

SCHOOL OF ARCHITECTURE, DESIGN & CONSTRUCTION

BSc (Hons) Building Surveying (Commercial Management)

BSc (Hons) Design & Construction Management

BSc (Hons) Quantity Surveying (Commercial Management)

**STUDENT HANDBOOK FOR PROGRAMMES
ACCREDITED BY THE CHARTERED
INSTITUTE OF BUILDING (CIOB)**

2011-2012



**UNIVERSITY
of
GREENWICH**

PREFACE

Welcome to the School of Architecture, Design & Construction.

This *Programme Handbook* contains important information relating to your specific Programme of Studies. It is complemented by the *General Information Student Handbook* (blue cover) , which gives essential information useful to all students in the School on accessing online information, assessment, pastoral care and assistance, University regulations, etc...

Please make sure you get both handbooks.

With our best wishes for a successful programme of studies.

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Disclaimer:

The University of Greenwich reserves the right to discontinue any class or programme, to alter any programme or to amend any other information without notice.

It is the intention of the School of Architecture, Design & Construction to keep under review the content, teaching methods and assessment of the programmes and in consequence there may be changes which have overtaken the production of this Handbook, or which may occur during the year. Changes will be advised by the Programme Leaders.

You are reminded that all work produced during your programme of study may be retained by the School for reference, exhibition or quality assurance purposes.

Introduction

Welcome to our portfolio of CIOB accredited programmes. These comprise Honours degrees in Building Surveying (Commercial Management), Quantity Surveying (Commercial Management) and Design and Construction Management. All are fully accredited by the Chartered Institute of Building (CIOB).

An overall philosophy which underpins this portfolio of programmes is that education should encourage the student to develop a flexibility and breadth of mind to cope with complex problems in a changing world. Students require a range of knowledge, analytical abilities and critical faculties to cope with an ever-changing world and perhaps most importantly, the synoptic and integrative ability to solve problems by drawing on specific areas of knowledge and applying a multi-agency approach across professional boundaries.

The main emphasis of the programmes in the portfolio is on the development of effective, informed and autonomous professionals, technically competent with a holistic approach to their thinking.

The Portfolio aims to provide graduates who can function as effective, informed and autonomous professionals. In addition the programmes will produce graduates who are innovative, creative and have the ability to initiate and manage change within the context of the built environment.

Information technology permeates all aspects of the Portfolio, with aspects included as part of almost all courses. You are actively encouraged to use all of the IT resources available within the University throughout your programme of study. All coursework assignments must be word processed to further develop keyboard skills. Certain aspects of the programmes utilize specific IT and software, such as construction planning and management, measurement, etc.

The programmes are integrated to a significant extent, with many courses common across the programmes, reflecting the changing characteristics of construction and the need for cross-disciplinary understanding in the construction profession. It also allows you flexibility to change between Programmes at appropriate points should you so choose.

We hope you find your programme of study interesting and stimulating and we wish you every success in your studies.

1. PROGRAMME DETAILS

Award	Title	Approved Mode of Study	Programme Banner Code	UCAS code (if applicable)
BSc (Hons)	Building Surveying (Commercial Management)	Full-time Part-time Sandwich	Avery Hill: P12471	K230

Award	Title	Approved Mode of Study	Programme Banner Code	UCAS code (if applicable)
BSc (Hons)	Design & Construction Management	Full-time Full-time (sandwich) Part-time	Avery Hill: P01308	K252

Award	Title	Approved Mode of Study	Programme Banner Code	UCAS code (if applicable)
BSc (Hons)	Quantity Surveying (Commercial Management)	Full time Part Time Sandwich	Avery Hill: P12511	K242

IMPORTANT

If you are enrolled in Sandwich mode: Please contact your programme leader before the end of year 2 in order to arrange contact during the 3rd year and discuss the assessment requirements.

2. PROFESSIONAL ACCREDITATION

BSc(Hons) Building Surveying (Commercial Management) programme

The Building Surveying (Commercial Management) Programme is fully accredited by the Chartered Institute of Building (CIOB) and is also an appropriate route to associate membership of the Royal Institution of Chartered Surveyors (AssocRICS).

BSc(Hons) Design & Construction Management programme

This programme is fully accredited by the Chartered Institute of Building (CIOB).

BSc(Hons) Quantity Surveying (Commercial Management) programme

The Quantity Surveying (Commercial Management) Programme is fully accredited by the Chartered Institute of Building (CIOB) and is also an appropriate route to associate membership of the Royal Institution of Chartered Surveyors (AssocRICS).

2.1 ASSOCIATE RICS ACCREDITATION

The RICS Associate qualification offers individuals with vocational experience and qualifications a route to RICS membership. Existing experience counts and assessment is through work-based evidence that is logged on-line. Further information is available at: <http://associate.rics.org/uk/about-associate/>

There are also routes to full MRICS status after additional study, through an RICS accredited MSc programme. You are advised to discuss any queries about professional career development with the relevant programme leader.

The RICS website: www.rics.org.uk is very comprehensive and explains how to become a student member of the RICS, how to obtain access to the RICS library in Central London and how to access research and reports. The RICS also has an online book catalogue and ordering system as well as the bookshop at the Great George Street headquarters building off Parliament Square. A number of government websites will also be very useful during the course of your studies, particularly the Office of the Deputy Prime Minister: www.odpm.gov.uk

3. PROGRAMME TEAM

BSc(Hons) Building Surveying (Commercial Management)

Programme Leader: Richard Cooper

BSc(Hons) Design & Construction Management

Programme Leader: Anthony Kelly

BSc(Hons) Quantity Surveying (Commercial Management)

Programme Leader: Julie Adeline

Other members of the programme team are all the lecturers teaching on the various courses which are approved for each programme.

The name of each course coordinator is written next to each course on the programme structure chart in Section 4. Some courses are shared by students who are registered on different programmes.

4. PROGRAMME STRUCTURE

School of Architecture, Design & Construction

From Session 2011/2012

Programme Leader: Richard Cooper

BSc (Hons) Building Surveying (Commercial Management) (P12471)

Year 1	
Term One	Term Two/Three
Sustainable Construction 1 BUIL 1161 Mark Mulville (PT1)	Sustainable Construction 2 BUIL 1162 Mark Mulville (PT1) <i>(Examination)</i>
Cultural Context ENVT 1064 Mark Mulville (PT1)	Economics 1 BUIL1100 Greg Bull (PT1) <i>(Examination)</i>
Studio 1 (Building Surveying Commercial Management) BUIL1094 Anthony Kelly (PT2)	Studio 2 (Building Surveying Commercial Management) BUIL1095 Anthony Kelly (PT2)
Management for the Built Environment BUIL0094 Simon Muturi (PT2)	Legal Studies LAW1081 Michael Greenslade (PT2) <i>(Examination)</i>
Year 2	
Term One	Term Two/Three
Building Rehabilitation (and Defects) BUIL1144 Carl Woodham (PT3) <i>(Examination)</i>	Rehabilitation Studies (with Structures) BUIL0010 Carl Woodham (PT3) <i>(Examination)</i>
Construction Contract Administration BUIL1099 Simon Muturi (PT3) <i>(Examination)</i>	Land Economics & Planning TOWN0001 Christopher Lewcock (PT3)
Studio 3 (Building Surveying Commercial Management) BUIL1096 Mark Michel (PT3)	Studio 4 (Building Surveying Commercial Management) BUIL1097 Carl Woodham (PT3)
Construction Technology & Design BUIL0006 Anthony Kelly (PT4)	Construction Technology & Maintenance BUIL0007 Anthony Kelly (PT4) <i>(Examination)</i>
Year 3	
Term One	Term Two/Three
Building Surveying Practice BUIL1107 Mark Michel (PT4) <i>(Examination)</i>	Project and Safety Risk Management in Construction BUIL1098 Karl Bunting (PT4)
Studio 5 (Building Surveying Commercial Management) BUIL1007 Carl Woodham (PT4)	Facilities Management BUIL 0100 Keith Jones (PT4) <i>(Examination)</i>
Project & Construction Management BUIL0097 Brian Cato (PT5) <i>(Examination)</i>	Studio 6 (Building Surveying Commercial Management) BUIL1008 Karl Bunting (PT5)
Dissertation BUIL0015 Greg Bull (PT5)	

**School of Architecture, Design &
Construction**

From Session 2011/2012

Programme Leader: Anthony Kelly

BSc (Hons) Design & Construction Management (P01308)

Year 1	
Term One	Term Two/Three
Sustainable Construction 1 BUIL1161 Mark Mulville (PT1)	Sustainable Construction 2 BUIL1162 Mark Mulville (PT1) <i>(Examination)</i>
Cultural Context ENVT1064 Mark Mulville (PT1)	Economics 1 BUIL1100 Greg Bull (PT1) <i>(Examination)</i>
Studio 1 (Design & Construction Management) BUIL1013 Anthony Kelly (PT2)	Studio 2 (Design & Construction Management) BUIL1014 Anthony Kelly (PT2)
Management for the Built Environment BUIL0094 Simon Muturi (PT2)	Legal Studies LAW1081 Michael Greenslade (PT2) <i>(Examination)</i>
Year 2	
Term One	Term Two/Three
Construction Management & Practice BUIL0005 Terry Phillips (PT3) <i>(Examination)</i>	Engineering Aspects of Design BUIL0008 Richard Cooper (PT3)
Construction Contract Administration BUIL1099 Simon Muturi (PT3) <i>(Examination)</i>	Land Economics and Planning TOWN0001 Christopher Lewcock
Studio 3 (Design & Construction Management) BUIL1015 Terry Phillips (PT3)	Studio 4 (Design & Construction Management) BUIL1016 Anthony Kelly
Construction Technology & Design BUIL0006 Anthony Kelly (PT4)	Construction Technology & Maintenance BUIL0007 Anthony Kelly (PT4) <i>(Examination)</i>
Year 3	
Term One	Term Two/Three
Studio 5 (Design & Construction Management) BUIL1111 Anthony Kelly (PT4)	Construction Contract Law BUIL0032 Michael Greenslade (PT4)
Construction Economics 1 BUIL0099 Yvonne Simpson (PT4) <i>(Examination)</i>	Project and Safety Risk Management in Construction BUIL1098 Karl Bunting (PT4)
Project & Construction Management BUIL0097 Brian Cato (PT5) <i>(Examination)</i>	Studio 6 (Design & Construction Management) BUIL1112 Anthony Kelly (PT5)
Dissertation BUIL0015 Greg Bull (PT5)	

