be updated throughout the programme and subject to availability</i>) Daylight Factor, Heliodon, Daylight and Sunlight Indicators, Building Physics, Thermal Comfort, Carbon Footprint, ERoEI, Eco Homes, Solar Electric, Solar Thermal, Wind Power, Hydro Power, Computer Simulation, Planning for Renewable Energy, Communication		

<p>Learning Outcomes for the Module</p> <p>At the end of this module, students will:</p> <p><i>Knowledge</i></p> <ol style="list-style-type: none"> 1. Have knowledge of the general principles behind environmental and sustainability assessment and management in relation to society 2. Have knowledge of the effects of agriculture, transport and renewables on environmental issues 3. Have knowledge of post occupancy evaluation requirements and techniques <p><i>Thinking skills</i></p> <ol style="list-style-type: none"> 4. Be able to place this specialised knowledge in the context of the design of buildings and the wider environmental debate 5. Be able to consider the possibilities involved in different forms of environmental management 6. To be able to think in an innovative and creative way <p><i>Subject-based practical skills</i></p> <ol style="list-style-type: none"> 7. Be able to make oral presentations of a cogent argument in public

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through lectures, practicals, workshops, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. One day during the module is spent on practical work; students choose from a list which of these to complete. Coursework usually consists of a Critique of Paper.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars and Tutorials Summative through Critique of Paper</p> <p>The Critique of Paper should be of approximately 2000 words. Please refer to section 9.4 for full details of coursework hand-in timetables.</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Critique of Paper 100%</p>
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Indicative Reading for this Module:

Barrow, C. *Environmental Management: Principles and Practice* Routledge, Oxford 1999 (reprinted 2005)
 Chambers, N et al *Sharing Natures Interest* Earthscan 2000
 Cudworth E. *Environment and Society* Routledge, London 2003
 Fairlie, S., *Low Impact Development*, 1999
 Fischer, F. & Hajer, M. *Living with Nature: Environmental Politics as Cultural Discourse* Oxford University Press 1999
 Gilpin, A. , *Environmental Impact Assessment*, 1995
 Girardet, H *Cities People Planet* Wiley Academy 2004
 Hawken, P et al *Natural Capitalism: the next industrial revolution* Earthscan 2005
 McDonough, W and Braungart, M *Cradle to Cradle* North Point Press 2002
 Papernek, V *The Green Imperative* Thames and Hudson 2003
 Pearce, David and Barbier E B *Blueprint for a Sustainable Economy* Earthscan 2000
 Wackernagel, M and Rees, W *Our Ecological Footprint* New Society Publishers 1996

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Lectures, Workshops, Seminars Tutorials, Practical</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Critique of Paper writing</p>

Module Title: Environmentally responsive materials; practical examination	Module Code: C3 May (UEL Code CEM 152) Level: M Credit: 15 ECTS credit: NA	Module Leaders: Jason Hawkes + Ranyl Rhywen Additional Tutors: Tom Woolley Kara Millen Melissa Taylor Ruth Stevenson Alison Pooley Lotte Reimer Blanche Cameron
Pre-requisite: None	Excluded Combination: None.	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To develop knowledge of the properties of at least five materials considered to have a good environmental performance • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Lecture topics: Specialist lectures on environmentally responsive materials such as Straw, Contained composite structures, Timber use, Rammed Earth, Timber construction Practical Activity: Most of the module is taken up with construction sessions involving the materials above		

<p>Learning Outcomes for the Module</p> <p>At the end of this module, students will:</p> <p><i>Knowledge</i></p> <ol style="list-style-type: none"> 1. Have knowledge of the of the properties of at least five materials considered to have a good environmental performance <p><i>Thinking skills</i></p> <ol style="list-style-type: none"> 2. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 3. Be able to conduct a critical analysis and evaluate the relative properties of the materials <p><i>Subject-based practical skills</i></p> <ol style="list-style-type: none"> 4. Be able to compare the physical properties of a number of materials by practical activity <p><i>Skills for life and work (general skills)</i></p> <ol style="list-style-type: none"> 5. Have become familiar with working in groups as required throughout the module. 6. To be able to make an oral group presentation summarising the results of the practical studies
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Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content the module is taught through lectures, seminars and tutorials but mainly practical activity, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. There are practical workshops on every day of the module in which the properties of the different materials are examined. Coursework consists of an Essay.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Formative through Seminars, Tutorials and Practical work Summative through Coursework.</p> <p>The Essay required for this module should be of approximately 2500 words. Please refer to section 9.4 for full details of coursework hand-in timetables.</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting: Essay 100%</p>
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Indicative Reading for this Module:

Hermannsson, J., *Green Building Resource Guide*, Tauton Press, 1997
 Berge, B *Ecology of Building Materials* Architectural Press 2001
 Jones, B *Building with Straw Bales* Green Books 2002
 Stulz, R and Mukerji, K *Appropriate Building Materials* SKAT & IT Publications 1993
 Kries, Mateo et al *Grow Your Own Home* Vitra Design Museum 2002
 Hall, Keith *The Green Building Bible* The Green Building Press 2005
 Curwell, S and March, C *Hazardous Building Materials* Spon Press 2001
 Houben, H and Guillaud, H *Earth construction* ITDG Publishing 2001
 Harris, C and Borer, P *The Whole House Book* 2nd Edition CAT 2005
 McDonough, W and Braungart, M *Cradle to Cradle* North Point Press 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time: 50 hours</p>	<p>Practical/Workshops, Lectures, Seminars Tutorials</p>
<p>Student Learning Time: 100 hours</p>	<p>Background reading Essay writing</p>

Module Title: Design and Evaluation	Module Code: A4 June (UEL Code CEM 154) Level: M Credit: 15 ECTS credit: NA	Module Leader: Kara Millen; Alison Pooley Additional Tutors: Melissa Taylor Blanche Cameron Jason Hawkes Lotte Reimer Mike Thompson Ruth Stevenson Ranyl Rhywen
Pre-requisite: None	Excluded Combination: None.	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To gain knowledge and experience of working on a design project responding to societal and environmental issues. • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Design decisions made within environmental parameters Lecture topics: Urban Design, Sustainable design principles, Aesthetics and Green Design Design workshop: Working in groups to collaboratively resolve the requirements of a design brief to a strategic level, with consideration given to materials, site layout and environmental constraints.		

Learning Outcomes for the Module At the end of this module, students will: <i>Knowledge</i> <ol style="list-style-type: none"> 1. Identify important aspects of the wider environmental agenda in relation to the production of a design and testing of a proposal. <i>Thinking skills</i> <ol style="list-style-type: none"> 2. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 3. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject 4. To be able to think in an innovative and creative way <i>Subject-based practical skills</i> <ol style="list-style-type: none"> 5. Be able to address particular design issues in a variety of mediums, within the context of the programme as a whole <i>Skills for life and work (general skills)</i> <ol style="list-style-type: none"> 6. Have become familiar with working in groups as required throughout the module. 7. To be able to make an oral group presentation summarising and evaluating the results of the studies
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Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through workshops, lectures, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. Apart from lectures and tutorials, all activity on the module consists of working in groups on the project. Coursework usually consists of a Design Report, and a Group presentation.

Assessment methods which enable student to demonstrate the learning outcomes for the Module:

Assessment Methods

Formative through Seminars, Tutorials and Design work
Summative through the Report

The coursework takes the form of a Design Report of approximately 2000 words on related to the work undertaken during the module, and a group Presentation of the work done. Please refer to section 9.4 for full details of coursework hand-in timetables. The 20 minute group presentation is made at the end of this module.

An example of the Assessment Process is given in Section 10.2

Weighting:

Report 80%
Group
Presentation 20%

Indicative Reading for this Module:

Day, C., *Places of the Soul*, 1990m
Baldwin R. et al, *BREEAM: An Environmental Assessment for Office Designs*, BRE, 1998
Rao, S. et al, *Ecohomes: The Environmental Rating for New Homes*, BRE 2000k
Hermannsson, J., *Green Building Resource Guide*, Tauton Press, 1997
Friends of the Earth, *The Good Wood Guide*, Friends of the Earth Publications, 1996
Fairlie, S., *Low Impact Development*, 1999
Gilpin, A., *Environmental Impact Assessment*, 1995
Elkington, John *Cannibals with forks: the triple bottom line of 21st century business* New Society Press 1998
Fox, Warnick *Ethics and the built environment* Routledge 2000
Brandon, Peter and Lombardi, Patrizia *Evaluating Sustainable development in the Built environment* Blackwell 2005
Kries, Mateo et al *Grow Your Own Home* Vitra Design Museum 2002
Hall, Keith *The Green Building Bible* The Green Building Press 2005
Curwell, S and March, C *Hazardous Building Materials* Spon Press 2001
Khan, Lloyd *Home Work* Shelter Publications 2004
Thornton, J *The Water Book*, CAT 2005
Harris, C and Borer, P *The Whole House Book* 2nd Edition CAT 2005
Wackernagel, M and Rees, W *Our Ecological Footprint* New Society Publishers 1996
Girardet, H *Cities People Planet* Wiley Academy 2004
Papernek, V *The Green Imperative* Thames and Hudson 2003
Chambers, N et al *Sharing Natures Interest* Earthscan 2000
Abley, Ian and Heartfield, James *Sustaining architecture in the Anti Machine Age* Wiley Academy 2001
Birkland, Janis *Design for Sustainability: a source book for integrated ecological solutions* Earthscan 2002
Correa, Charles *Housing ad Urbanisation: Building solutions for people and cities* Thames and Hudson 1999
Day, Christopher *Spirit and Place* Architectural Press 2002
Porteous, Colin *The new eco-architecture: alternatives from the modern movements* Spon Press 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
Student/Tutor Contact Time: 50 hours	Design Workshops, Lectures, Seminars Tutorials.
Student Learning Time: 100 hours	Background reading Report writing Group Presentation preparation

Module Title: Fabrication and Experimentation Project (working in groups)	Module Code: A5 July (UEL Code CEM 155) Level: M Credit: 15 ECTS credit: NA	Module Leader: Kara Millen; Alison Pooley Additional Tutors: Melissa Taylor Blanche Cameron Jason Hawkes Lotte Reimer Mike Thompson Ruth Stevenson
Pre-requisite: None	Excluded Combination: None.	
Main Aim(s) of the Module: <ul style="list-style-type: none"> • To understand the environmental constraints involved with design decisions through the mechanism of fabrication, experimentation and testing. • To enhance theoretical knowledge with practical applications 		
Main Topics of Study: Experimentation, Fabrication and Evaluation within an environmental context Lecture topics: Various related to concepts of experimentation and evaluation, Fabrication and Experimentation Workshops: In groups students are required to construct an element or elements related to a building or the construction process that specifically explores environmental issues in an innovative way and conduct an evaluation of this.		