School of Architecture, Design & Construction

From Session 2011/2012

Programme Leader: Julie Adeline

BSc (Hons) Quantity Surveying (Commercial Management) (P12511)

Year 1	
Term One	Term Two/Three
Sustainable Construction 1 BUIL 1161 Mark Mulville (PT1)	Sustainable Construction 2 BUIL1162 Mark Mulville (PT1) <i>(Examination)</i>
Cultural Context ENVT1064 Mark Mulville (PT1)	Economics 1 BUIL1100 Greg Bull (PT1) <i>(Examination)</i>
Studio 1 (Quantity Surveying Commercial Management) BUIL1109 Julie Adeline (PT2)	Studio 2 (Quantity Surveying Commercial Management) BUIL1110 Yvonne Simpson (PT2)
Management for the Built Environment BUIL0094 Simon Muturi (PT2)	Legal Studies LAW1081 Michael Greenslade (PT2) <i>(Examination)</i>
Year 2	
Term One	Term Two/Three
Measurement & Documentation 1 BUIL1101 Julie Adeline (PT3)	Measurement & Documentation 2 BUIL1102 Julie Adeline (PT3) <i>(Examination)</i>
Construction Contract Administration BUII1099 Simon Muturi (PT3) <i>(Examination)</i>	Land Economics and Planning TOWN0001 Christopher Lewcock
Studio 3 (Quantity Surveying Commercial Management) BUIL1060 Michael Greenslade (PT3)	Studio 4 (Quantity Surveying Commercial Management) BUIL1105 Michael Greenslade (PT3)
Construction Technology & Design BUIL0006 Anthony Kelly (PT4)	Construction Technology & Maintenance BUIL0007 Anthony Kelly (PT4) <i>(Examination)</i>
Year 3	
Term One	Term Two/Three
Construction Economics 1 BUIL0099 Yvonne Simpson (PT4) <i>(Examination)</i>	Construction Contract Law BUIL0032 Michael Greenslade (PT4)
Studio 5 (Quantity Surveying Commercial Management) BUIL1011 Yvonne Simpson (PT4)	Studio 6 (Quantity Surveying Commercial Management) BUIL1106 Julie Adeline (PT4)
Project & Construction Management BUIL0097 Brian Cato (PT5) <i>(Examination)</i>	Construction Economics 2 BUIL0013 Yvonne Simpson (PT5) <i>(Examination)</i>
Dissertation BUIL0015 Greg Bull (PT5)	

5. PERMITTED LENGTH OF TIME TO COMPLETE THE PROGRAMMES

Title	Mode	Normal Duration (Years)	Normal Maximum Period of Duration (years) (i)
BSc Building Surveying	FT	3	5
BSc (Hons) Design & Construction Management	PT	5	7
BSc(Hons) Quantity Surveying	SW	4	6

(i) Provided there is no substantial change to the programme during that period.

6. PROGRAMME SPECIFICATIONS

UNIVERSITY OF GREENWICH: PROGRAMME SPECIFICATION

Awarding Institution:	Teaching Institution:	Accredited by:	Final Award:	Programme Title/Team	UCAS Code:	QAA Benchmarking Gp(s):
University of Greenwich	University of Greenwich	Chartered Institute of Building	Bachelor of Science	BSc (Hons) Building Surveying (Commercial Management) Property & Construction Management	K230	Building & Surveying (2002)
Educational Aims of the Programme:						
<p>The programme has been designed to appeal to a wide range of applicants including those currently working in the field who are looking towards a higher qualification. The BSc Building Surveying programme leads to a degree that can be a route to full membership of the CIOB or to an AssocRICS qualification. For all participants, the programme aims to provide skills needed to work in the UK as effective, informed and autonomous professionals. Graduates from this programme will have developed analytical techniques, initiative and imagination to equip them to tackle novel and broadly defined problems requiring abstract reasoning and the application of both quantitative and qualitative judgments at an appropriate level.</p>						
The Programme provides opportunities for learners to achieve the following outcomes:				The following teaching, learning and assessment methods are used to enable learners to achieve and demonstrate these outcomes:		
<p>A Knowledge and understanding of: On successful completion of the Programme the student should have knowledge and understanding of:</p> <ul style="list-style-type: none"> • The use of analytical skills directed to the diagnosis and solution of maintenance/refurbishment problems by applying current knowledge and the use of appropriate materials and methods. • The importance and perception of risk and how it affects the human response to it. • The principles and techniques of project management and their application to the management of projects in the construction industry. • How to plan space for new uses within the restriction of an existing shell • How to apply knowledge and skills in a practical context at the appropriate level. 				<p>A Teaching and learning:</p> <ul style="list-style-type: none"> • Formal lectures • Seminar case studies • Projects and laboratory work • Directed reading. <p>A Assessment Methods:</p> <p>Individual and Group submissions, and formal examinations</p>		

<p>B Intellectual skills:</p> <ul style="list-style-type: none"> • To develop written and oral communications skills and write in a professional manner • The ability to reflect on the significance and inter-relationships of knowledge derived from the experience of the individual (on the basis of experience and institutionally focused and similar investigations) and knowledge derived through scholarship • The ability to formulate, on the basis of such reflection, original ideas and/or innovative proposals • The ability to identify and solve problems 	<p>B Teaching and learning: Will be a combination of Lecture, Studio and Seminars.</p> <ul style="list-style-type: none"> • Lectures are formal teaching sessions and are considered to be an affective way of establishing the framework for student centred learning • Studio comprises a variety of project orientated work and seminar presentations. • Seminars – provide an opportunity to develop an insight into a particular area of expertise and allow discussion. <p>B Assessment Methods:</p> <ul style="list-style-type: none"> • Projects – encompass case study and simulations. They may be carried out by individuals of small groups, and are designed to encourage critical investigation, and analysis in tackling assignments based on professional practice issues. • Laboratory work simulates current practice. • Dissertation – affords a student an opportunity to select a theme of relevance and to undertake an in-depth investigation into the subject. • Examinations - will be scenario based and will be developed from the lecture and seminar programme.
<p>C Subject Practical skills: The development of property specific skills relating to:</p> <ul style="list-style-type: none"> • Building technology and sustainability • Health and safety • Surveying and measurement • Graphical communication • Building surveying • Maintenance planning • Building rehabilitation and re-use 	<p>C Teaching and learning</p> <ol style="list-style-type: none"> 1. Formal lectures: to impart knowledge and provide students with a starting point from which to develop their studies; 2. seminars and tutorials: to provide a forum that focuses on a particular topic or subject area and promotes discussion; 3. studio: to allow students to work together on individual and group project work, engaging with members of staff as part of the process; 4. laboratory work e.g. for the testing of materials; 5. field based work e.g. for measured surveys and land surveying. <p>C Assessment Methods: Individual and group submissions; including seminar discussions and presentations; formal examinations.</p>

D Transferable/ key skills:

1. The ability to identify and solve problems;
2. The ability to communicate both orally and in writing;
3. The ability to integrate knowledge;
4. The ability to work as part of a team;
5. Interpersonal skills

D Teaching and learning

Through participation in Seminar and group work, and the successful completion of assignments and examinations.

D Assessment Methods:

Both formative and summative assessment takes place through the Programme, and forms part of each task.

UNIVERSITY OF GREENWICH: PROGRAMME SPECIFICATION

1. Awarding Institution/ Body: University of Greenwich	2. Teaching Institution: University of Greenwich	3. Accredited by: Chartered Institute of Building	4. Final Award: Bachelor of Science	5. Programme Title/ Team BSc (Hons) Design & Construction Management Property & Construction Management Department	6. UCAS Code: K252	7. QAA Benchmarking Gp(s): Building & Surveying (2002)
8. Educational Aims of the Programme:						
<p>The overall aim of the programme is to produce honours graduates with the intellectual skills, knowledge and understanding necessary for a professional role as a Chartered Building Surveyor and for research in construction and related disciplines. From dialogue with a number of leading construction organisations at the original conception of the programme in 1989, it became clear that its particular aims should be to.</p> <ol style="list-style-type: none"> 1. Foster interdisciplinary understanding; 2. develop a technical competence; 3. develop an international awareness; 4. stress the importance of communication; 5. develop managerial skill and a commercial awareness. 						
9. The programme provides opportunities for learners to achieve the following outcomes: [where relevant, provide reference to subject benchmarking statements]				10. The following teaching, learning and assessment methods are used to enable learners to achieve and demonstrate these outcomes:		
<p>A Knowledge and understanding of:</p> <ol style="list-style-type: none"> 1. The operation of the construction industry; 2. the development of managerial skills; 3. the development of solutions to technical problems; 4. the effective use of computer software for managerial and technical application; 5. the importance of developing a commercial outlook; 6. effective group working as a member of the construction team with a clear understanding of roles of all team members; 7. the global nature of construction and the development of an international perspective. 				<p>A Teaching and learning (generally):</p> <ol style="list-style-type: none"> 1. Formal lectures; 2. seminars and tutorials; 3. projects; 4. directed reading; 5. Laboratory and field based work. <p>A Assessment Methods: Individual and group submissions; including seminar discussions and presentations; formal examinations.</p>		

<p>B Intellectual skills:</p> <ol style="list-style-type: none"> 1. The ability to reflect on the significance and inter-relationships of knowledge derived from the experience of the individual (on the basis of experience and institutionally focused and similar investigations) and knowledge derived through scholarship; 2. the ability to formulate, on the basis of such reflection, original ideas and/or innovative proposals; 3. the ability to initiate change on the basis of such informed ideas and proposals; 4. the ability to do the above with a reasonable level of autonomy. This need not imply a lack of tutorial support but relates to the individual's ability to initiate, plan and organise their professional development; 5. the ability to identify and solve problems. 	<p>B Teaching and learning</p> <ol style="list-style-type: none"> 1. Formal lectures: to impart knowledge and provide students with a starting point from which to develop their studies; 2. seminars and tutorials: to provide a forum that focuses on a particular topic or subject area and promotes discussion; 3. studio: to allow students to work together on individual and group project work, engaging with members of staff as part of the process. <p>B Assessment Methods: Individual and group submissions; including seminar discussions and presentations; formal examinations.</p>
<p>C Subject Practical skills: The development of construction specific skills relating to:</p> <ol style="list-style-type: none"> 1. Construction technology and sustainability; 2. Health and safety; 3. Surveying and measurement; 4. Graphical communication; 5. Engineering design; 6. Contract administration and construction law; 7. Construction economics 	<p>C Teaching and learning</p> <ol style="list-style-type: none"> 1. Formal lectures: to impart knowledge and provide students with a starting point from which to develop their studies; 2. seminars and tutorials: to provide a forum that focuses on a particular topic or subject area and promotes discussion; 3. studio: to allow students to work together on individual and group project work, engaging with members of staff as part of the process; 4. laboratory work e.g. for the testing of materials; 5. field based work e.g. for measured surveys and land surveying. <p>C Assessment Methods: Individual and group submissions; including seminar discussions and presentations; formal examinations.</p>

D Transferable/ key skills:

1. The ability to communicate at various levels both orally and in writing;
2. the development of analytical skills and the ability to research, evaluate and synthesise information from various sources;
3. the ability to work as part of a team;
4. the development of interpersonal skills.

D Teaching and learning

1. Seminars and tutorials: to provide a forum that focuses on a particular topic or subject area and promotes discussion;
2. studio: to allow students to work together on individual and group project work, engaging with members of staff as part of the process.

D Assessment Methods:

Individual and group submissions; including seminar discussions and presentations; formal examinations.

UNIVERSITY OF GREENWICH: PROGRAMME SPECIFICATION

Awarding Institution: University of Greenwich	Teaching Institution: University of Greenwich	Accredited by: Chartered Institute of Building	Final Award: Bachelor of Science (BSc)	Programme Title/ Team BSc (Hons) Quantity Surveying (Commercial Management) Property & Construction Management Department	UCAS Code: K240	QAA Benchmarking Gp(s): Building & Surveying (2002)
Educational Aims of the Programme:						
<p>The construction industry requires highly trained quantity surveyors to work in the industry. This programme is vocational and aims to produce students equipped with the necessary skills to be able to enter a quantity surveying career. The programme contains a strong background in economics, law and management that develops these core competencies in relation to the construction industry – construction contract law, project and construction management and construction economics. The programme also contains the practical aspects necessary to become a practising quantity surveyor – measurement, pre contract duties, post contract duties, estimating, cost planning and cost control. Studio is used to bring much of these subjects to life with the focus on learning from real life projects.</p> <p>The aims and objectives of this Programme are:</p> <ul style="list-style-type: none"> • To develop students’ knowledge of management, law and economics in the context of the construction and property industries. • To develop students’ skills, techniques and abilities with regard to the role of the quantity surveyor. • To develop students’ abilities to generate solutions to construction problems related to the role of the quantity surveyor. 						
The Programme provides opportunities for learners to achieve the following outcomes:				The following teaching, learning and assessment methods are used to enable learners to achieve and demonstrate these outcomes:		
<p>Knowledge and understanding :</p> <p>On successful completion of the Programme the student should have knowledge and understanding:</p> <ul style="list-style-type: none"> • Of the purpose and role of the quantity surveyor within the industry. • Of management, law and economics in the context of the construction and property industries • Of economic principles to develop an understanding of the construction and property industries. • To select and apply appropriate quantity surveying theories, techniques and skills, adapt and apply these to construction. • To analyse and evaluate construction projects, firms and problems from a quantity surveying perspective • Of the implementation of appropriate project cost control systems 				<p>A Teaching and learning:</p> <ul style="list-style-type: none"> • Formal lectures • Seminars • Tutorials • Workshops • Projects • Directed reading. <p>A Assessment Methods:</p> <p>Individual and Group submissions, including seminar discussions and presentations, portfolio submissions.</p>		

B Intellectual skills:

- The ability to reflect on the significance and inter-relationships of knowledge derived from the experience of the individual (on the basis of experience and institutionally focused and similar investigations) and knowledge derived through scholarship
- The ability to formulate, on the basis of such reflection, original ideas and/or innovative proposals
- The ability to initiate change on the basis of such informed ideas and proposals. Such actions could relate to personal professional practice or a wider context.
- The ability to do the above with a reasonable level of autonomy. This need not imply a lack of Tutorial support but relates to the individuals ability to initiate, plan and organise their professional development.
- The ability to identify and solve problems

B Teaching and learning:

Will be a combination of Lecture, Studio and Seminars.

- Lectures are formal teaching sessions and are considered to be an effective way of establishing the framework for student centred learning
- Tutorials reinforce the framework of the lecture programme and develop learning and assessment strategy.
- Studio comprises a variety of project orientated work and seminar presentations.
- Seminars – provide an opportunity to develop an insight into a particular area of expertise and allow discussion.
- Workshops enable the practical tasks to be undertaken such as the measurement courses

B Assessment Methods:

- Projects – They may be carried out by individuals of small groups, and are designed to encourage critical investigation, analysis and evaluation in tackling professional practice problems.
- Portfolio's – a collection of a terms work for a particular course
- Presentations – develop, support and integrate the subject studies.
- Dissertation /Project– affords a student an opportunity to select a theme of relevance and to undertake an in-depth investigation into the subject.
- Examinations – to test the knowledge of the student in particular aspects of quantity surveying. These are scenario based to encompass the working environment.

<p>C Subject Practical skills:</p> <p>The development of construction specific skills relating to:</p> <ol style="list-style-type: none"> 1. Construction technology and sustainability; 2. Health and safety; 3. Quantity Surveying; 4. Measurement; 5. Project and Construction Management; 6. Contract administration and construction law; 7. Construction economics 	<p>C Teaching and learning</p> <ol style="list-style-type: none"> 1. Formal lectures: to impart knowledge and provide students with a starting point from which to develop their studies; 2. seminars and tutorials: to provide a forum that focuses on a particular topic or subject area and promotes discussion; 3. studio: to allow students to work together on individual and group project work, engaging with members of staff as part of the process; <p>C Assessment Methods: Individual and group submissions; including seminar discussions and presentations; formal examinations.</p>
<p>D Transferable/ key skills:</p> <ul style="list-style-type: none"> • The ability to identify and solve problems • The ability to integrate knowledge • The ability to work as part of a team • The ability to communicate on a number of levels • The ability to undertake research • Quantity surveying skills • Interpersonal Skills 	<p>D Teaching and learning Through participation in Seminar and group work, and the successful completion of assignments.</p> <p>D Assessment Methods: Both formative and summative assessment takes place through out the Programme, and forms part of each task.</p>

7. ASSESSMENT

7.1 Assessment Schedule

Programmes are made up of courses. The specification for each course can be viewed via Banner Web or via the university portal. Each course specification has a section on assessment. Please read this carefully. This will enable you to understand how each course is assessed, how many pieces of coursework you will submit or if there are any examinations for the course.

A detailed schedule of assessment with hand-in dates for coursework and dates for presentation should be given by the course co-ordinator at the start of each course. A schedule of assessment will also be posted up on the School of Architecture, Design and Construction Student Resources web page at: <http://www.gre.ac.uk/schools/arc/students>

7.2 General Assessment Regulations

Unless otherwise stated below, your programme will be assessed in accordance with the University's **Academic Regulations** (Academic Regulations for Taught Awards; Academic Regulations for Research Awards) which are available on the website of The Office of Student Affairs/Information and Publication.

7.2.1 Award and Classification for Honours

The Progression and Award Board has delegated authority from Academic Council for the conferment of awards. Before recommending a classification the Progression and Award Board needs to confirm that a student has met the requirements of the final stage.

The class of degree awarded will be based on consideration by the Progression and Award Board of the following models:

(a) **Aggregation and Weighting (Overall Grade Point Average)**

The award of the class of Honours will be on calculated on the grades obtained in stages 2 and 3 of a programme in the ratio of 25:75. Aggregation of grades to obtain the class of Honours will be based on averaging **the full spread of** grades in Stage 2 to obtain 25% of the final grade and averaging **the full spread of** grades in Stage 3 to obtain 75% of the final grade. *The following norms are accepted:*

70% or more	= First Class Honours
60-69%	= Upper Second Class Honours
50-59%	= Lower Second Class Honours
40-49%	= Third Class Honours

OR

(b) **Profiling:** *where a majority of the overall grades for each individual course have been attained in a higher classification band, this class of degree will be awarded. The criteria for this are that at least 150/240 credits must have been achieved in the higher classification band*

AND

the Overall Grade Point Average must be not less than one classification band below the eventual degree awarded

e.g. A First Class degree can be awarded to a student who obtains 70% or more for individual courses totalling 150 out of 240 credits AND whose Overall Grade Point Average does not fall below 60%.

OR

*(c) **Stage 3 Grade Point Average:** the Honours classification will be awarded on the Stage 3 Grade Point Average alone*

The discretion of the Progression and Award Board may be applied in the consideration of candidates at the borderline between classifications.

7.2.2 Compensation, progression, reassessment

Check the University Academic Regulations for further details on compensation, progression, reassessment, etc.

However, it is worth noting that under the regulations, students will not normally be permitted an opportunity to re-sit failed courses if they have not engaged in the summative assessment tasks on those courses. This means that if you fail to attend an examination or if you fail to submit an assessment element or fail to make a serious attempt at doing the work, you will not be allowed to retrieve the work at the summer re-sit (or equivalent for special programmes).

An exception to this is where students have been granted extenuation. In such cases, absence or poor performance in assessment will result in a decision of deferral.