Learning Outcomes for the Module At the end of this module, students will: <i>Knowledge</i> <ol style="list-style-type: none"> 1. Identify within the wide ranging and complex issues of the environment, areas of testing, fabrication and experimentation and detail a chosen item for the purposes of fabrication <i>Thinking skills</i> <ol style="list-style-type: none"> 2. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject 3. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject 4. To be able to think in an innovative and creative way <i>Subject-based practical skills</i> <ol style="list-style-type: none"> 5. Be able to address particular experimental issues which are associated with the module as a whole <i>Skills for life and work (general skills)</i> <ol style="list-style-type: none"> 6. Have become familiar with working in groups as required throughout the module. 7. To be able to make an oral group presentation summarising and evaluating the results of the studies

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through fabrication or experimentation workshops, lectures, presentations, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Both theoretical and practical aspects are covered. Apart from lectures and tutorials, all activity on the module consists of working in groups on the project. Coursework usually consists of an Report and a Presentation.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module: Assessment Methods Formative through Seminars, Tutorials and Fabrication or Experimentation work Summative through the Report</p> <p>The coursework takes the form of a Report of approximately 2000 words on related to the work undertaken during the module, and a group Presentation of the work done. Please refer to section 9.4 for full details of coursework hand-in timetables. The 20 minute group presentation is made at the end of this module. .</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Report 80% Group Presentation 20%</p>
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Indicative Reading for this Module:

Day, C., *Places of the Soul*, 1990
 Baldwin R. et al, *BREEAM: An Environmental Assessment for Office Designs*, BRE, 1998
 Rao, S. et al, *Ecohomes: The Environmental Rating for New Homes*, BRE 2000
 Anderson, J. et al, *The Green Guide to Housing Specification*, BRE, 2000
 Hermannsson, J., *Green Building Resource Guide*, Tauton Press, 1997
 Friends of the Earth, *The Good Wood Guide*, Friends of the Earth Publications, 1996
 Fairlie, S., *Low Impact Development*, 1999
 Gilpin, A., *Environmental Impact Assessment*, 1995
 Elkington, John *Cannibals with forks: the triple bottom line of 21st century business* New Society Press 1998
 Fox, Warnick *Ethics and the built environment* Routledge 2000
 Brandon, Peter and Lombardi, Patrizia *Evaluating Sustainable development in the Built environment* Blackwell 2005
 Kries, Mateo et al *Grow Your Own Home* Vitra Design Museum 2002
 Hall, Keith *The Green Building Bible* The Green Building Press 2005
 Curwell, S and March, C *Hazardous Building Materials* Spon Press 2001
 Khan, Lloyd *Home Work* Shelter Publications 2004
 Thornton, J *The Water Book*, CAT 2005
 Harris, C and Borer, P *The Whole House Book 2nd Edition* CAT 2005
 Wackernagel, M and Rees, W *Our Ecological Footprint* New Society Publishers 1996
 Girardet, H *Cities People Planet* Wiley Academy 2004
 Papernek, V *The Green Imperative* Thames and Hudson 2003
 Chambers, N et al *Sharing Natures Interest* Earthscan 2000
 Abley, Ian and Heartfield, James *Sustaining architecture in the Anti Machine Age* Wiley Academy 2001
 Birkland, Janis *Design for Sustainability: a source book for integrated ecological solutions* Earthscan 2002
 Correa, Charles *Housing ad Urbanisation: Building solutions for people and cities* Thames and Hudson 1999
 Day, Christopher *Spirit and Place* Architectural Press 2002
 Porteous, Colin *The new eco-architecture: alternatives from the modern movements* Spon Press 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Fabrication or Experimentation Workshops, Lectures, Seminars Tutorials</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Report writing Group Presentation preparation</p>

Module Title: Solar Thermal	Module Code: A6 July (UEL Code CEM 156) Level: M Credit: 15 ECTS credit: N/A	Module Leaders: Chris Laughton Additional Tutors: Bryce Gilroy-Scott
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module:		
<ul style="list-style-type: none"> • To gain knowledge of working on the design of a renewable energy system, with particular emphasis on solar thermal. • To gain experience of working on design and practical issues in groups. • To understand and critically evaluate the practical constraints involved with design decisions through the mechanism of fabrication, experimentation and monitoring 		
Main Topics of Study:		
<p>This module involves students working in groups and examines the problems of the design and planning decisions made in relation to a renewable energy system and how these decisions integrate with and impact on building design, site evaluation and setting up of continuous monitoring. Re-evaluation of design decisions, construction of working system and evaluation of performance.</p>		

<p>Learning Outcomes for the Module</p> <p>At the end of module, students will:</p> <p><i>Knowledge</i></p> <ol style="list-style-type: none"> 1. Identify important aspects of the renewable energy agenda in relation to the production of a design and testing of a proposal 2. Have experience of analysing the results of energy monitoring and of the complexities of assembling renewable energy systems <p><i>Thinking skills</i></p> <ol style="list-style-type: none"> 3. Evaluate the relative merits and overall of various proposals and place these in the context of renewable energy provision and the wider environmental debate 4. Think in an inventive and creative way in the context of the design and re-evaluation of the system and how this impact on building design <p><i>Subject-based practical skills</i></p> <ol style="list-style-type: none"> 5. Be able to identify areas where testing is required and perform required tasks 6. Be able to address practical issues associated with evaluation assembly and operation of the system <p><i>Skills for life and work (general skills)</i></p> <ol style="list-style-type: none"> 7. Have become familiar with working in a group within the context of a wide range of design and practical activity on the module. 8. To be able to make an oral group presentation summarising and evaluating the results of the studies

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through practical workshops, lectures, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Apart from lectures and tutorials, all activity on the module consists of working in groups on the project Coursework consists of a Report, and a group presentation.
Both theoretical and practical aspects are covered and integration of renewable technologies into proposals fully explored through practical application.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module:</p> <p>Assessment Methods Formative through Seminars, Tutorials and Practical work Summative through the Report</p> <p>The coursework takes the form of a Report of approximately 2500 words on related to the work undertaken during the module.. Please refer to section 9.4 for full details of coursework hand-in timetables. .</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Report 100%</p>
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Indicative Reading for this Module:

World Commission on Environment and Development, *Our Common Future*, O.U.P., 1991
 Bolin, B. et al., *The Greenhouse Effect, Climate Change and Ecosystems*, John Wiley, 1986
 HMSO (pub.), *This Common Inheritance: Britain's Environmental Strategy*, 1990
 Houghton, J and Jenkins, G, *Climate Change: The IPCC Scientific Assessment*, C.U.P., 1991
 McClaren, D. et al., *Tomorrows World*, Earthscan, 1998
 Twidell, J. and Weir, T., *Renewable Energy Resources*, Spon, 1997
 Boyle, G et al *Energy Systems and Sustainability* Oxford university Press 2004
 Boyle, G *Renewable Energy* Oxford University Press 2004
 Santamouris, M. *Energy and Climate in the Urban Built Environment* James and James 2001
 Clements-Croomb, D., *Naturally Ventilated Buildings*. SPON, 1997
 Givoni, B., *Man, Climate and Architecture*, Applied Science, 1976
 Evans, M., *Housing, Climate and Comfort*, Architectural Press, 1980
 Clarke, R., *Water - the International Crisis*, London, 1993
 Twidell, J. and Weir, T., *Renewable Energy Resources*, Spon, 1997
Planning and Installing Solar Thermal Systems Earthscan 2005
 Quaschnig, V *Understanding Renewable Energy Systems* Earthscan 2005
 Trimby P *Solar Water Heating* CAT 1998
 Laughton C *Tapping the Sun: A solar water heating guide* CAT 2004
 Norton *Heating water by the Sun* 2000
 Thomas, R *Photovoltaics and Architecture* Spon Press 2001
Planning and Installing Photovoltaic Systems Earthscan 2005
 McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Practical Workshops, Lectures, Seminars Tutorials,</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Report writing Group Presentation preparation</p>

Module Title: Solar Electric	Module Code: A7 July (UEL Code CEM 157) Level: M Credit: 15 ECTS credit: N/A	Module Leaders: David Hood Additional Tutors:
Pre-requisite: None	Excluded Combination: None	
Main Aim(s) of the Module:		
<ul style="list-style-type: none"> • To gain knowledge of working on the design of a renewable energy system, with particular emphasis on solar electric systems. • To gain experience of working on design and practical issues in groups. • To understand and critically evaluate the practical constraints involved with design decisions through the mechanism of fabrication, experimentation and monitoring 		
Main Topics of Study:		
<p>This module involves students working in groups and examines the problems of the design and planning decisions made in relation to a renewable energy system and how these decisions integrate with and impact on building design, site evaluation and setting up of continuous monitoring.</p> <p>Re-evaluation of design decisions, construction of working system and evaluation of performance.</p>		

Learning Outcomes for the Module
At the end of module, students will:
<i>Knowledge</i>
<ol style="list-style-type: none"> 1. Identify important aspects of the renewable energy agenda in relation to the production of a design and testing of a proposal 2. Have experience of analysing the results of energy monitoring and of the complexities of assembling renewable energy systems
<i>Thinking skills</i>
<ol style="list-style-type: none"> 3. Evaluate the relative merits and overall of various proposals and place these in the context of renewable energy provision and the wider environmental debate 4. Think in an inventive and creative way in the context of the design and re-evaluation of the system and how this impact on building design
<i>Subject-based practical skills</i>
<ol style="list-style-type: none"> 5. Be able to identify areas where testing is required and perform required tasks 6. Be able to address practical issues associated with evaluation assembly and operation of the system
<i>Skills for life and work (general skills)</i>
<ol style="list-style-type: none"> 7. Have become familiar with working in a group within the context of a wide range of design and practical activity on the module. 8. To be able to make an oral group presentation summarising and evaluating the results of the studies

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

The factual content of the module is taught through practical workshops, lectures, seminars and tutorials, and throughout this process an active exchange of views and opinions within the group, including staff, is encouraged. Apart from lectures and tutorials, all activity on the module consists of working in groups on the project Coursework consists of a Report, and a Group presentation.
Both theoretical and practical aspects are covered and integration of renewable technologies into proposals fully explored through practical application.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module:</p> <p>Assessment Methods Formative through Seminars, Tutorials and Practical work Summative through the Report</p> <p>The coursework takes the form of a Report of approximately 2500 words on related to the work undertaken during the module.. Please refer to section 9.4 for full details of coursework hand-in timetables. .</p> <p>An example of the Assessment Process is given in Section 10.2</p>	<p>Weighting:</p> <p>Report 100%</p>
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Indicative Reading for this Module:

World Commission on Environment and Development, *Our Common Future*, O.U.P., 1991
 Bolin, B. et al., *The Greenhouse Effect, Climate Change and Ecosystems*, John Wiley, 1986
 HMSO (pub.), *This Common Inheritance: Britain's Environmental Strategy*, 1990
 Houghton, J and Jenkins, G, *Climate Change: The IPCC Scientific Assessment*, C.U.P., 1991
 McClaren, D. et al., *Tomorrows World*, Earthscan, 1998
 Twidell, J. and Weir, T., *Renewable Energy Resources*, Spon, 1997
 Boyle, G et al *Energy Systems and Sustainability* Oxford university Press 2004
 Boyle, G *Renewable Energy* Oxford University Press 2004
 Santamouris, M. *Energy and Climate in the Urban Built Environment* James and James 2001
 Clements-Croomb, D., *Naturally Ventilated Buildings*. SPON, 1997
 Givoni, B., *Man, Climate and Architecture*, Applied Science, 1976
 Evans, M., *Housing, Climate and Comfort*, Architectural Press, 1980
 Clarke, R., *Water - the International Crisis*, London, 1993
 Twidell, J. and Weir, T., *Renewable Energy Resources*, Spon, 1997
Planning and Installing Solar Thermal Systems Earthscan 2005
 Quaschnig, V *Understanding Renewable Energy Systems* Earthscan 2005
 Trimby P *Solar Water Heating* CAT 1998
 Laughton C *Tapping the Sun: A solar water heating guide* CAT 2004
 Norton *Heating water by the Sun* 2000
 Thomas, R *Photovoltaics and Architecture* Spon Press 2001
Planning and Installing Photovoltaic Systems Earthscan 2005
 McMullan, R *Environmental Science in Building* 5th Edition Palgrave 2002

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>50 hours</p>	<p>Practical Workshops, Lectures, Seminars Tutorials</p>
<p>Student Learning Time:</p> <p>100 hours</p>	<p>Background reading Essay writing Group Presentation preparation</p>

Module Title: Thesis Module	Module Code: Thesis (UEL Code CEM 135) Level: M Credit: 60 ECTS credit: NA	Module Leader: Gerry Jones + Judith Thornton Additional Tutors: Damian Randle Melissa Taylor Mike Thompson Ranyl Rhydwen Simon Tucker Bobby Gilbert Kara Millen Blanche Cameron Ruth Stevenson
Pre-requisite: none	Excluded Combination: none	
Main Aim(s) of the Module:		
<ul style="list-style-type: none"> • To demonstrate students ability to explore a research topic in depth, with appropriate research methodology, displaying creativity and analytical skills • For students to become familiar with the procedures and conventions of academic scholarship. • Time manage the completion of the research investigation, and the submission of a research dissertation 		
Main Topics of Study:		
Students are required to choose a subject in consultation with the Module Leader and as a result of group discussions around initial ideas. Small groups or individual tutorials are given each week as appropriate.		
Workshops: The process of thesis production starts with a Thesis Workshop day, which occurs in March and September.		

Learning Outcomes for the Module
At the end of this module, students will:
<i>Knowledge</i>
1 Identify and apply appropriate theoretical framework to the chosen topic
<i>Thinking skills</i>
2 Implement a piece of advanced research as formulated in the project proposal
3 Competently choose appropriate research methods and tools for data collection and analysis
4 Critically interpret the results in relation to existing knowledge
5 Demonstrate critical self-reflection on the research process and suggest further developments
<i>Subject-based practical skills</i>
6 Conduct an advanced search of literature and/or other appropriate sources
<i>Skills for life and work</i>
7 Prepare a major piece of work written in a scholarly fashion according to set guidelines
8 Demonstrate the confidence and skills to manage research in a way that is consistent with both professional practice and the normal principles of research ethics

Teaching/ learning methods/strategies used to enable the achievement of learning outcomes:

This is the Thesis Module which culminates the work on the MSc programme. Teaching and learning is by tutorial supported student work on the preparation of this major item of academic discourse. After an initial seminar group meeting involving other students, tuition is mainly on an individual basis.

<p>Assessment methods which enable student to demonstrate the learning outcomes for the Module:</p>	<p>Weighting:</p>
<p>The thesis should be 14,000 words and take the following form:-</p> <ul style="list-style-type: none"> • Must be a coherent piece of academic work that contains a number of sections that all link together. • Will start by briefly setting out what the objectives of the work are, and then go on to develop an argument, bringing in research or other evidence in support of the argument, and drawing specific conclusions at the end of the work based on the earlier argument. • Contains a research element, which means that the student has conducted some investigation of their own that represents an original idea and contributes advanced knowledge. 	<p>100%</p>

Indicative Reading for this Module:

Hall, Caroline *Getting down to writing : a students' guide to overcoming writer's block* Centre for Rese, 1994
 Watson, George, *Writing a thesis: a guide to long essays and dissertations* . - London : Longman, 1987
 Murray, Rowena *How to write a thesis*, Open University Press, 2002
 Silyn-Roberts, H *Writing for science and engineering : papers, projects & proposals : a practical handbook for postgraduates in science, engineering and technology*, Oxford : Butterworth-Heinemann, 2000
 Anderson, Jonathan, *Thesis and assignment writing*, Brisbane : Wiley, 1994
 Bell, J, *Doing Your Research Project*. Buckingham: Open University Press 1999
 Hart, C, *Doing A Literature Review* London: Sage Publications 1998
 Rudestan, K E and Newton, R R "*Surviving Your Dissertation: A Comprehensive Guide To Content And Process*" Newbury park. CA : Sage Publications 2000
 Sharp, J A and Howard K, *The Management Of A Student Project*. Aldershot :Gower 1996

Indicative Teaching and Learning Time (10 hrs per credit):	Activity
<p>Student/Tutor Contact Time:</p> <p>45 hours</p>	<p>Lectures, Seminars Tutorials</p>
<p>Student Learning Time:</p> <p>555 hours</p>	<p>Thesis writing Background reading</p>

9.4 Coursework Hand-in and Filing Details

Students are issued with relevant Coursework at the beginning of each module and these are required to be handed-in as indicated in the Table 1 **Coursework Hand in Dates** shown later . We are required to keep a copy of all student work together with a record of any marks awarded. This enables you to have a record of your work and progress on the programme and enables the External Examiner to verify that standards are being achieved by students and that these are being maintained at a suitable level. In relation to the above the following points should be noted:-

- 1 All records are kept in the small office in the Old Shop in the form of an individual file for each student. Please only consult your personal file and not those of others; do not remove any files from the room.
- 2 All summative coursework (see Section 8.4 of the Programme Handbook for a definition of this) requirements are issued at the beginning of each module. Coursework may consist of an Essay, Critique of Paper, Report, and Presentation. Full details are given to students at each module.
- 3 The Essay , Report, or Critique of Paper are handed in at the time indicated in Table 1 (by post is not attending a the module at this time); the Presentation must be made during the module at which the essay is handed in (see Table 1 for these dates) but in some cases involves a group presentation at the end of the module during which the work was done. **If you are required to send in your coursework by post the presentation must be made on a CD and included with the essay. This presentation should be in Power Point format with the Notes section of each slide containing a brief description of what you are doing at this stage.** Full details given to students at each module and are shown in the Programme Handbook. Section 9.
- 4 The written items of Coursework should be on A4 paper, portrait orientation and single side only. Please use Ariel font size 11. Do not bind the pages of the coursework in any way but simply place it with the appropriate Coursework Assessment Sheet with details completed (ie Name, Student No, Seminar Group, date of the module to which the work refers, and Title) in the plastic folder provided. The Presentation Mark Sheet should be filled in by you and handed in at your Presentation event. Please ensure that you do this for all posted coursework, ie for essays, etc and presentations
- 5 **Two copies of the Essay , Report, or Critique of Paper** are required; one copy goes to your Seminar tutor; the other is required for second marking. Approximately 20% of all work is second marked in order to check on marking standards. Detailed written comments on each item of coursework are given.
- 6 After marking, the items of Coursework for each module are kept in your individual file. We will endeavour to ensure that all work is properly filed but **it is your interests check that the required items of work are present and in good order and that the marks obtained are recorded on the database.** Please consult your Seminar Tutor if this is not the case. At the time of registration, coursework hand-in is also registered on the Programme Database and all marks awarded for previous work are available (a printout if required) for your information. Marks awarded are provisional and are subject to confirmation by the UEL Field Board that meets in February, June and September

- 7 If you fail to hand-in work according to the time schedule outlined in Table 1 it will be recorded as a zero mark and you are likely to fail the module. If you cannot hand-in work due to Extenuating Circumstances (details of this are given in the Programme Handbook) then a form must be filled in and submitted at the appropriate hand-in time in lieu of the work concerned.
- 8 **There are fixed hand-in times for summative course work. Exact dates are given in Table 1 below. If you are NOT attending a module at that time then the appropriate coursework including an electronic version of the presentation must be posted to arrive at the start of that module (see section 3 above). Upon arrival this work will be registered and distributed for marking. . Please note that point 7 above continues to apply to this work.**
- 9 Any work that has failed (including work required as a result of extenuation) can be repeated and reassessed but must be completed in time for the next Field Board (see section 11.0 for a definition of the Field Board) which is in February, June or September. This requires a hand in of this work by the next hand in date after the Field Board that recorded an item of work as failed. This will be March 15 after the February Board, July 15 after the June Board and October 15 after the September Board. (See Table 2) The marks for the module will be capped at 50% unless extenuating circumstances are granted. **It is important for you to understand that you will be automatically registered for reassessment if you have failed a module either by not achieving the component pass mark or by non submission. (Please note that there are usually two components for each module, an essay, critique of paper or report and a presentation; each of these must achieve a pass mark for the module to be passed.) If work for reassessment does not reach the required standard or is not done, the work will be recorded as a fail and you will fail the module for a second time.** You are permitted one reassessment opportunity only; if this fails then you must repeat the whole module which will be capped at 50% and a fee is payable but you can choose another one module not previously attempted who upon successful completion will not be capped
- 10 If you have completed your last module then the coursework including presentation if applicable must be posted to arrive at the date indicated in Table 1. Please note that point 7 above continues to apply to this work.

TABLE 1

Module	Module Components		Hand in times	Work marked by	Field Board
A1 Sept	Essay Weighting 80%	Individual Presentation Weighting 20%	Nov 10 (by post if not attending)	January 21	February
A2 Oct	Essay Weighting 100%	No Presentation required	Dec 15 (by post)	January 21	February
A3 Nov	Essay Weighting 80%	Individual Presentation Weighting 20%	Jan 12 (by post if not attending)	January 21	February
B1 Jan	Essay Weighting 80%	Individual Presentation Weighting 20%	Mar 16 (by post if not attending)	May 28	June
B2 Jan	Essay Weighting 80%	Individual Presentation Weighting 20%	Mar 16 (by post if not attending)	May 28	June
B3 Feb	Essay Weighting 80%	Individual Presentation Weighting 20%	Apr 13 (by post if not attending)	May 28	June
B4 Feb	Report Weighting 80%	Individual Presentation Weighting 20%	Apr 13 (by post if not attending)	May 28	June
C1 Mar	Essay Weighting 80%	Individual Presentation Weighting 20%	May 11 (by post if not attending)	May 28	June
C2 Apr	Essay Weighting 100%	No Presentation required	Jun 15 (by post if not attending)	July 28	September
B4 (repeat) Apr	Report Weighting 80%	Individual Presentation Weighting 20%	Jun 15 (by post if not attending)	July 28	September
C3 May	Essay Weighting 100%	No Presentation required	July 13 (by post if not attending)	July 28	September
A4 June	Report Weighting 80%	Group Presentation at module Weighting 20%	Sept 14 (by post if not attending)	Oct 28	February
A5 July	Report Weighting 80%	Group Presentation at module Weighting 20%	Sept 14 (by post if not attending)	Oct 28	February
A6 and A7 July	Report Weighting 100%	No Presentation required	Sept 14 (by post if not attending)	Oct 28	February

TABLE 2

Module	Coursework Hand in times	Field Board	If coursework fails, at Field Board, hand in of reassessed work	Field Board for reassessed work
A1 Sept	Nov 10 (by post if not attending)	February	March 16	June
A2 Oct	Dec 15 (by post)	February	March 16	June
A3 Nov	Jan 12 (by post if not attending)	February	March 16	June
B1 Jan	Mar 16 (by post if not attending)	June	July 13	September
B2 Jan	Mar 16 (by post if not attending)	June	July 13	September
B3 Feb	Apr 13 (by post if not attending)	June	July 13	September
B4 Feb	Apr 13 (by post if not attending)	June	July 13	September
C1 Mar	May 11 (by post if not attending)	June	July 13	September
C2 Apr	Jun 15 (by post if not attending)	September	October 12	February
B4 (repeat) Apr	Jun 15 (by post if not attending)	September	October 12	February
C3 May	July 13 (by post if not attending)	September	October 12	February
A4 June	Sept 14 (by post if not attending)	February	March 15	June
A5 July	Sept 14 (by post if not attending)	February	March 15	June
A6 and A7 July	Sept 14 (by post if not attending)	February	March 15	June