7.3 Specific Regulations for the Programme(s) contained in this handbook

For each course:

- (a) where there is assessment by both written examination and by continuous assessment:
 - (i) a student needs to achieve a pass mark of 40% in both elements
 - (ii) the examination will normally account for 50% of the total assessment for the course
- (b) where there is continuous assessment only:
 - (i) a student needs to achieve an average aggregate pass mark of 40%.

Where continuous assessment work comprise 50% of the assessment (i.e. where there is also a written examination), group work will normally account for no more than 20% of the course assessment.

Where continuous assessment work comprises 100% of the assessment (i.e. where there is no written examination), group work will normally account for no more than 40% of the course assessment.

8. WHAT NEXT? CAREER/JOBS/FURTHER STUDIES

Career Opportunities

As mentioned previously, the programmes are fully accredited by the Chartered Institute of Building, (www.ciob.org.uk) the leading professional body worldwide for managers in construction. Student membership is available for students on accredited programmes such as this. All graduates of these programmes that are working in the construction industry are expected to strive towards corporate membership of the CIOB after a period of industrial training. The programmes thus provide the starting point for a career in construction management with local, national and international contractors and construction management consultancies. It should also be remembered that education does not end at graduation and should be a lifelong experience. Those with good honours degrees may want to consider further study at Masters or Doctorate level.

APPENDIX A

Course Specifications and Reading Lists

Course specifications/definitions:

For each course, we specify the number of credits, the aims of the course, its academic level, its learning outcomes, its indicative content and how it will be assessed (for instance: how many pieces of coursework, portfolio or exams). It is important that you become familiar with the definition for each course on your programme (see course specifications enclosed in this handbook).

Each course specification (or definition) may also be viewed on the University Banner Web via the university portal. You will need your user ID and PIN number. These will have been given to you at registration. To view the course specification for any approved course in the University: go through the student portal, click on “My Learning”; look at the Student Record (Banner) window; go to Authorised Course List via Course Information then search for the required Course Code for the current academic session, then click on the Course Code.

Reading lists:

You can access your tutor’s reading list, or the reading list relating to a particular course, via the university portal; then click on ‘Search the library catalogue’; then click on ‘View items on your reading list’. You may also be given reading lists with your course handouts.

BSc (Hons) Building Surveying (Commercial Management)/Design & Construction Management/Quantity Surveying (Commercial Management)

List of courses (alphabetical order by course title):

Building Rehabilitation (and Defects)	BUIL1144
Building Surveying Practice	BUIL1107
Construction Management and Practice	BUIL0005
Construction Contract Administration	BUIL1099
Construction Contract Law	BUIL0032
Construction Economics 1	BUIL0099
Construction Economics 2	BUIL0013
Construction Technology & Design	BUIL0006
Construction Technology & Maintenance	BUIL0007
Cultural Context	ENVT1064
Dissertation	BUIL0015
Economics 1	BUIL1100
Engineering Aspects of Design	BUIL0008
Facilities Management	BUIL0100
Land Economics and Planning	TOWN0001
Legal Studies	LAW1081
Management for the Built Environment	BUIL0094
Measurement and Documentation 1	BUIL1101
Measurement and Documentation 2	BUIL1102
Project and Construction Management	BUIL0097
Project & Safety Risk Management in Construction	BUIL1098
Rehabilitation Studies (with Structures)	BUIL0010
Studio 1 (Building Surveying)	BUIL1094
Studio 2 (Building Surveying)	BUIL1095
Studio 3 (Building Surveying)	BUIL1096
Studio 4 (Building Surveying)	BUIL1097
Studio 5 (Building Surveying)	BUIL1007
Studio 6 (Building Surveying)	BUIL1008
Studio 1 (Design & Construction Management)	BUIL1013
Studio 2 (Design & Construction Management)	BUIL1014
Studio 3 (Design & Construction Management)	BUIL1015
Studio 4 (Design & Construction Management)	BUIL1016
Studio 5 (Design & Construction Management)	BUIL1111
Studio 6 (Design & Construction Management)	BUIL1112
Studio 1 (Quantity Surveying)	BUIL1109
Studio 2 (Quantity Surveying)	BUIL1110
Studio 3 (Quantity Surveying)	BUIL1060
Studio 4 (Quantity Surveying)	BUIL1105
Studio 5 (Quantity Surveying)	BUIL1011
Studio 6 (Quantity Surveying)	BUIL1106
Sustainable Construction 1	BUIL1161
Sustainable Construction 2	BUIL1162

COURSE SPECIFICATION

Course Code:	BUIL 1144	School:	Architecture, Design and Construction
Course Title:	Building Rehabilitation and Defects		
Course Co-ordinator:	Carl Woodham		
Level: 5	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

Defects in buildings are notoriously difficult to identify and remedy. Too often, symptoms are treated without satisfactorily fixing the underlying cause. The importance of correct and thorough diagnoses and subsequent specification of economic and effective remedial work cannot be over-emphasised. Building pathology is a term increasingly being adopted to describe a holistic approach to the investigation and remediation of building failures. This core building surveying discipline requires a diverse range of skills encompassing knowledge of; the principals of construction, historic and contemporary construction techniques, the properties, performance and deterioration of materials and components and current legislative and user expectations.

This course extends and consolidates the learning from previous courses by applying current knowledge to maintenance and rehabilitation work. The course mainly concentrates on domestic and commercial buildings of traditional construction. The complimentary courses in Rehabilitation Studies (with structures) and Construction Technology at stage two and Building Surveying Practice at stage three will further extend this course.

Aims:

The course aims to;

- Consolidate and extend knowledge gained in previous courses
- Equip the student with the requisite knowledge and skills appropriate to maintenance and rehabilitation work
- Investigate the processes of deterioration in material performance and durability
- Develop an understanding of traditional building techniques
- Appraise alternative technical solutions and innovations in techniques and materials for the repair of existing buildings
- Develop an awareness of the key legislation affecting the repair and maintenance of existing buildings

Learning Outcomes:

At the end of the course the student should be able to;

- Work independently, research relevant material to support and extend knowledge of each topic of study
- Appraise the options for the repair and refurbishment of older existing building stock from a knowledge of material performance, durability and compatibility
- Evaluate and diagnose problems particular to the repair and maintenance of older buildings and apply current knowledge to facilitate their rehabilitation
- Explore and reflect on the constraints imposed by statutory regulation

Content:

General principles influencing rehabilitation work, focusing on the application of practical building maintenance techniques. Core areas covered will include;

- The development of site data collection and surveying techniques
- An overview and appraisal of traditional construction techniques and materials
- The introduction to performance of building materials
- The application of statutory controls affecting the maintenance and adaptation of existing buildings. These include; party wall, planning and building control legislation, health and safety and accessibility issues

Learning and Teaching Activities:

The course will be taught using a combination of formal lectures and tutorial sessions, reinforced by the studio three course which will run concurrently. Teaching sessions will primarily focus on traditional construction techniques, materials deterioration and building maintenance. Sessions will also encompass practical surveying techniques; building adaptation and basic structural design. Studio work will provide an opportunity for students to explore issues with the peer group through the use of case studies and projects.

Assessment Details:

Methods of assessment	Last item assessed	Grading mode	Weight	Minimum pass mark	Word length	Outline details
Assignment	✓		100%	40%	3,000	Portfolio of activity including essays and presentations as appropriate.

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
9781842190975	Burkinshaw, R. & Parrett, M.	2003	Diagnosing Damp	RICS Books, Coventry
9780750686228	Chudley, R. & Greeno, R.	2008	Building Construction Handbook, 7 th Edition	Elsevier Ltd, Oxford
9780750666671	Douglas, J.	2006	Building Adaptation	Butterworth-Heinemann, Oxford
9781842191927	Hollis, M.	2005	Surveying Buildings, 5 th Edition	RICS Books, Coventry
0632028130	Noy, E.	1992	Building Surveys & Reports	BSP Professional Books, Oxford
9780415452724	Polley, S.	2008	Understanding the Building Regulations	RICS Books, Coventry
9780230203624	Riley, M. &	2008	Construction Technology 1	Macmillan, Basingstoke

	Cotgrave, A.		House Construction, 2 nd Edition	
9781842192917	Rushton, T.	2007	Investigating Hazardous & Deleterious Building Materials	RICS Books, Coventry
0333457013	Seeley, I. H.	1989	Building Maintenance, 2 nd Edition	Macmillan Press Ltd, London

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1107	School:	Architecture, Design and Construction
Course Title:	Building Surveying Practice		
Course Co-ordinator:	Mark Michel		
Level: 6	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

The management of real property is subject to an ever increasing weight of diverse and sophisticated legislation. Consequentially, building surveyors are increasingly expected to be experts in a range of complex and interrelated legal requirements and industry best practice. Coupled with this is a growing demand by building owners and users for all property to provide some form of financial return, be it a commercial estate or single family home. Clients often perceive that such statutory controls are in direct conflict with their immediate needs. As a consequence, property professionals must not only understand the variety of current professional activities, but also their duty to maintain professional standards when undertaking such work.

This course extends and consolidates the learning from previous courses by further examining and then reflecting on the effect of legislation on rehabilitation work and the management of the built environment. The course primarily focuses upon core professional building surveying activities, covering a range of statutory controls and how these might influence the refurbishment and maintenance of existing property, or conflict with client demands. Students will be encouraged to reflect upon stakeholder relationships and how differing perspectives might alter individual views.

Aims:

The course aims to;

- Build on the knowledge acquired in previous courses as a foundation for the development of appropriate professional surveying skills
- Equip the student with the requisite knowledge and skills appropriate to rehabilitation work
- Reflect upon how key legislation might affect the rehabilitation of existing sites
- Study the potential for the conservation and reuse of existing building stock
- Examine the role and impact of market forces, legislation and government policy with respect to existing building stock
- Reinforce the philosophies of conservation, preservation and sustainability as applied to the built environment

Learning Outcomes:

At the end of the course the student should be able to;

- Work independently and research relevant material to support and extend knowledge of each topic of study
- Investigate and critically appraise the concept of the rehabilitation of existing sites and assess the factors affecting feasibility
- Critically examine the constraints imposed by statutory regulation
- Apply relevant legislation and building standards to rehabilitation schemes
- Investigate the inter-relationship of a broad range of design issues influencing the rehabilitation of a variety of historically important buildings
- Be able to identify the likely needs of building users and formulate innovative proposals so as to satisfy both current and future user needs within physical and legislative constraints

- Be able to analyse and diagnose problems particular to the rehabilitation of older buildings and apply current knowledge to facilitate their rehabilitation

Content:

General principles influencing rehabilitation work, focussing on the application of statutory controls affecting the maintenance, adaptation and bring back into use of existing buildings. These include but shall not be limited to; town and country planning, building control and party wall legislation, health and safety and accessibility issues. Core areas covered will include;

- Building obsolescence
- Building conservation; theory, process and practice (listings, grants & legislation etc.)
- Adaptive reuse of buildings (agricultural, industrial, ecclesiastic, commercial and domestic)
- Legislative conflicts in adaptation
- Space planning and design principles of rehabilitation
- Viability and option appraisal of refurbishment schemes

Learning and Teaching Activities:

The course will be taught using a combination of formal lectures and tutorial sessions, reinforced by the studio five course which will run concurrently. Studio work will provide an opportunity for students to explore issues with the peer group through the use of case studies and projects.

Throughout the course, theoretical perspectives will be explored and their relevance to current professional practice examined. Teaching sessions will primarily focus on the critical examination of current issues affecting the sustainable use of the existing built environment within a building surveying context. Students will be required to review and evaluate legislation introduced in previous courses, reflecting upon the interaction between varied and differing areas of law. The course aims to promote an awareness of the different perspectives that will inevitably exist between the varied stakeholders in the built environment. Students will be encouraged to synthesize relevant material so as to demonstrate such an appreciation of these issues through reflective study.

Assessment Details:

Methods of assessment	Last item assessed	Grading mode	Weight	Minimum pass mark	Word length	Outline details
Assignment			50%	40%	1500	Portfolio of activity including essays and presentations as appropriate.
Examination	✓		50%	40%	3hrs	3hr examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
9781842191521	Hannaford, S. & Stephens, J.	2004	Case in Point - Dilapidations	RICS Books, Coventry
9781842191521		2004	Case in Point - Party Walls	RICS Books,

	Hannaford, S. & Stephens, J.			Coventry
0728201043	Hollis, M.	1988	Surveying for Dilapidations	Leaf Coppin Ltd for Estates Gazette Ltd
9780727734969	Joyce, R.	2007	The CDM Regulations 2007 Explained	Thomas Telford Publications Ltd
9780415452724	Polley, S.	2008	Understanding the Building Regulations	RICS Books, Coventry
9780955845406	<i>Pyramus & Thisbe Club</i>	2008	The Party Wall Act Explained (The Green Book), 2 nd Edition	<i>Pyramus and Thisbe Club, Co Down</i>

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0005	School:	Architecture, Design and Construction
Course Title:	Construction Management and Practice		
Course Co-ordinator:	Terry Phillips	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Major construction projects are now so complex that large numbers of different organisations are involved in their creation. These organisations need to be co-ordinated so that, at the planning stage, the designers communicate relevant information to each other and, at the construction stage, contractors do not interfere with each other's work. Materials and construction equipment must also be delivered to the site at the right place and at the right time. All this takes considerable management skill and effort. There is thus a great need within the construction industry for graduates with management as well as technical expertise.

This course builds on the management theories covered at Level I and introduces management practice in the form of operations research, measurement and basic contract procedures.

Aims:

- To develop the student's knowledge of management theory from the first year work to a level suitable for the construction professional and apply it to construction related activities.
- To introduce contract planning including financial analysis and control, measurement and tendering to equip the student particularly the student going on to sandwich training, with an appreciation of these aspects of construction management and practice.

Learning Outcomes:

At the end of this course the student will be able to:

- appreciate the theories and principles of management and recognise their application to firms in the construction industry;
- understand the principles of measurement related to simple construction works;
- understand the principles of construction management relating to tendering procedures and claims resolution;
- be familiar with the roles of the parties to a construction contract;
- appreciate the various standard forms of contract and their appropriate application;
- be familiar with the means by which contracts are obtained, organised and controlled;
- appreciate the safety obligations of the parties to a contract during construction;
- understand basic techniques of project planning and control;
- appreciate the role of resource allocation techniques in the control of large projects;

- demonstrate an understanding of selected financial performance indicators and the use of financial techniques in project evaluation and control.

Indicative Content:

Organisation structure, policy and objectives. Corporate strategy. Financial management. Co-ordination of service departments. Concept of marketing and its significance for construction organisations. Training and recruitment. Concepts of total quality management.

Project planning and control: bar charts and networks; critical path analysis, line of balance, resource allocation and levelling; linear programming, simulation. Measurement techniques, use of Standard Method of Measurement. Method related charges. Valuation of work in progress.

Payments: valuations; retention; liquidated damages; late payment. Delays: extension of time; costs and claims. Insurance: bond; damage to persons, property, works. Variations: instructions; payment; dayworks. Prime cost and provisional sums. Unforeseen conditions. Delays and arbitration. Specifications, clauses for materials, workmanship and methods.

Role of the client, contractor, engineer and project manager. Contract documents: drawings specifications; bills of quantities; performance specifications. Types of contracts: lump sum; measured; schedule of rates; jobbing works; emergency works. Conditions of contract. Tendering and evaluation of tenders. Claims.

Main Learning and Teaching Activities:

Learning and teaching will be by a combination of lectures and studio. Studio work will comprise project work including individual and group presentations.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		3000	50%	40%	Portfolio
Written examination	✓	N/A	50%	40%	2 hour formal examination

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0632041420	Fryer	1997	The Practice of Construction Management	Blackwell Science
0750605103	Calvert	1995	Introduction to Building Management 6th Ed	Butterworth-Heinemann
0632038624	Oxley & Poskitt	1996	Management Techniques Applied to the Construction Industry	Wiley-Blackwell
			ICE Conditions of Contract	Thomas Telford
0582102987	Keith Potts	1995	Major Construction Works - Contractual and Financial Management	Longman

COURSE SPECIFICATION

Course Code:	BUIL 1099	School:	Architecture, Design and Construction
Course Title:	Construction Contract Administration		
Course Co-ordinator:	Simon Muturi	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Those who pursue careers in construction will require a working knowledge of the terms and key components of property and construction law. This course explores the essential areas of law that practitioners will commonly encounter as they progress through along their career paths.

Aims:

- To develop an understanding of the nature and types of construction contract and to examine the legal responsibilities of the various parties involved in the design and construction process.
- To provide an understanding of the law of arbitration with reference to the construction industry.
- To outline the notions of land tenure and estates and the nature of land ownership in England and Wales including the process of land transfer under the registered system of conveyancing.
- To explore the main rights affecting the acquisition and use of land.
- To develop an understanding of the concept of a lease and distinguish between the legal consequences of a lease and a licence.

Learning Outcomes:

At the end of the course the student will be able to:

- Show an understanding of the nature of a construction contract.
- Demonstrate a working knowledge of the standard forms of construction contract and their application to the construction industry.
- Show an understanding of the liability of sub-contractors, architects, engineers and surveyors. Explain the arbitration procedures and procedures for Alternative Dispute Resolution in relation to the construction industry.
- Demonstrate fundamental knowledge of the law of property ownership and the various rights affecting land users.
- Show an understanding of the process of land transfer in England and Wales under the registered system of conveyancing.

Content:

The course will explore the principles of contract law in the context of the parties in a construction project and the extent of privity of contract. The formation of the contract will be explored, including

tendering, letters of intent, acceptance and the terms of the building contract. The terms implied by the Construction Act 1997 will also be considered. Standard forms of contract such as the JCT and ICE forms of contract will be evaluated. The course will also examine tort, specifically negligence, duty of care, breach of duty, causation, remoteness of damage, vicarious liability. Tortious aspects related to the operation of construction sites will be explored, specifically nuisance and occupiers' liability. The interaction between contract and tort will be examined. The Defective Premises Act 1972 will be assessed. The liability of builders, surveyors, architect and engineers will also be reviewed. The course will explore construction statutes and safety. In this context, the building regulations will be examined as will general duties under the Health and Safety at work Act and the CDM Regulations. The impact of European Directive will also be considered. Alternative methods of dispute resolution will be explored. This will include arbitration and adjudication with particular reference to statutory provisions. The course will examine estates and interests in land and the right affecting the land users. The latter will include licences, easements, profits and restrictive covenants. The process of land transfer and the registered system of land conveyancing will be covered. Students will examine real legal documents in order to familiarise them with situations that they may encounter in their future profession.

Learning and Teaching Activities:

The course will be delivered by lectures supplemented by tutorials which will support the development of valid coursework solutions.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1,750	50%	40%	Portfolio of activity including essays and presentations as appropriate
Written examination	✓	N/A	50%	40%	2 hour formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
9780230521650	Adriaanse, J.	2007	Construction Contract Law 2e: The Essentials	Palgrave
0-13-129827-5	Ashworth, A.	2005	Contractual Procedures in the Construction Industry, 5 th Edition	Prentice Hall
978-1-4058-4671-4	Elliot, C. and Quinn, F.	2007	Contract Law, 6 th Edition	Longman

07506-6833-4	Griffiths, P. , Birchall, S. and Ramus, J. W.	2006	Contract Practice for Surveyors, 4 th Edition	A Butterworth- Heinemann Title
978-0-415- 39368-3	Murdoch, J. and Hughes, W.	2007	Construction Contracts: Law and Management, 4 th Edition	Taylor & Francis
University Website	University Website	2004	Construction Information Service	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0032	School:	Architecture, Design and Construction
Course Title:	Construction Contract Law		
Course Co-ordinator:	Michael Greenslade		
Level: 6	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

To further develop the general legal framework delivered in the second stage of the programmes and apply these concepts to professional practice.

Aims:

- To further develop an understanding of the principal standard forms of construction contract used in the United Kingdom.
- To further develop an understanding of the way in which these standard forms of contract can be used to deal with issues of liability and conflict within the construction industry.
- To extend knowledge of both the principles and application of these standard forms of contract in so far as they are applicable to subcontractors and suppliers and others directly involved with the law relating to construction contracts.