10.0 Postgraduate Assessment

- 10.1 The aim of assessment is to determine, on the basis of work presented and the students understanding of it, whether the student is ready to receive an award. Assessment for this programme is continuous. This is in keeping with acknowledged good practice within Learning and Teaching in Higher Education. The Assessment process is concerned with each student's progress.
Further information can be found at <http://www.uel.ac.uk/qa/AssessmentPolicy.htm>
- 10.1.1 Coursework for each module usually consists of an Essay or Critique of Paper or Report and a Presentation (further description of the assessment for each module can be found in the module specifications in section 9).
- 10.1.2 Students on the programme are divided into small Seminar groups to allow follow up to the lecture programme. A member of staff, Seminar Tutor, is responsible for each group and this person remains with students throughout their attendance on the programme. The Seminar Tutor marks the student Essay (or Critique of Paper or Report) for their Seminar Group and makes written and verbal comments to the student. As a result it is not possible or desirable to have anonymous marking. In order to ensure that marking is fair there is a procedure for second marking as follows:-
- Students produce two copies of their essay at the required time of hand-in One of these essays goes to the appropriate Seminar Tutor for marking, A total of 20% of the second copy is independently marked by the Programme Leader.
 - If the marks gained by this process differ by less than 10 then the average of the two marks is recorded.
 - If the marks gained by this process differ by more than 10 then the two markers discuss the situation and come to agreement.
 - If agreement is not possible, a third marker will be engaged and a final mark arrived at.
 - Mark sheets for both marked essays are kept in the student files for reference
- 10.1.3 Details of the Assessment Criteria and some Coursework Assessment sheets are available in this below. Full details are published in the Study Books issued at the beginning of each module. This is done to ensure transparency for students (and staff) in how they are going to be assessed during the progress of the programme and to ensure that the Learning Outcomes are achieved.
- 10.1.4 The completed Thesis must be handed in at the designated time and will only be accepted if all coursework has been completed.
- 10.1.5 The Thesis is read by two members of the programme team. The final grade of the Thesis is then arrived at after discussion between the programme team The External Examiner(s) reads a sample of Theses in order to confirm the programme teams marking standards.
- 10.1.6 In order to be eligible for the award of a Postgraduate Diploma, a student must pass each Module (a total of eight 15 credit modules) gaining a total of 120 credits with a minimum mark in any one module of 50%.

Coursework	Credits	Percentage of total
Module 1*	15	12.5
Module 2	15	12.5
Module 3	15	12.5
Module 4	15	12.5
Module 5	15	12.5
Module 6	15	12.5
Module 7	15	12.5
Module 8	15	12.5
Total 8 modules	120	100

* Module numbers refer only to the order of these completed, ie Module 1 is the first completed module

10.1.7 In order to be eligible for the award of the MSc, a student must pass each teaching Module (a total of eight 15 credit modules) and also the Thesis module (which is 60 credits) gaining a total of 180 credits) with a minimum mark in any one module of 50%.

Coursework	Credits	Percentage of total
Module 1*	15	8.3
Module 2	15	8.3
Module 3	15	8.3
Module 4	15	8.3
Module 5	15	8.3
Module 6	15	8.3
Module 7	15	8.3
Module 8	15	8.3
Thesis	60	33.3
Total 8 modules + Thesis	180	100

* Module numbers refer only to the order of these completed, ie Module 1 is the first completed module

10.2 Examples of the Summative Assessment Process and Coursework Assessment sheets

The following gives an example of the assessment process applied to all the programme modules. The example relates specifically to Module A1 only; the same process applies to all modules.

Strands of Assessment

There are three strands of assessment:-

1. Theoretical knowledge and understanding. (TKU)
2. Thinking skills (TS)
3. Subject based practical skills (SBPS)

Learning Outcomes

At the end of this module, students will:

Theoretical knowledge and understanding

1. Be able to identify and explain the key issues arising from 3 or 4 topics of the module
2. Be able to analyse these issues in relation to global environmental and energy issues

Thinking skills

3. Be able to place this specialised knowledge in the context of the design of buildings and the wider subject
4. Be able to consider the political and economic limitations of the implementation of an environmental agenda
5. Be able to conduct a critical analysis and evaluate the relative importance of particular aspects of the subject
6. To be able to think in an innovative and creative way

Subject-based practical skills

7. To be able to make an oral presentation of a cogent argument in public

Modes of Assessment

There are two modes of summative assessment which address the issues in the Learning Outcomes and take the form of:-

1. Written assignments: an essay which are marked (and double marked) with written and oral feedback from programme tutors. Weighting: essay 80%,
2. Presentation: observation by two programme tutors of an audio-visual presentation given to a group of peers. Weighting 20%

Weighting given to different modes

The different modes above are assessed in accordance with their contribution to each of the three strands in the following approximate proportions (%)

Strand	Essay	Presentation
Theoretical knowledge and understanding	50	20
Thinking skills	50	20
Subject based practical skills	0	60

Marking Criteria: General

1. Essay

The criteria according to which essay is assessed relate to five broad aspects:-

- (a.) Introduction
- (b.) Structure, clarity and references
- (c.) Analysis, evidence and argument
- (d.) Creativity and innovation
- (e.) Conclusion

2. Presentation

The criteria according to which the presentation is assessed relate to four broad aspects:-

- (a) Quality of visual material
- (b) Structure and organisation
- (c) Clarity of delivery
- (d) Communicative impact

Marking Criteria: Specific

1. Assessment Criteria: Essay	Indicative comments
The student has demonstrated in the written assignment (essay) the ability to:-	High standards are sought in the following
(a) Introduction (5%) <ul style="list-style-type: none"> • Explain how the topic relates to the module • Explain why this topic is important 	Significant details of the relationship to the module are expected The importance of the topic to the environmental discourse must be given.
(b) Structure, clarity and references (15%) <ul style="list-style-type: none"> • Plan and construct in a logical sense • Offer the reader a clear understanding from beginning to end • Provide adequate references showing that information used can be verified and using a recognised system 	Logically developed argument. Argument can be easily followed throughout Wide range of relevant well recognised sources
(c) Analysis, evidence and argument (50%) <ul style="list-style-type: none"> • Demonstrate that adequate data from appropriate sources has been obtained. • Produce evidence that the above data has been adequately and objectively analysed. 	It is expected that relevant knowledge, theories and ideas can be assembled in a logical fashion. Theories and models used should show evidence of thinking, reflection and clear reasoning Pre-existing work will represent an

<ul style="list-style-type: none"> • Demonstrate an adequate use, in weight and range, of work produced by other authors or organisations • Have shown that the sources above have been fully appraised critically. 	<p>important part of the material used in developing the argument. Clear evidence that other published work has been adequately and critically evaluated in a balanced way.</p>
<p>(d) Creativity and innovation (10%)</p> <ul style="list-style-type: none"> • Offer an independent contribution to the formulation of, and or approach to, the treatment of their chosen topic 	<p>An imaginative approach is demonstrated through extending knowledge and experience.</p>
<p>(e) Conclusion (20%)</p> <ul style="list-style-type: none"> • Produce a concise resolution of the question/problem posed at the beginning and encapsulating the major arguments. • Demonstrate that an adequate account has been given of the limitations of the work from whatever sources • Consider the impact of the ideas discussed or investigations made on existing academic or other orthodox thinking. • Offer justified suggestions for further investigation or research work in the area. 	<p>This is expected to be a summary of the points raised, with a conclusion arrived at. No new ideas should be contained in this section</p> <p>Limitations can result from problems related to the accessibility of data, various uncertainties or lack of time. These need to be considered.</p> <p>The relationship with existing orthodoxy is important and significant comment is required</p> <p>Being able to consider further developments and research in the area is considered a valuable indicator of understanding.</p>

2. Assessment Criteria: Presentation	Indicative comments
The student has demonstrated in the presentation the ability to:-	High standards are sought in the following
(a) Quality of visual material <ul style="list-style-type: none"> • Select the most appropriate visual material in relation to the topic covered 	By observation of handling, variety and independence.
(b) Structure and organisation <ul style="list-style-type: none"> • Assemble, arrange and deliver a coherent and informative performance 	By observation that the information is in the correct order and comes across as coherent with a proper conclusion.
(c) Clarity of delivery <ul style="list-style-type: none"> • Conduct a clear, concise and easily followed delivery 	By observation and evaluation of the message delivered
(d) Communicative impact <ul style="list-style-type: none"> • Deliver a high impact message 	By observation of the audience

All assessed pieces of work are graded according to the following criteria:-

Grade	Marking range	Standard required
Distinction	70%+	Exceeds relevant learning outcomes with originality and flair, indicated by: TKU - imaginative, insightful or innovative grasp of relevant concepts and the application TS - outstanding degree of analytical study; ability to reflect and learn SBPS – outstanding Presentation Marking criteria met to an outstanding degree in all areas
Merit	65-69%	Demonstrably fulfils and exceeds the relevant learning outcomes indicated by: TKU - sophisticated grasp of relevant concepts and their application TS - high degree of analytical study; ability to reflect and learn SBPS - high quality Presentation Marking criteria met to a high standard in virtually all areas
Pass	50-64%	Able to satisfy the relevant learning outcomes, indicated by: TKU - adequate grasp of relevant concepts and their application TS - good standard of analytical study; ability to reflect and learn SBPS – good standard of Presentation Marking criteria generally met in most aspects
Fail	49%-	Does not fulfil the relevant learning outcomes at all, indicated by: TKU - poor or no understanding of relevant concepts and their application TS - little or no evidence of analytic study or ability to reflect and learn SBPS - very little skill shown in Presentation Marking criteria not met in substantive or critical ways

Examples of Coursework Assessment Sheets is shown overleaf

Coursework Assessment: Essay

Student Name:	Module number:
Tutor group:	Module date:
Name of Examiner: (marking work)	Submission date:
I confirm that no part of this coursework, except where clearly quoted and referenced, has been copied from material belonging to any other person, e.g., from a book, handout, another student. I am aware that it is a breach of regulations to copy the work of another without clear acknowledgement and that attempting to do so renders me liable to disciplinary proceedings.	

Title of work:-

A: Introduction:	Mark /	Out of	Section comments
Contextualization of the question in the module, and why this specific question is important.		/5	
B: Structure, clarity & referencing			
i) Coherence of the structure		/5	
ii) Clarity of the writing		/5	
iii) Adequacy of referencing		/5	
C: Analysis, evidence & argument			
i) Sufficient relevant data or other factual support; balance		/10	
ii) Quality of the critical input on the support used		/15	
iii) Adequacy, of the use made of pre-existing work; balance		/10	
iv) Quality of the critical input on the pre-existing sources used		/15	
D: Creativity & innovation			
An original or creative question, or approach to the question		/10	
E: Conclusion			
i) Summary of the case made		/5	
ii) Limitations of the essay		/5	
iii) Implications of the case made for existing orthodoxy		/5	
iv) Implications in terms of future research required		/5	
This is an indicative mark – all marks are subject to the appropriate assessment board and this mark may change		/100%	

Other comments:

Examiner's Name:Examiner's
Signature.....

Coursework Assessment: Critique of paper

Student Name:	Module number:
Tutor group:	Module date:
Name of Examiner: (marking work)	Submission date:
I confirm that no part of this coursework, except where clearly quoted and referenced, has been copied from material belonging to any other person, e.g., from a book, handout, another student. I am aware that it is a breach of regulations to copy the work of another without clear acknowledgement and that attempting to do so renders me liable to disciplinary proceedings.	

Title of work:-

	Mark /	Out of	Section comments
A: Factual summary			
i) the problem or question being addressed		/5	
ii) the data or other factual material adduced		/5	
iii) the arguments used		/5	
B: Contextualisation			
i) Connections between the topic of the paper & the unit		/5	
C: Critique			
i) Structure		/10	
ii) Data: adequacy and relevance		/20	
iii) Argument: logic, clarity, implications, assumptions, omissions		/30	
D: Conclusion			
i) overall judgement of the case made		/5	
ii) implications for discussions in the field		/5	
iii) further research required		/10	
This is an indicative mark – all marks are subject to the appropriate assessment board and this mark may change		/100%	

Other comments

Coursework Assessment: Presentation

Student Name	Module number:
Tutor group:	Module date:
Name of Examiner: (marking work)	Submission date:
I confirm that no part of this coursework, except where clearly quoted and referenced, has been copied from material belonging to any other person, e.g., from a book, handout, another student. I am aware that it is a breach of regulations to copy the work of another without clear acknowledgement and that attempting to do so renders me liable to disciplinary proceedings.	

Title of work:-

	Mark /	Out of	Section comments
A: Quality & appropriateness of visual aids		/25	
B: Structure/organisation		/25	
C: Clarity of delivery		/25	
D: Communicative impact		/25	
This is an indicative mark – all marks are subject to the appropriate assessment board and this mark may change		<u>/100</u>	

Other comments:

Examiner's Name:Examiner's
Signature.....

11.0 **Field Boards and Module Assessment**

The following outlines the procedure the University operates for all programmes. The MSc Architecture: Advanced Environmental and Energy Studies programme is run and administered by CAT but the academic standards which include assessment and associated processes must conform to those of the University. This is in order to maintain standards and is common to all UK universities. The assessment process in the University consists of a **Field Board** (which meets at CAT and considers the marks for all completed modules on this programme) and an **Award Board** held at UEL (see section 12) which reviews and formally records the final result gained by students including the award of the MSc. The University consists of a number of Schools. Teaching activity in these Schools is segregated into a number of Fields which contain a number of teaching programmes of which this is one. The following process appears complicated but is designed to give students the assurance that the correct processes are adhered to.

11.1 **Field Boards**

11.1.1

Field Boards are responsible for:

- assuring the appropriate standards for modules
- considering the performance of students on modules
- confirming the marks achieved by students on modules
- awarding credit for the achievement of students on modules
- awarding credit for certificated and experiential learning
- noting Breaches of Regulations

The Field Board considers all and only modules within the Field (which in this case means the work done on this Programme). Field Boards meet immediately prior to the Award Boards (see section 12). The Field Board for Semester A meets in February, the Field Board for Semester B meets in June and the Field Board for Reassessments meets in September.

The Field Board meets at CAT and will consist of:-

- Head of the Graduate School of the Environment
- Module Leaders
- Staff teaching on the Programme

- External Examiners

11.2 **Module assessment**

11.2.1

In calculating the mark for a module the final mark is calculated as a percentage with all decimal points rounded up to the nearest whole number.

11.2.2

In order to pass a module, a student must both achieve an aggregate mark of 50% and also meet the module threshold marks, see below.

11.2.3

For the purposes of passing a module each **component** (ie Essay or Critique of Paper or Report and Presentation) has a threshold mark of 40%.

11.3 **Reassessment in a module not passed**

11.3.1

Where a student does not achieve an aggregate of 50%, or does not achieve **component** threshold marks, the student is reassessed in the module at the next reassessment point in all and only those components achieving a mark of less

than 50%. Component marks of 50% or over are carried forward to reassessment.

- 11.3.2 The reassessment point for all modules is defined in Table 2 in Section 9.4
- 11.3.3 In determining whether a student has passed a module on reassessment the calculation is based on the highest component marks achieved, whether in assessment or reassessment.
- 11.3.4 In order to pass a module on reassessment a student must both achieve an aggregate mark of 50% and achieve the component threshold marks. If the module is passed, the module mark is capped at 50%. The actual mark achieved will be recorded on the student transcript (which is issued by the University)

11.4 Procedure in the case of not passing a module on reassessment

- 11.4.1 A student who does not pass a module on reassessment is entitled to repeat the module once only and has to pay the full cost of this.
- 11.4.2 If a module which has not been passed on reassessment in an option module, the student may choose to register on an alternative option module (rather than repeat the option module). In this case, the regulations governing the first time study and assessment of a module apply and the marks achieved are not capped at 50%. (All modules on this programme are option modules as all are open to student choice)
- 11.4.3 A repeated module must be undertaken after re-registration. Marks achieved previously in the module are ignored for the purposes of assessment of the repeated module (i.e. no marks are carried forward from the previous registration).
- 11.4.4 A repeated module is assessed at the end of the module in the normal way and (if necessary) reassessed at the subsequent reassessment point. If passed, a repeated module is capped at 50%. The actual mark achieved will be recorded on the student transcript.
- 11.4.5 No further registration, study or assessment is possible for a repeated module which has not been passed after reassessment.

11.5 Extenuating Circumstances: Procedure in the event of illness or other valid cause

- 11.5.1 This is the term that the University uses to deal with assessable work that is handed in late or not at all. If there is a valid reason for this then extenuating circumstances apply.

It is considered desirable for students to hand in their work at prescribed times. This gives them valuable experience at working to a deadline (an essential part of the modern world) and also allows the work to be marked and feedback made available to the student. Having feedback as soon after coursework is done is considered good educational practice.

The University validates the GSE teaching programmes and part of this requires us to have a policy on hand in of work and consequently of the conditions and processes of extenuation. The following information is based on the UEL Extenuation Policy but is altered slightly to make allowance for the way the teaching programmes run in GSE.

The underlying principle of this extenuation process is to make allowances for those students with genuine problems and to give those that cannot meet the required deadlines for any reason, a second chance. Only in circumstances of complete neglect of the programme and its processes can a student who is capable of success, fail to achieve this.

11.5.2.. Definitions

11. 5.2.1. ` **What are Extenuating Circumstances?**

Extenuating Circumstances are circumstances which

- impair the performance of a student in assessment or reassessment
- prevent a student from attending for assessment or reassessment
- prevent a student from submitting assessed or reassessed work by the scheduled date

Such circumstances would normally be

- unforeseeable - in that the student could have no prior knowledge of the event concerned
- unpreventable - in that the student could do nothing reasonably in their power to prevent such an event
- expected to have a serious impact

Students are expected to make reasonable plans to take into account commonly occurring circumstances, even those which, on occasion, may have been unforeseeable and unpreventable.

11.5.2. 2. Module This is the name given to the various events which constitute the Programme.. The five day event at CAT is a teaching module equivalent to 15 credits. The Thesis module requires the preparation of a major item of academic discourse and is equivalent to 60 credits. (see Programme Handbook Section 9 for more information on this)

11.5.2. 3 Component This is an assessed item which is required following completion of a module. For the teaching modules, this is usually an essay or report, and a presentation. The thesis module has no components.

11.5.2. 4 Pass and Fail The pass mark for all components is 40%. The marks for the whole module are aggregated according to the weightings shown in the module specifications (see Programme Handbook Section 9) The pass mark for the module is 50%

11.5.2. 5 Field Board. This meets three times per year (February, June and September) to bring together and formally consider marks of previous modules. Any failure either through low marks or none submission is considered at this time

11.5.2. 6 Reassessment Period Any time after the appropriate Field and Award board. See section 9.4 for details of reassessment processes and dates.

11.5 .3 **Coursework and Extenuating Circumstances**

11.5 .3.1 **Hand in times and dates**

For the teaching module, coursework from the last attended module must be handed in at registration and no later than 19.00 hours on the Wednesday of the module. For the Thesis module, hand in by post to the Courses office no later than the last working day of January or July as appropriate (see Programme Handbook Section 8.1 Programme Dates and Activity)

11.5 .3.2 **Procedures for the Submission of Claims for Extenuating Circumstances**

For an extenuation claim to be considered, it is the student's responsibility to ensure that for each component affected

- they submit details of the circumstances on the standard Extenuating Circumstances proforma
- details are submitted by the designated date and time
- the circumstances have been discussed with the appropriate Seminar Tutor
- details must be submitted with accompanying documents and evidence.

The designated date and time for submission of claims for extenuation are at the time of the scheduled hand in time but claims are accepted (by post if necessary) in the Courses Office no later than one calendar week after the scheduled date and time for the submission of the assessed work.

11.5 .3.3 **Procedures for Consideration of Extenuating Circumstances**

Claims for extenuation will be considered by a panel consisting of the Programme Leader as Chair, and two senior academic members of CAT staff that are not part of GSE.

In considering claims for extenuation, wherever possible, the identity of the student will not be made available to the Panel.

Where extenuation for more than one component is sought by a student, extenuation will be considered on a component by component basis.

The decision of the Extenuation Panel is final

The Extenuation Panel will meet prior to the February, June and September Field Boards and prior to the October hand in deadline (refer to Tables 1 and 2 in Section 9.4)

11.5 .4 **Extenuating Circumstances Details**

11.5 .4.1 **Work submitted by the published deadline:**

No claim for extenuation may be submitted.

11.5 .4.2 **Work submitted late, but within one calendar week of the published deadline:**

A claim for extenuation may be submitted. Work submitted will be marked:

If the Extenuation Panel grants extenuation, then the mark achieved for the work will be awarded.

If the Extenuation Panel does not grant extenuation, then a mark of zero will be recorded.

11.5 .4.3 **Work submitted later than one calendar week after the published deadline, or not submitted:**

A claim for extenuation may be submitted. Any submitted work will not be assessed;

The mark awarded will be zero;

If a student seeks extenuation and this is granted by the Extenuation Panel, the outcome is as follows:-

- the zero mark awarded is ignored
- the student will be reassessed, in the extenuated component(s) only by submission of a new piece of work (not by resubmission of the original piece of work)
- no other components will be reassessed

- the mark achieved for the module will not be capped (unless it is a repeated module)

If a student seeks extenuation and this is NOT granted by the Extenuation Panel, the outcome is as follows:-

- The mark recorded for the work is zero
- The student may be reassessed (in the failed components only) in the reassessment period only
- The mark achieved for the module will be capped at 50%

11.5 .4.4 If a student fails to submit any work or be reassessed, the mark recorded will be zero and the module is failed.

There is no provision for giving extensions to coursework deadlines

11.5 .5 Late submission of claims for extenuating circumstances

Normally, late submission of a claim for extenuating circumstances is not accepted.

However, it is recognized that there may be cases where a student is unable to submit a claim for extenuation within the time period (e.g. emergency in-patient hospital treatment occurring at the time of hand in). In this case, submission of the claim at the earliest opportunity, via the Courses Office, should be made. This must be accompanied by evidence as to why the claim is being submitted late. The Chair of the Panel will decide whether to accept the late submission. The Chair's decision will be final.