Learning Outcomes:

On completion of the course the student will be able to:

- Understand and apply procedures relating to a variety of construction contract forms;
- Anticipate, identify and analyze the key issues involved with the resolution of contractual issues.

Content:

The standard forms of construction contract in context. A detailed review of the appropriate JCT 2005 forms.

Procurement and the construction contract, risk, essentials of a contract, formation of a contract, subcontracts, obligations of the contractor, position of consultants, payment, dispute resolution, compensation.

Learning and Teaching Activities:

A lecture programme will introduce basic theories and concepts and provide a forum for the practical demonstration of the techniques. A studio programme will develop students understanding and depth of knowledge of the basic theories and concepts introduced in the lecture programme.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100	40%	Portfolio of activity including essays and presentations as appropriate

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0415413850	Chappell, D.	2007	Understanding JCT Standard Building Contracts, 8 th Edition	Taylor & Francis
1842192353	Mills, R	2005	Construction Adjudication	RICS Books
9780415393690	Murdoch, J.	2007	Construction Contracts - Law and Management	Spon Press
9781847037671	Uff, J.	2009	Construction Law, 10 th Edition	Sweet & Maxwell

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0099	School:	Architecture, Design and Construction
Course Title:	Construction Economics 1		
Course Co-ordinator:	Yvonne Simpson		
Level: 6	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

The topic area of construction economics is an established core function for the quantity surveyor. Although quantity surveyors can be involved in a wide variety of activities, this subject area is fundamental to the core skills and competencies of the profession.

Aims:

- Investigate the principles and application of pre-contract estimating, cost planning and cost control techniques.
- Evaluate different cost data sources.
- Evaluate the economic factors influencing construction costs, building life and performance.

Learning Outcomes:

At the end of the course the student will be able to:

- Investigate and critically appraise the fundamental aspects of construction economics.
- Apply appropriate estimating and cost planning techniques to a full range of pre-contract situations.
- Monitor, review and evaluate the effects of design and market variations and apply standard costing techniques such as the B.C.I.S. database.
- Analyse and evaluate economic factors influencing building cost, life and performance.

Content:

The focus of this course is on project cost control and forecasting. The content includes the development process and stages of construction projects with particular reference to the cost control process and value in construction. Budget estimates, elemental cost planning, sources of cost data, elemental cost analyses, BCIS, cost implications of design variables, approximate estimates, cost planning of building services and cost control procedures for different procurement methods.

Learning and Teaching Activities:

A lecture programme will introduce basic theories and concepts and provide a forum for the demonstration and application of the techniques. A studio programme will develop students understanding and depth of knowledge and ability to use the principles and techniques' introduced in the lecture programme.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1500	50%	40%	Portfolio of activity including essays and presentations as appropriate
Exam	✓	N/A	50%	40%	3 Hours formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
013145322 X	Ashworth, A.	2006	Cost Studies of Buildings, 5 th Edition	Longman Higher Education
0-333-62111-5	Cooke, A. J.	1996	Economics and Construction	Macmillan
0632042516	Ferry, J. et al	2008	Cost Planning of Buildings, 7 th Edition	Blackwell Science
0-419-19200-X	Morton, R. and Jaggar, D.	1995	Design and the Economics of Building	E. and F.N. Spon

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0013	School:	Architecture, Design and Construction
Course Title:	Construction Economics 2		
Course Co-ordinator:	Yvonne Simpson		
Level: 6	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

To establish a framework that enables the student to investigate and discuss the tools and systems in place for economic evaluation within the construction industry.

Aims:

- Review the principles of cost management systems.
- Identify within the context of costs management the effective and efficient operations of an organisation.
- Assess the impact these systems have upon the decision making processes within an organisation.
- Communicate in an informed manner to identified stakeholders the effectiveness of these systems.

Learning Outcomes:

At the end of the course the student will be able to:

- Critically appraise the relationship of the business cycle to the construction industry.
- Critically appraise the use of systems designed to deliver value for money.
- Critically analyse the use of cost modelling and assess its role in improving cost forecasting.
- Relate the role of cost information systems within the decision making process.
- Demonstrate an enhanced awareness of bidding theory and strategy.

Content:

Estimating accuracy and its improvements.

Cost modelling techniques alternative paradigms, black box, simulation, deterministic, realistic, stochastic, product, process, statistical models.

Capital Allowances.

Business Cycle.

Whole Life Cycle Costing.

Decision making techniques – DDSs and Expert systems.

Bidding strategy and theory.

Key performance indicators and benchmarking.

Learning and Teaching Activities:

Allocated contact time for the module is two hours per week over a term. The two hours split between formal lecture sessions, seminars or tutorials. Within the formal lecture slots there will be ample opportunity for students to engage in question and answer sessions and discussions on relevant topics. The tutorials will be based around the current research found in the field, particularly published papers.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1500	50%	40%	Portfolio of activity including essays and presentations as appropriate
Exam	✓	N/A	50%	40%	3 hrs formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0273728954	Ashworth, A.	2010	Cost Studies of Buildings, 5 th Edition	Prentice Hall
0632042516	Ferry, J. et al	1999	Cost Planning of Buildings	Wiley Blackwell
0632040289	Flanagan, R. and Tate, B.	1997	Cost Control in Building Design	Wiley Blackwell
0415462290	Myers, D.	2008	Construction Economics	Taylor & Francis
	RICS	1969	Standard Form of Cost Analysis	RICS
0333638352	Seeley, I. H.	1995	Building Economics	Palgrave Macmillan

Periodical References:

RICS Business, RICS, London
 Construction Manager, CIOB, Ascot
 Building Magazine, Builder Group, London
 Construction Management and Economics
 International Journal of Project Management

COURSE SPECIFICATION

Course Code:	BUIL 0006	School:	Architecture, Design and Construction
Course Title:	CONSTRUCTION TECHNOLOGY & DESIGN		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

This course will further develop the knowledge from earlier courses by considering more complex structures, namely high rise and long span buildings for domestic, commercial and industrial uses. It will explore the range of materials, construction techniques and forms suitable for such structures.

Aims:

- To provide a sound basis for the evaluation of the performance requirements of high rise and long span buildings.
- To provide an appreciation of the site investigation process from information gathering and desk top study to physical investigation.
- To provide an appreciation of technical, statutory, scientific, economic, commercial and other information, and its application to construction, together with a detailed knowledge of its sources.
- To appreciate the key factors to consider when selecting an appropriate high-rise structural frame, long span structure, basement construction and building envelope.
- To instil an appreciation of the methods of connecting buildings to the local sewerage and utilities infrastructure.
- To understand health and safety considerations and relevant legislation.
- To instil an awareness of the building design process and the methods of developing a design brief into a buildable solution.

Learning Outcomes:

At the end of the course, the student will be able to:

- Recognise the relationship between user, performance and the built environment.
- Understand the site investigation process and the influence of ground conditions on substructure and superstructure design and construction.
- Understand the performance requirements of high-rise and long span buildings and be able to identify alternative technical solutions and specify satisfactory forms to match performance requirements.
- Understand the construction processes and sequences for different constructional forms, their elements and component parts.

- Appreciate the selection process for the building envelope to provide a stable structure against wind effects, have effective thermal, aural and daylighting capability whilst providing adequate fire protection.
- Understand the methods of and constraints associated with connecting buildings to local sewerage and utilities infrastructure.
- Identify and understand the applicable statutory regulations including Construction, Design and Management legislation and appreciate their implications upon construction.
- Relate the aesthetic appearance, shape, size and use of commercial high rise, long span and frame buildings to their internal layout and interior design.

Indicative Content:

This course will examine the construction of high-rise buildings with basements and large span structures. It will develop an understanding of:

Site investigation, Basement construction and tanking systems, External envelope, cladding, glazing systems, curtain walling, atria and roof lights., Roofing structure and coverings, Below ground drainage, The provision of mains and utilities, Passive fire protection, Space planning and the design of internal layout

This course examines the appropriate technology alongside issues such as quality control and health and safety.

Main Learning and Teaching Activities:

The teaching and learning will be by a combination of formal lectures and studio. Studio will comprise project work, discussion groups, seminars and guest lectures.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0750608994	Alder, D	1999	Metric Handbook: planning and design data	Architectural Press, Oxford
0415383870	Brookes, A J	2007	Cladding of Buildings	Taylor & Francis
0750686227	Chudley, R & Greeno, R	2008	Building Construction Handbook, 6th edition	Butterworth-Heinemann
0582218659	Foster J S & Harrington R	1994	Mitchell's Structure and Fabric Part 2, 5 th edition	Prentice Hall
0-582-40447-9	Foster, J S	2001	Mitchell's Structure and Fabric Part 1, 6 th edition	Pearson
0582009715	Reid, E	1988	Understanding Buildings	Longman
0419242708	Stollard, P & Abrahams, J	1999	Fire from First Principles (3rd ed.)	Taylor & Francis

COURSE SPECIFICATION

Course Code:	BUIL 0007	School:	Architecture, Design and Construction
Course Title:	CONSTRUCTION TECHNOLOGY & MAINTENANCE		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

This course's content differs from that covered in Construction Technology & Design by considering the internal environment of buildings. The maintenance of a satisfactory internal environment is largely dependent on the correct functioning of a building's passive and active elements. These are its fabric and finishes (passive) and its mechanical and electrical services (active). This course examines the performance requirements of each and the options available to fulfil these. The often overlooked activity of Building Maintenance ensures that a pleasant internal environment is maintained over a building's design life. So, without considering the technology, economics and management of building maintenance, the course would be incomplete.

Aims:

- To provide an appreciation of the importance of building services to the functioning of a building.
- To provide an understanding of the function, design, operation and application of each building service.
- To provide an understanding of the materials and components of building services.
- To provide an understanding of the implications of building services system upon the design, construction and performance of a building.
- To generate an understanding of the principles of maintenance, and to enable the application of those principles to address and resolve potential building defects in a cost effective manner, at the design and construction phases.