12.0 Awards - General

12.1 Award Boards The Award Board follows immediately after, and ratifies the decisions made by, the Field Board (see section 11)

12.1.1 Award Boards are responsible for:

- conferring final awards
- awarding credit to students on modules passed by compensation confirming eligibility for awards on the basis of accumulated credit
- ensuring any award-specific requirements have been met
- formally implementing the decisions of the Extenuation Panel
- noting credits achieved on the basis of accredited learning
- noting Breaches of Regulations

The Award Board for Semester A meets in February, the Award Board for Semester B meets in June and the Award Board for the summer period meets in September and takes place a few days after the Field Board. The Award Board will consist of:-

Head of School (CITE) or senior nominee (Chair)
Programme Leaders for all programmes under consideration

12.2 Compensation

If a module has failed it may be considered as passed subject to the conditions outlined below. This is termed Compensation

12.2.1 A student is awarded a compensated pass in a module by an Award Board and awarded credit provided that:

- the module is an appropriate module
- the student has been awarded 90 UEL credits at the level (or higher) of the compensated module
- the student has both attained at least 45% in the module to be compensated and attained the threshold in all components
- the module is not specified as non-compensatable in the programme specification as an award-specific requirement

12.2.2 If eligible the student will be awarded a compensated pass on one module on a programme and this will occur at the earliest eligibility for compensation.

12.3 Conferment of award for completion of a programme

12.3.1 The Award Board will confer an award on a student for completion of a programme at the first occasion on which the student is eligible for the award.

12.3.2 Where a student has withdrawn from, or is being discontinued on, a programme and has not transferred to another UEL programme, the Award Board will confer the highest award for which the student is eligible.

12.4 Masters award – classification

12.4.1 Where a student is eligible for an Masters award then the award classification is determined by calculating the arithmetic mean of all marks and applying the mark obtained as a percentage, with all decimals points rounded up to the nearest whole number, to the following classification

70% - 100%	Distinction
60% - 69%	Merit
50% - 59%	Pass
0% - 49%	Not passed

12.5 Aegrotat and Posthumous Awards

12.5.1 These may be conferred in accordance with the Manual of General Regulations.

12.6 Award Name

12.6.1 In order to qualify for a named award the student must have been enrolled on the programme and satisfied the programme specifications associated with that named award.

12.7 Discontinuation of a student on a programme

12.7.1 A student cannot continue on a programme if the student has not achieved a pass in the reassessment of a repeated module for the programme.

13.0 Modular Programmes - General

13.1 Definitions and Explanations

13.1.1 A **module** is a separate identifiable block of learning which is credit-rated, with credit allocated on the basis of 10 hours of study for each credit. Standard modules are 20 credits in size for undergraduate programmes (indicating 200 hours of student study) or 30 credits in size for postgraduate programmes (indicating 300 hours of student study). The MSc Architecture programme has a number of 15 credit modules; this is a necessary consequence of the way the programme operates at CAT

13.1.2 A unique **module level** is associated with each module. This is level 0, 1, 2, 3, or M (and P for placement modules), reflecting the level of achievement expected in order to pass (i.e. be awarded credit) in the module. M refers to a masters programme

13.1.3 A module is a **prerequisite module** for another module if a student must have passed the prerequisite module (i.e. been awarded credit) in order to study on the other module.

13.1.4 A module is a **precursor module** for another module if a student must register on the precursor module (and remain registered throughout the semester of the delivery of that module) in order to study subsequently on the other module.

13.1.5 A module is a **co-requisite module** with another module if both modules must be studied at the same time.

13.1.6 A **component** of a module is a separate part of a module, as identified in the module specification. Whole number marks are awarded for each component of a module. A standard module may have one, two or three parts. Double and treble modules have a maximum of six and nine components respectively.

13.1.7 A **Field** comprises modules forming a coherent academic grouping. Each module belongs to one and only one Field.

13.1.8 A **module specification** specifies (amongst other matters)
module name
module unique identifying code
module credit value
the Field to which the module belongs
any prerequisites, precursors and co-requisites
module learning outcomes
outline module content
details of the component assessments and their weightings (together with the threshold mark for assessment if, for Professional and Statutory Regulatory Body requirements, this is set above the minimum standard threshold for)

13.1.9 In order to study, be assessed, or be reassessed on a module, a student must be **registered** on the module. Provided a student has registered on a module (and not subsequently been formally withdrawn from the module), the student will be

assessed at the next assessment point and (if the module is not passed) reassessed on that module at the next reassessment point. Assessment or reassessment cannot be deferred.

- 13.1.10 Reassessment for all modules (with the exception of the thesis) will occur as detailed in Table 2 of Section 9.4.
- 13.1.11 A module for which a pass has not been achieved on assessment or reassessment may be repeated only once. This will involve re-registration and further study and assessment (and reassessment if necessary).
- 13.1.12 A **programme** is a combination of modules leading to a university award.
- 13.1.13 A **programme specification** specifies (amongst other matters)
 - admission requirements for the programme
 - the structure of the programme
 - any particular conditions to be met (e.g. Professional and Statutory Regulatory Body requirements) for conferment of the relevant named award
- 13.1.14 A **core module** for a programme is a module which a student must have passed (i.e. been awarded credit) in order to achieve the relevant named award. Core modules are specified in the programme specification. (There are no core modules on this programme but students are advised to attend A1 if they are starting in September and C1 if starting in March)
- 13.1.15 An **option module** for a programme is a module selected from a range of modules specified in the programme specification. In effect all modules on this programme are optional)

13.2 Postgraduate Awards

13.2.1 Postgraduate Associate Certificate

A programme leading to a Postgraduate Associate Certificate consists of 30 credits at Level M

13.2.2 Postgraduate Certificate

A programme leading to a Postgraduate Certificate consists of 60 credits at Level M

13.2.3 Postgraduate Diploma

A programme leading to a Postgraduate Diploma consists of 120 credits at Level M

13.2.4 Masters

A programme leading to a Masters award consists of 180 credits at Level M and will include a 60 credit level M core module of advanced independent research.

Exceptionally, through programme validation, a maximum of one third of the credits for a postgraduate award may comprise credit for modules at level 3.

Up to half the credits for an award may be achieved through accredited experiential learning, and up to two thirds of the credits for an award may be achieved through accredited certificated learning. (Where a combination of experiential and certificated learning is involved up to one half of the credits for the award may be achieved through accredited experiential learning with further

credits being achieved through accredited certificated learning up to a maximum of two thirds of the credits for the award)

13.3 The Structure of Modular Postgraduate Programmes

Modules

- 13.3.1 A module is allocated to a single level – level M.
- 13.3.2 No module can be a pre-requisite for another taught module at the same level. One or more modules may be specified as pre-requisites for the advanced independent research module.
- 13.3.3 The programme specification will specify for each module within a programme whether it is a core module or an option module for that programme.
- 13.3.4 A standard module may be composed of one, two, or three components. Double and treble modules have a maximum of six and nine components respectively.

13.4 Postgraduate Awards

- 13.4.1 A postgraduate award may be either a named single award or a general postgraduate award at the Certificate or Diploma Level, where award-specific requirements have not been met

13.5 Postgraduate Student Study

13.5.1 Student registration and study

- 13.5.1 A student must be registered on a module in order to be assessed or reassessed on the module.
- 13.5.2 Once a student has passed (or been awarded a compensated pass (see 12.2.2) on a module the student may not register, be assessed or reassessed on the module.
- 13.5.3 A student may study up to 60 credits in any semester as specified in the programme specification.

13.6 Time limits for student study

- 13.6.1 A student may not continue study, or be assessed or reassessed, on a module once three years have elapsed from first study on the module.
- 13.6.2 The time limit for completion of a programme is six years after first enrolment on the programme.

13.7 Intermission

- 13.7.1 A student may intermit from a programme with the agreement of the programme leader.

13.7.2 During the intermitted period, which must be one or more complete semesters and no more than a total of two years, (ie four semesters) no module study may be undertaken. However all outstanding reassessment requirements should be undertaken or else the module will automatically be regarded as not passed on reassessment (Note: Standard regulations on extenuation apply).

13.7.3 An intermission extends the time limits for study on the module and the programme for the period of the intermission (unless prohibited by Professional and Statutory Regulatory Body requirements).

14.0 Academic Appeals

Students who dispute a decision of an Assessment Board may appeal in accordance with the *Procedure for notification of Appeal, Part 7 paragraph 2* of the Manual of General Regulations.

No appeal will be entertained on matters of academic judgement. These remain the exclusive prerogative of the Assessment Board. Matters of academic judgement include: whether a student has reached the academic standard required for the relevant stage of the programme; whether a student would benefit academically from further study on the programme.

An appeal may be made only on the following grounds:

- that the assessment failed to accord with the regulations pertaining to that particular programme;
- that, for a student with disability or special educational need, the agreed revised assessment procedures were not implemented.

Any student wishing to appeal against a decision or recommendation of an Assessment Board must lodge his or her notice of appeal with Strategic Planning and Quality Enhancement, normally using a pro forma available from the Department of Student Administration (Student Information Centres), **within ten working days** of publication of the relevant pass list.

Further information about the UEL appeals process, including copies of the formal Notification of Appeal Form, is available for view at: <http://www.uel.ac.uk/qa>

15.0 Assessment Offences

For the purposes of our University's Regulations, an assessment offence is defined as any action(s) or behaviour likely to confer an unfair advantage in assessment, whether by advantaging the alleged offender or disadvantaging (deliberately or unconsciously) another or others. Examples of such offences are given below: the list is **not** exhaustive.

Importation into an examination room of materials other than those which are specifically permitted under the regulations pertaining to the examination in question.

Reference to such materials (whether written or electronically recorded) during the period of the examination, whether or not such reference is made in the examination room.

Copying the work of another candidate.

Disruptive behaviour during examination or assessment.

The submission of material (written, visual or oral), originally produced by another person or persons, without due acknowledgement*, so that the work could be assumed to be the student's own. For the purposes of these Regulations, this includes incorporation of significant extracts or elements taken from the work of (an) other(s), without acknowledgement or reference*, and the submission of work produced in collaboration for an assignment based on the assessment of individual work. (Such offences are typically described as plagiarism and collusion.)

*(Note: The incorporation of *significant* elements of (an)other(s) work, even with acknowledgement or reference, is unacceptable academic practice and will normally result in failure of that item or stage of assessment).

Being party to any arrangement whereby the work of one candidate is represented as that of another.

If an examiner suspects that a candidate has breached the regulations, the matter will be dealt with under the *Procedure to be followed in the Event of a Suspected Assessment Offence, Part 7, paragraph 2* of the Manual of General Regulations (available for view at <http://www.uel.ac.uk/qa>). If it is determined that a breach of regulations has taken place, a range of penalties may be prescribed which includes exclusion from the programme.

15.1 Plagiarism - A Guidance Note for Students

15.1.1 Definition of Plagiarism

The University defines plagiarism and other assessment offences in Part 7 of the UEL Manual of General Regulations. All students will have received a copy of this when they joined the University as it is reprinted in "The Essential Guide to the University of East London". In this document, the following example of an assessment offence is given:

(e) The submission of material (written, visual or oral) originally produced by another person or persons without due acknowledgement*, so that the work could be assumed to be the student's own. For the purpose of these Regulations, this includes incorporation of significant extracts or elements taken from the work of an (other(s), without acknowledgement or reference*, and the submission of work produced in collaboration for an assignment based on the assessment of individual work. (Such offences are typically described as plagiarism or collusion).

The following note is attached:

*Note: To avoid potential misunderstanding, any phrase not the students' own should normally be in quotation marks or highlighted in some other way. It should also be noted that the incorporation of significant elements of an (other(s) work, even with acknowledgement or reference, is not an acceptable academic practice and will normally result in failure of that item or stage of assessment.

15.1.2 Plagiarism in Greater Detail

Work that students submit for assessment will inevitably be building on ideas that they have read about or have heard about in lectures. Students can, however, only demonstrate that they have learnt from their sources by presenting the concepts in their own words and by incorporating their own commentary on the findings.

Where students submit work purporting to be their own, but which in any way borrows ideas, wording or anything else from other source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing

someone else's work whether it be from a published article, book chapter, website, and an assignment from a friend or any other source.

When an assignment or report involves outside sources, or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, they must be put in quotation marks or otherwise identified and a reference as to source appended. See the next section for more guidelines.

Making simple changes to the wording of a section from a book, article, web-site etc. whilst leaving the organisation, content and phraseology intact would also be regarded as plagiarism.

15.1.3 Collusion

Collusion is the term used to describe any form of joint effort intended to deceive an assessor as to who was actually responsible for producing the material submitted for assessment. Students may obviously discuss assignments amongst themselves and this can be a valuable learning experience. However, if an individual assignment is specified, when the actual report/essay is produced it must be by the student alone. For this reason students should be wary of lending work to colleagues since were it to be plagiarised they could leave themselves open to a charge of collusion.

15.1.4 When to Reference

Since the regulations do not distinguish between deliberate and accidental plagiarism, the key to avoiding a charge of plagiarism is to make sure that you assign credit where it is due by providing an appropriate reference for anything in your essay or report which was said, written, drawn, emailed or implied by somebody else.

You need to provide a reference:

when you are using or referring to somebody else's words or ideas from an article, book, newspaper, TV programme, film, web page, letter or any other medium;

when you use information gained from an exchange of correspondence or emails with another person or through an interview or in conversation;

when you copy the exact words or a unique phrase from somewhere;

when you reprint any diagrams, illustrations, or photographs.

You do not need to reference:

when you are writing of your own experience, your own observations, your own thoughts or insights or offering your own conclusions on a subject;

when you are using what is judged to be common knowledge (common sense observations, shared information within your subject area, generally accepted facts etc.). As a test of this, material is probably common knowledge if:

you find the same information undocumented in other sources;

it is information you expect your readers to be familiar with;

the information could be easily found in general reference sources.

15.1.5. When might the Charge be one of Unacceptable Academic Practice rather than Plagiarism?

Students occasionally misunderstand the concepts being presented here and submit essays or reports where substantial and significant elements of another author's work are used and acknowledged. It is clear that such an essay or report cannot satisfy the normal assessment criteria to:

- use your own words
- provide a critical commentary on existing literature
- aim for novelty and originality
- demonstrate your understanding of the subject area by paraphrasing

It is thus likely in such a case that the outcome will be a fail mark for the particular piece of work concerned.

16.0 Student Seminars and Tutorials

16.1 At the start of the programme, students are placed in seminar groups consisting of between 20 and 25 students. These groups meet during the Seminar sessions, which are related to the lecture programme, and the evening tutorial sessions and are led by a member of staff. The students and associated member of staff remain together throughout the period of student study. During these periods, and in particular during tutorials, wider issues can be raised.

16.2 Each student has a personal tutor who is also the seminar group tutor. The student remains with their personal tutor throughout their period of study. Personal problems can be dealt with in private by making an appointment with the personal tutor and/or with the Programme Leader at any time during a residential teaching week, or at any other time by telephone or email.

17.0 Student Attendance Policy – Guidance for Students

17.1 The Importance of Attendance

You have made a commitment to work towards achieving academic success by enrolling on your programme and registering on your modules. We know, as you do, that in order to achieve ultimate success in your studies it is important that you participate in, and engage fully with, all your scheduled activities such as lectures, workshops and seminars. We therefore regard attendance as essential, as we are sure you will.

Punctuality is also crucial (if you turn up late you may find you will not be allowed to enter -late attendance causes disruption for others). Other aspects of behaviour are important as well - for instance, no food or drink should be consumed in lectures or classes, all mobile phones should be turned off.

17.2 Recording attendance

We keep records of your attendance. For all teaching activities specified by the programme (workshops, seminars, practicals etc.) a record will be kept. You must ensure that you can demonstrate your attendance through this recording process.

17.3 If you cannot attend you should let us know, either beforehand or as soon as possible afterwards. You should notify the CAT office. A short note or email will do - but you should give your name and student number.

- 17.4 If you do not attend regularly or do not keep us informed of occasional non attendance you will find that your tutor will contact you to discuss the matter with you. It is important that you take this communication seriously and make contact immediately.

We are so firmly convinced of the importance of attendance that we regard persistent non attendance as a statement by you that you are not interested in being a student. **You will therefore find that if you do not attend for at least one year (without intermitting or communicating with us), you will be withdrawn from your programme.**

- 17.5 If you attend regularly you will get the most out of your studies, you will maximise your chances of success, and you will find the relationships you build up in your classes support you in your achievements.

18.0 Programme Management

- 18.1 The programme committee are responsible for assuring and enhancing the quality of the student experience at programme level. Membership of committee;

CAT Director of Courses

Administrator/Servicing (ex-officio)

Module leaders of all modules

The programme leader (chair)

Two student representatives and at least one part-time student (where appropriate)

Programme staff, making a significant teaching contribution to the programme, and relevant Field Leaders will be entitled to attend.

- 18.2 The Meeting will be held once per residential session (i.e. ten times per year) and will be quorate if 40% of the members are present.

- 18.3 The Programme Committee are responsible for assuring the quality and standards of the range of modules within the field. Further information available at:
<http://www.uel.ac.uk/qa/policies/Apendix9-FieldandProgrammeCommittee.pdf>

19.0 Staff

The Programme Team consists of the following:-

Alison Pooley	Module Leader, Lecturer, and Seminar Tutor
Annie Benfield	Administration Student Records
Blanche Cameron	Module Leader Seminar and Practical Tutor, Special needs.
Bobby Gilbert	Module Leader, Lecturer, Practical Tutor
Chris Laughton	Module Leader, Lecturer and Practical Tutor
Jason Hawkes	Module Leader, Lecturer, Seminar and Practical Tutor
Lotte Reimer	Lecturer, Seminar and Practical Tutor
Damian Randle	Lecturer, Seminar Tutor / Web based Tutor
Gerry Jones	Thesis Coordinator, Lecturer,
Joan Randle	Courses Director
John Kearney	Seminar Tutor/Technical Advisor
Judith Thornton	Thesis Tutor, Module Leader, Lecturer,
Kara Millen	Module Leader, Lecturer, Seminar and Practical Tutor
Melissa Taylor	Thesis Tutor, Lecturer, Seminar Tutor
Mike Thompson	Programme Leader, Module Leader, Lecturer
Robert Gwillim	Module Leader, Lecturer, and Practical Tutor
Simon Tucker	Thesis tutor, Lecturer,
Ranyl Rydwen	Lecturer, Thesis Tutor
Ruth Stevenson	Module Leader, Lecturer, Seminar and Practical Tutor
Tim Helweg-Larsen	Lecturer, Practical Tutor
Tom Wooley	Professor of Architecture, Lecturer

20.0 Library/Resources/Equipment Loan

Currently there is no library available at CAT but there is one under construction as part of the expansion of facilities at CAT (available Spring 2009) We are planning to start the formation of a library immediately. All students do have an Athens account and can use any University library in the UK. This is particularly helpful to students on this programme who are normally resident in all parts of the UK. In addition we give students a total of about 12 key and frequently used books at various stages through their teaching programme in order to ensure they have easy access to this learning resource. Physical resources at CAT are wide ranging. In addition to numerous display and research items, (which students have access to) the programme has been investing in a wide range of monitoring equipment (temperature data loggers, light meters etc) and also has recently installed an Artificial Sky. Various materials for practical work are available or purchased for specific needs. Previous validation events (the last being in June 2006) have been satisfied by the resources available to the programme.

The programme has various items of equipment which students may need to use for their work. The loan process will be administered by the CAT administrator with the equipment stored at CAT when not used.

21.0 Complaints

21.1 If you feel that the University has not delivered the standard of service which it would be reasonable to expect, you may be entitled to lodge a complaint, in accordance with section 15 of the *Manual of General Regulations*. The Complaints Procedure should be used for serious matters, and not for minor things such as occasional lapses of good manners or disputes of a private nature between staff and students. Complaints can be lodged by students, prospective students and members of the general public, but cannot be made by a third party.

21.2 Separate procedures exist for the following, which therefore cannot form the substance of a complaint:

appeals against the decisions of Assessment Boards;
complaints against the Students' Union;
appeals against decisions taken under disciplinary proceedings;
complaints about businesses operating on University premises, but not owned by our University;
complaints about the behaviour of other students.

21.3 The procedure has four possible stages:

Complaint raised informally with the staff concerned at the local level (Stage 1)
Complaint to Head of School (Stage 2)
Appeal to a Complaints Review Panel (Stage 3)
In addition, if you have exhausted the internal procedures and are not satisfied with the outcome you may request that the case is reviewed by the Office of the Independent Adjudicator for Higher Education (Stage 4).

21.4 Every reasonable effort should be made to raise the complaint informally. If no satisfactory outcome is reached, you can lodge a formal complaint with the Complaints Liaison Officer, based in Strategic Assurance and Enhancement. You are also advised at this point to discuss the matter with a member of the Students' Union Welfare team.

21.5 A complaint must normally be lodged within two calendar months of the incident giving rise to the complaint; this ensures that the people involved still remember the case, and the facts can be established.

- 21.6 Further information about our University's complaints procedure, including copies of the formal Complaints Form, are available for view at <http://www.uel.ac.uk>

22.0 Student Feedback

- 22.1 A programme committee meeting is held during every module and all students are encouraged to attend along with all staff involved in delivering that module. In addition each seminar group elects one or more student representatives to the committee. These reps attend committee meetings as well as programme staff.
- 22.2 Students are encouraged to complete a module feedback questionnaire at the end of every module; this information is collated by the programme leader. Feedback to the comments on the questionnaire is given by the programme leader and programme staff where appropriate in the next published study book. This makes the feedback process a circular one where students contribution to programme content and organisation is manifest.
- 22.3 All staff involved in the programme value the process of student feed back and welcome it as an important element of programme development. Feedback is obtained through learning and teaching strategies, seminar group meetings and individual tutorials.
- 22.4 For further information on module feedback visit:
<http://www.uel.ac.uk/qa/StudentUnitFeedbackService.htm>

23.0 Personal Development Planning

All staff on the programme recognise the importance of personal development planning, the principles of which are embedded in many professions in the form of Continuing Professional Development (CPD). Coursework for the programme builds into a comprehensive record of student's written work as well as tutorial exchanges, group work, presentation feedback and practical work.

The process of personal tutoring ensures that these records are maintained and personal tutorials allow an opportunity for students to reflect on their coursework with their personal tutor.