Learning Outcomes:

At the end of this course the student will be able to:

- Recognise the relationship between user, performance and the built environment.
- Identify alternative technical solutions and specify satisfactory systems and techniques to match performance requirements.
- Identify and understand the applicable statutory regulations and appreciate their implications upon construction including internal components and layout.
- Understand and apply the concepts of fire protection both passive and active and their application to the design, layout and construction of high rise, long span and frame buildings.
- Understand the principles of function, design, operation, application and maintenance of electrical, mechanical, gas, water, heating, ventilation, drainage and fire protection systems that service buildings under consideration.

- Understand the principles of maintenance and the whole life maintenance requirements of buildings.

Indicative Content:

This course will examine the following aspects of both tall and long-span buildings: Heating, ventilating and air conditioning systems, Vertical transportation – lifts and escalators, Hot and cold water supply and distribution., Electrical distribution – mains power and lighting, Above ground drainage, Active fire protection and fire fighting systems (alarms, sprinklers, risers etc), Security management systems (intruder detection, CCTV, physical security measures), Lightning protection systems, ICT infrastructure systems, Practical Maintenance of the building fabric and services, Maintenance strategies and economics.

Main Learning and Teaching Activities:

The subject will be taught by a combination of lectures and studio. Studio will comprise project work, seminars, discussion groups and guest lectures.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment 1		1500	50%	40%	Portfolio
Examination	✓		50%	40%	3 hour formal examination

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
058221 257X	Blanc, A	1994	Mitchell's Internal Components	Longman
058225 8774	Dean, Y,	1996	Mitchell's Finishes 4th ed.	Longman
075064 6926	Hall, F & Greeno, R	2001	Building Services Handbook	Architectural Press
033348 9934	Lee, HS & Yuen, G	1993	Building Maintenance Technology	Palgrave Macmillan
058221 2553	McEvoy, M	1994	Mitchell's External Components	Longman
058200 9715	Reid, E	1998	Understanding Buildings	Longman
041924 2708	Stollard, P & Abrahams, J	1999	Fire from First Principles (3rd ed.)	Taylor & Francis

COURSE SPECIFICATION

Course Code:	ENVT1064	School:	Architecture, Design and Construction
Course Title:	Cultural Context		
Course Co-ordinator:	Mark Mulville		
Level: 4	Credit: 15	Department:	Property & Construction Management

Aims:

- To examine the relationship between the Built Environment and Society.
- To examine the challenges faced by those responsible for developing, constructing and operating the modern built environment.
- To examine the role of innovation to the construction industry.

Learning Outcomes:

At the end of the course the student will be able to:

- Demonstrate an ability to interpret and evaluate the historical and contemporary built environment and the theories supporting it, in terms of human well-being, the welfare of future generations, the natural world, the consideration of a sustainable environment, the process of assembly and operation.
- Explain the roles of the various stakeholders to the built environment and the challenges that they face in achieving sustainable development.
- Appreciate the role of construction in the modern built environment and be aware of some of the latest methods of construction.
- Process information and extend individual learning, using verbal and written communication methods and appropriate media.
- Work in a group to undertake research and present findings, listening and critically responding to the views of others, while managing and appraising their own working practices..

Content:

The course will provide a background for current issues concerning quality in the built environment, with reference to the development of the modern built environment.

Learning and Teaching Activities:

Lectures will examine the development, construction and operational requirements of the built environment through appropriate case studies, drawing together the societal issues and examining their impact on a sustainable built environment.

Assessment Details:

Methods of Assessment	LAST item of assessment	Word length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100	40%	Portfolio of activity including essays and presentations as appropriate

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

There are no set books for the course but students are encouraged to read items from the list below:

ISBN Number	Author	Date	Title	Publisher
1901970876	Bruges, J.	2008	The Big Earth Book	Alastair Sawday Publishing
0470852844	Girardet, A.	2004	Cities People Planet	John Wiley & Sons
1594865671	Gore, A.	2006	An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It	Rodale Press
1900322188	Hopkins, R.	2008	The Transition Handbook	Green Books
0571179932	Rogers, R.	1997	Cities for a Small Planet	Faber and Faber

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code: BUIL 0015
Course Title: DISSERTATION
Level: 6
Department: Property & Construction Management

School: Architecture, Design & Construction
Credit: 30
Course Coordinator: Dr Gregory Bull
Pre-requisites: None

Introduction and Rationale:

The dissertation represents the culmination of each individual student's development through the learning undertaken on their respective programme. It provides an opportunity for students to demonstrate their ability to undertake a substantial study in order to investigate a subject, issue, or problem and produce a definitive usable outcome.

The dissertation will require students to demonstrate their analytical, deductive, investigative, critical and written communication skills in relation to their chosen subject, issue or problem. The dissertation will require students to use the wide range of skills that they have developed during the programme, such as enterprise, initiative and resourcefulness; self-motivation and time management; synthesis and integration of complex data and information, together with the organisational skills required to produce a substantive piece of written work.

Aims:

The aims of this Course are to:

- provide students with an opportunity to carry out a substantial critical, in-depth study in a subject area of particular interest to the student;
- introduce students to investigation, research, analysis, synthesis and other techniques to gather, process and present usable information.
- enable students to develop a particular area of expertise for use in their future professional career.

Learning Outcomes:

Upon completion of this course, students will be able to:

- demonstrate initiative and discrimination in the sourcing and selection of material.
- undertake critical reading skills and critical analysis of material.
- integrate data and knowledge and synthesise complex information.
- organise and structure a substantial piece of work.
- produce a clearly defined and usable outcome within a specified timescale.
- demonstrate a level of expert knowledge in a particular subject or issue.
- manage their own efforts effectively.

At the end of the successful completion of the course the student will have completed a submission in accordance with the course and thus fulfilled the aims outlined above.

Indicative Content:

N/A

Learning and Teaching Activities:

Introductory lectures/seminars.

Consultations with personal dissertation supervisor.

Assessment Criteria:

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| 1. End of term visual/verbal presentation | 5% |
| 2. Clear statement of purpose, objectives and sub-objectives for the study. | 5% |
| 3. Logical and workable method to achieve the stated objectives. | 5% |
| 4. Scope, depth and quality of the information, data and material used. | 30% |
| 5. Quality of the contents/findings and expertise demonstrated in the study. | 30% |
| 6. Extent to which the stated objectives have been achieved | 10% |
| 7. Quality of the structure, presentation and usability of the study | 10% |
| 8. Process and preparation | 5% |

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	8000 – 10000	100%	40%	Dissertation

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0335-215041	Bell, J.	2005	Doing Your Research Project: A Guide for First-Time Researchers in Education, Health and Social Science, 4 th Edition	Open University Press
9781405161107	Knight, A. and Ruddock, L.	2008	Advanced Research Methods in the Built Environment	Wiley Blackwell
0582803128	Lindsay, D.	1996	A Guide to Scientific Writing: Manual for Students and Research Workers	Longman
0750682647	Naoum,	2006	Dissertation Research and Writing for	Butterworth-

	S.		Construction Students	Heinemann
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In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1100	School:	Architecture, Design and Construction
Course Title:	Economics 1		
Course Co-ordinator:	Dr. Gregory Bull	Department:	Property & Construction Management
Level: 4	Credit: 15		

Aims:

Property professionals in both the private and public sector provide advice across a range of issues including construction, development planning design funding and project managers as well as many others. In order to give appropriate advice it is necessary to consider the impact of economics on advice given, in a cogent and reasoned form.

Students should also develop an understanding of the economic context in which they operate and be able to understand how this affects the business environment in which they work.

The course aims to:

- Introduce principles of government economic policy and identify how they influence the UK economy;
- Examine the principles of market supply and demand, business cycles with particular reference to property and labour markets;
- Explore the relationship between the construction industry and the economy on both micro and macro levels.

Learning Outcomes:

At the end of the course, the student will:

- Understand the relationship between construction and the wider economy and how changes in the latter affect the former
- Be conversant with basic economic principles
- Be able to use an economic vocabulary to describe economic processes in relation to construction and development
- Apply a proper format for referencing work

Content:

The content will include an explanation of the underlying factors causing changes in market demand and supply and shifts in the elasticity of supply, price mechanisms and business cycles. . Particular emphasis will also be placed on property markets and government policy, with particular regard to economic and fiscal policy.

Learning and Teaching Activities:

Learning and teaching will be via lectures and discussions, set readings and individual consultations.

Assessment Details:

Methods of Assessment	LAST item of assessment	Word length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1250	50	40%	Portfolio of activity including essays and presentations as appropriate
Examination	✓		50	40%	Formal 2 hour examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0077121880	Begg, D.	2009	Foundations of Economics, 4 th Edition	McGraw - Hill Higher Education
0333621115	Cooke, A.	1996	Economics and Construction (Building and Surveying)	Palgrave Macmillan
0273708228	Griffiths, A. & Wall, S.	2007	Applied Economics	Financial Times/Prentice Hall
0419182608	Manser, J. E.	1994	Economics: A Foundation Course for Built Environment Studies	Taylor and Francis
1408241560	Sloman, J.	2009	Essentials of Economics: And My Econ Lab Access Card	Financial Times/Prentice Hall

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0008	School:	Architecture, Design and Construction
Course Title:	Engineering Aspects of Design 1		
Course Co-ordinator:	Richard Cooper		
Level: 5	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

In order for students to be able to advise on and discuss technical issues and to be able to undertake the level III courses to the programme, students must have a thorough grasp of the fundamentals. This course covers the basic technical principals required for this purpose.

Aims:

- To equip the student with knowledge of the fundamental concepts of theory of structures, fluids, design of services and structural design. The relationships of these subject areas to each other and to other courses of the programme will be emphasised.

Learning Outcomes:

At the end of the course the student will be able to:

- Identify structural components and evaluate forces in statically determinate trusses
- Draw shear force, bending moment diagrams for statically determinate beams.
- Understand the concept of permissible stress and limit state and be able to design simple structural elements in timber, steel, reinforced concrete and masonry to the relevant British Standard.
- Understand the physical properties of fluids and calculate forces due to static fluids such as water and wet concrete.
- Understand fluid motion and flow resistance in pipes and ducts.
- Understand qualitatively the principles of boundary layers, flow separation and drag forces on bodies, flow patterns round structures and wind loading.
- Understand the principles of noise measurement and room acoustics and make decisions as to the most appropriate method of obtaining a satisfactory acoustics environment.
- Make decisions as to the most appropriate heating method for a particular property and carry out heat flow calculations for sizing of heating emitters.
- Understand the nature of electricity, the principles of power generation and distribution and the performance of electrical machines, including potential problems in use.
- Understand the principles involved in providing a satisfactory lighting level. Carry out calculations to determine daylight factors from drawing or from existing buildings.

Indicative Content:

Theory of Structures Real and idealised structures – components, joints, supports. Elements of statics – resultant force, conditions of equilibrium. Determinate structures – forces in trusses, shear force and bending moment diagrams. Concepts of stress and strain – section properties, simple theory of building. Design of Structures. Permissible stress and limit state philosophy. Introduction to design standards including Eurocodes. Design of simple structural elements in timber, masonry, steel and reinforced concrete. Introduction to Code of Practice for wind loading. Environmental Engineering Principles of sound and noise measurement. Room acoustics and reverberation time. Nature of electricity, principles of power generation and distribution, basic units and measurements, performance of electrical machines. Principles of lighting measurement, daylight factors.

Main Learning and Teaching Activities:

The course comprises 75% lectures and 25% studio. Studio sessions will include: - project orientated work – tutorials; and – case studies.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Outline Details
Assignment	✓	3000	100%	Portfolio

Indicative texts:

ISBN Number	Author	Date	Title	Publisher
0333804570	Hulse, R and Cain J	2000	<i>Structural Mechanics</i>	Palgrave
0582236584	Gauld, B	1995	Structures for Architects	Longman
0582009715	Reid, E	1988	Understanding Buildings – A Multidisciplinary Approach	Longman Scientific and Technical
0419257306	Chadderton, D	2000	Building Services Engineering	E & FN Spon

In addition you should consult the University on-line resources. In particular, MyLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0100	School:	Architecture, Design and Construction
Course Title:	Facilities Management		
Course Co-ordinator:	Professor Keith Jones		
Level: 6	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

Facilities Management is a developing role within the global property market. Those responsible for property can be involved in a wide range of activities, dependent upon the focus of the organisation including commercial, housing, multi-use complexes, etc. Facilities Management is looked at from the viewpoint of existing buildings being managed and operating as an organism, within the framework of law, providing efficient and economic environments, aware and responsive of user needs. A thorough grounding in the principles of property management is essential to professionals within the built environment involved in facilities management. Financial management issues of property ownership, etc, will also be covered.

Aims:

The course aims to:

- develop the students understanding of the requirements and components of the facilities management function;
- provide students with a greater understanding of the property/facility management process;
- enable the students to develop some of the key managerial and technical knowledge necessary in undertaking the facilities management function.

Learning Outcomes:

At the end of the course, the student will be able to:

- understand the approach, terminology and scope of facilities management; the application of project management techniques and health and safety issues relating to the management of facilities;
- apply property management and business management techniques in the strategic asset management context
- critically examine the concept of flexible working practices and techniques of space utilization and planning
- monitor, review and evaluate how technological innovation, particularly the role of IT & T can be applied to facilities management
- critically appraise the strategic and operational skills relevant to managing the maintenance of individual or groups of buildings
- have a deeper understanding of the component parts and principal considerations in the development and format of maintenance policies
- monitor, review and evaluate the options and requirements for maintaining security in and to buildings
- critically appraise dilapidations within the context of property leases and the process of preparing interim and terminal schedules.

Content:

Strategic Facilities Management – Identification of the role of facilities management as a distinct function. Management concepts, such as: outsourcing, partnering, human resources management, etc. management principles applied to facilities, including: flexible working practices, space

planning, hot desking, hoteling etc. an introduction to programme and project management techniques applied to facilities functions. The application of Information Technology and telecommunications (IT&T) to facilities. Management of Health and Safety and Disaster Recovery Planning. Environmental management, including waste management, Building Management systems, sick buildings systems, internal environmental issues (offices).

Property – Strategic asset management, property management skills, and property management systems. Features of investment properties and finance. Dilapidations practice and procedures.

Maintenance and Operational Management – Identification of the importance of maintenance and operations management to the efficiency of organisations, including principal considerations: legal obligations, attributes of planned and reactive operations, Just in Time (JIT) maintenance. Formulation of a maintenance and operations management policy from a range of expenditure, including service charges. Execution of maintenance works. Premises audits, including the use of maintenance manuals and log books.

Learning and Teaching Activities:

The course will be taught by a combination of lectures and studio. Studio sessions will reflect the particular programme being studied and will comprise of workshops, seminars, presentations and projects.

Assessment Details:

Methods of Assessment	Last item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1500	50	40%	Portfolio of activity including essays and presentations as appropriate.
Examination	✓		50	40%	3 hour formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0415321468	Alexander, K., Atkin, B., Brochner, J. & Haugen, T.	2004	Facilities Management: Innovation & Performance	Spons, Abingdon Oxon
978-0-632-06445-8	Barrett, P. and Baldry, D.	2003	Facilities Management; Towards Best Practice	Blackwell
0-333-69333-7	Parks, A.	1998	Facilities Management, An Explanation	Palgrave Macmillan
1-4051-3557-3	Shah, S.	2007	Sustainable Practice for the Facilities Manager	Blackwell

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	TOWN 0001	School:	Architecture, Design and Construction
Course Title:	Land Economics and Planning		
Course Co-ordinator:	Christopher Lewcock		
Level: 5	Credit: 15	Department:	Property & Construction Management

Aims:

Those pursuing careers in the built environment need to understand the economic factors which create development pressure and the planning system which seeks to steer that pressure into sustainable development. This course seeks to provide that understanding by exploring key elements of urban land economics and planning.

The course aims to:

- Explore and reflect upon the economics of the development process.
- Begin to recognise the roles of key players in the development process and to explain how they interact on planning and economic issues.
- Increase awareness of the history, philosophy and legislative basis for town planning.

Learning Outcomes:

At the end of the course, the student will:

- Be able to explain the economic forces which drive the development process.
- Show a deeper understanding of how developers, construction firms, owners of land and buildings and local authorities interact in the development process.
- Understand the history, philosophy and key elements of the planning system.

Content:

The land economics part of the course explores urban transport economics, road pricing and the economics of public transport. This part of the course also looks at the economics of property development, the determination of site-bid, optimal investment and the economics of redevelopment. This element of the course also examines the determination of capital values of existing buildings and cleared sites and factors affecting the timing of development. The economics of rehabilitation versus redevelopment and the economics of historic buildings are also considered.

The planning element of the course examines the history and philosophy of planning and the gradual development of state intervention up to the present time when the planning system tries to foster sustainable development. Aspects of planning law are considered in relation to development plans, development management, planning obligations, use classes and permitted development rights. This part of the course also considers the rights and methods of appeal where planning consent has been refused. Special controls concerning listed buildings, conservation areas, environmental impact assessment and designated areas are also considered.

Learning and Teaching Activities:

Teaching comprises a lecture programme which delivers the economics and planning elements in an integrated way, so that lectures will support the gradual development of students' knowledge in this

subject area. Students will also learn through reading and participating in discussions around the scenario-based course assignments.

Assessment Details:

Methods of Assessment	LAST item of assessment	Grading Mode	Weighting %	Minimum Pass Mark	Word Length	Outline Details
Assignment	✓	%	100%	40%	3,000	Portfolio of activity including essays and presentations as appropriate

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0333629035	Balchin, P., Kieve, J. and Bull, G.	1995	Urban Land Economics and Public Policy, 5th Edition	Macmillan
0333771281	Balchin, P., Isaac, D. and Chen, J.	2000	Urban Economics – A Global Perspective	Palgrave
0415358108	Cullingworth, J. B. and Nadin, V.	2006	Town and Country Planning in the UK, 14 th Edition	Routledge
9781842194317	Gunne-Jones, A.	2009	Town Planning: A Practical Guide	RICS Books
1403900019	Harvey, J. and Jowsey, E.	2004	Urban Land Economics, 6 th Edition	Palgrave Macmillan
0415450780	Ratcliffe, J., Stubbs, M. and Keeping, M.	2009	Urban Planning and Real Estate Development, 3 rd Edition	Routledge

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	LAW 1081	School:	Architecture, Design and Construction
Course Title:	Legal Studies		
Course Co-ordinator:	Michael Greenslade		
Level: 4	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

This course will provide students with a grounding in the principles of the English legal system, contract law, tort, health and safety, landlord and tenant and land law. These topics are all of concern to professionals working within the built environment disciplines. The key principles of law introduced in this course can be developed further at stage 2 of the student's programme.

Aims:

- To equip students with the ability to recognise and resolve legal problems within a framework of the substantive law and legal systems of England and Wales.
- To develop in the student an understanding of the general principles of the law of contract, including formation, matters affecting validity and enforceability, discharge and remedies for breach, standard form contracts and exclusion clauses.
- To enable students to understand the general principles of the law of torts, including liability, remedies, defences, negligence, nuisance, trespass and occupiers liability.
- To introduce and explain key legislation relating to landlord and tenant in both a commercial and residential context.
- To outline the main elements of land law.

Learning Outcomes:

At the end of the course the student will:

- Have acquired an ability to resolve legal problems within a framework of the substantive law and legal system of England and Wales.
- Understand and be able to describe the general principles of the law of contract.
- Understand and be able to describe the general principles of the law of torts.
- Be able to outline and explain the key legislation relating to landlord and tenant in both a commercial and residential context.
- Be able to describe and explain the key components in land law.

Indicative Content:

This course will cover sources of English law, civil and criminal courts and proceedings, hierarchy of courts and the legal professions. The essentials of contract and terms of a contract will also be explored, as will mistakes and misrepresentation. Performance, breach and remedies will also be covered along with discharge, limitation and privacy of contract. Tort will be covered particularly with regard to the tort of negligence. The main principles of the health and safety will be introduced,

as will the key legislation relating to the law of the landlord and tenant. Key elements of land law will also be introduced.

Main Learning and