In addition to a personal tutor all students have access to a member of the academic staff for PDP discussions and career advice.

Graduating students are encouraged to complete a destination survey questionnaire, this enables the staff team to advise current students on their future career path options.

24.0 Student Support Services at CAT

Students on the programme have a personal tutor who will support and advise on all matters academic and pastoral. The nature of the programme operation, namely five day residential sessions, in which staff and students operate in the same general area, enables contact with staff to occur on a regular basis if required. This provides close and immediate support together with help and advice as required.

All members of CAT staff are qualified providers of First Aid.

There is a Dyslexia/Disabilities adviser who can where necessary liaise with those facilities at UEL see section 25 of this document

CAT operate an equal opportunities policy

The CAT site complies with all Health and Safety requirements

CAT are pledged to operate a clean, safe and appropriately equipped learning environment

The CAT restaurant endeavours to meet all dietary requirements

The programme offers a 'Return to Study' support for new students when required

The study and learning resource centre offer 24 hour access.

CAT offer financial advice and in appropriate cases support via a Hardship Fund

25.0 Advice for Students with Dyslexia/Disabilities

The following explains the support we offer and where you can get more evidence or guidance if you need it. We have a disability adviser at CAT, as well as a University dyslexia co-ordinator based on the Stratford campus (contact details are at the end of this section.) Students on the MSc Architecture running at CAT are registered UEL students. The following support is available to CAT students.

From September 2002, the Disability Discrimination Act applied to Higher Education and as such all Higher Education Institutions are expected to be more proactive in supporting all of their disabled students.

The university has at least one member of staff in each School and Service who has responsibility for all disability/dyslexia matters. The name and contact details of these staff are given on School & service notice boards and course handbooks and study guides. You may choose also to tell tutors or other staff within your study area and ask them to contact the disability/dyslexia service or you may make contact directly with our disability/dyslexia advisers. We have disability/dyslexia staff at each main site (details below), and can offer technological, practical or financial support; advice and guidance, and liaison with tutors and other staff. At CAT there is one member of staff that help students with disabilities or dyslexia.

Support available specifically from UEL to students with disabilities includes:

Assistance, advice and assessment of your needs to help you apply to your LEA for a Disabled Students' Allowance (see later section on this subject)

Extended loans from the library for dyslexic / disabled students

Keys for library lifts

- Arrangements for specialist software use with the IT Department

- Dyslexia screening service (for people who may be dyslexic)
- One-to-one study skills support where your disability / dyslexia requires this
- Exam modifications / special arrangements for assessment and marking
- Use of equipment in the special needs rooms in the libraries (the key can be obtained from the library staff)
- Advice to tutors on the nature of your disability/ dyslexia and what impact this will have on your study. We will help liaise with staff if you feel it necessary. Your tutors can be asked to provide modified teaching materials or handouts, e.g. copies of OHP's; seating at the front of the lecture theatre
- If you have mobility problems you can have a staff car-park pass and keys to the lifts in the libraries
- We can offer advocacy, advice and support on your behalf in any liaison between you and other staff and services at UEL
- Guidance, advice and support in finding personal assistants, e.g. scribes in exams, note-takers, BSL Communication Support Workers, mentors, readers, library assistants, etc.
- Some assistance is available from a small annual budget if you need items which cannot be provided from other sources, such as the Disabled Students' Allowances. Please contact your Disability Adviser about this.

If you feel you may be dyslexic you should refer to the Quickscan program which is available on all UEL networked computers and at CAT. If, as a result of doing this test dyslexic issues are identified, then you can contact the CAT Dyslexia person or at UEL, Debbie Moseley, Dyslexia Administrator, her details are at the end of this section.

Other Disabilities

Deaf and Hearing Impaired Students

If you are deaf or have a hearing impairment we can arrange note-takers. Please enquire at the CAT office for details

Students with mental health difficulties

If you have, or have had, a mental health difficulty that you think may affect your studies we can offer confidential advice, guidance and support through our specialist adviser at CAT

The Disabled Students' Allowances (DSAs)

The Disabled Students' Allowance (DSA) is available to full-time undergraduates as well as part-time and post-graduate students. For most students with disabilities and/or dyslexia this will be the main source of their support, whether that be technological or human.

- The DSA is administered by local education authorities, although the money comes from central government.
- The DSA is a non means-tested grant that all students with disabilities can apply for.
- The DSA is designed to bring students to a 'level playing field' and as such should not be used to provide students with equipment that will give them an unfair advantage over other students on their course.

Applying for a Disabled Student's Allowance

The Disability Adviser can assist you with applying to your LEA. The process involved is explained below:

- You can apply directly to your LEA for the DSA and you will have to provide the LEA with evidence of your disability or dyslexia. Alternatively, our Disability Adviser can write to your Local Education Authority (LEA) to request assistance through the Disabled Students' Allowances (DSAs) scheme but you must have provided us with evidence of your disability, as the LEA will not deal with an application unless they have this information. If you are a dyslexic student, please ensure that you have provided us with a copy of your Educational Psychologist's (EP) report).
- Once we have evidence of your disability / dyslexia, we will write to your LEA to request a SASSA. This stands for a Study Aids and Study Strategies Assessment, (also known as a needs assessment). This is to determine what computer equipment, personal support and other help that you need. We will send you a copy of the letter we have sent to the LEA at the same time.
- The LEA will then write to us to confirm that you are eligible for a DSA. We will then write to you to book an assessment of need or SASSA with our Assessment Centre. If your LEA ask you to contact a National Network of Assessment Centres (NNAC) Assessment Centre, our Assessment Centre at UEL is part of the Network.
- The Assessment Centre is based at the Stratford Campus, The Green (Room G12) and can offer you a study aids and strategies assessment (sometimes known as a needs assessment). Contact Anu Doraisamy on 020 8223 4118 to book an appointment or cancel or change any appointments made.
- We will confirm by letter details of the date and time of the appointment, how to get to the Centre and what you need to bring with you. It will also tell you the name of your assessor. The assessment should take between one and a half to two hours. If you have to cancel or re-arrange your appointment please give us as much notice as possible so that we may allocate your appointment time to someone else. Similarly, if you are running late on the day of the assessment or you cannot make it due to unforeseen circumstances please call and let us know. It will help the smooth running of the Assessment Centre if you are on time for your assessment; if you do not keep your appointment this may result in no more appointments being made for you.
- After the assessment a report of your study needs will be sent to you. It will describe your study difficulties and how they can be reduced by using DSA funding. It is important that you check this report as soon as possible and let us know if you think any changes need to be made.
- Once the assessment has taken place, a draft version of the report will be sent to you for your approval. As long as you are happy with what has been written and what has been recommended, this will then be forwarded to your LEA, (if we do not hear from you within ten days the report will be sent to your LEA). If you wish to change anything on the report you will need to discuss this with your assessor; they should give you a contact number where they can be reached.

The LEA will then write to you to and explain how your equipment/support will be provided. They will either;

- a). Send you a cheque for the amount agreed. You can then order the equipment directly from the suppliers we deal with (their contact details will be on your report). You must keep all receipts for money spent.
- b). Order the equipment on your behalf from the suppliers.

We can offer IT training in the recommended equipment.

If you have been recommended human support, such as one-to-one study support for dyslexic students we can help you arrange this.

We appreciate this may seem a complex procedure, but it is important to remember the benefits it can provide. The University's Disability Advisers are here to help you with any concerns you may have. If you have any queries with any of the processes involved please contact one of our advisers (see contact details at the end of this leaflet).

FAQ (Frequently asked questions) about the DSA

1. **Q.** Who provides the DSAs?
A. Your local education authority (LEA).
2. **Q.** Will I have to pay for the SASSA (needs assessment) myself?
A. No. Your LEA are invoiced and it is paid from the DSAs itself.
3. **Q.** Why do I have to have another assessment if I've already been diagnosed dyslexic?
A. The needs assessment is to determine what help you require to study effectively rather than to investigate the nature of your disability
4. **Q.** Will I have to do any tests in the SASSA?
A. No. The purpose of the needs assessment is to establish what support you need and it is more informal than the session with the Educational Psychologist or medical specialist.
5. **Q.** What if I disagree with the assessors' recommendations once I've seen the report?
A. You should discuss exactly why you're unhappy with the assessor and resolve the problem with them. If you and your assessor fail to agree you may take this up with your LEA.
6. **Q.** Will the LEA agree to everything that has been recommended?
A. While we can only make recommendations to the LEA, if they have asked to request a SASSA from an Assessment Centre such as our one at Stratford it is unlikely they will refuse to provide what we have asked for. We will support your claim to have what is recommended.
7. **Q.** What if an item of equipment becomes available after my assessment? Will it be too late to request any extra items?
A. No. Providing it is necessary to alleviate difficulties caused by your disability/dyslexia, (rather than being something which any student would like) then we can make a case for your LEA to provide it. In this instance you will need to contact the Assessment Centre and formally request whatever it is that you feel you need.
8. **Q.** What happens if I miss my appointment?
A. Appointments are unfortunately in short supply. If you feel that you may miss your appointment due to ill-health or other reasons it is important to let us know beforehand - preferably a few days in advance, (but if necessary on the day itself). That way we may be able to offer someone else that time. If you fail to do this, then you will go to the back of the queue and you may have to wait several weeks before you can be offered another appointment time.
9. **Q.** Do students have to return the equipment provided once their course has been completed?
A. No. It is yours to keep.
10. **Q.** Are part-time and post-graduate students eligible for the Disabled Student's Allowance?
A. Yes. The DSA has been available for part-time and post-graduate students since September 2000.

The DSA is divided into three parts:

- **Technology Allowance** (up to £4,565* awarded once for the duration of the course)
- **Non Medical Helpers Allowance** (up to £11,550*)

- **General Allowance** (up to £1,525* awarded annually)

* (2004/2005 figures for full-time undergraduates and PGCE students. For details of awards for part-time and post-graduate ask the Disability Service for a copy of the DfES Leaflet 'Bridging the Gap').

NB. The figures above are the maximum amounts available and it is unlikely that you will be recommended support adding up to these figures. The amount that you receive is based on a detailed assessment of your needs, (the SASSA).

We can help you get these allowances, but you must provide the information we need to do this.

Further Advice:

SKILL promotes opportunities for young people and adults with any kind of disability in post-16 education, training and employment across the UK. Skill provides individual support to disabled people, their families/enablers or people working with disabled people by offering an information service by phone, minicom or letter publishing books, booklets and information leaflets. They can also offer advice about financial matters, such as Social Security benefits.

Contact Skill Information Service Tel: 0800 328 5050 or on the web at www.skill.org.uk

Further information on the DSAs is available from the DfES in the booklet, "Bridging the Gap" (Braille and audio cassette versions are available on request from telephone number 0800 731 9133). See website www.DfES.gov.uk/support/index.htm

The **UEL Disability Service URL** is <http://www.uel.ac.uk/eds/student-support/disability/>

Disability Rights Commission

Helpline between 8.00 a.m. and 8.00 p.m. Monday to Friday on:

Tel: 08457 622 633

Fax: 08457 778 878

Textphone: 08457 622 644

www.drc-gb.org

DISABILITY AND DYSLEXIA STAFF

Disability Adviser - Fozya Sharif

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26. CAT GRADUATE SCHOOL OF THE ENVIRONMENT: School Management Structure



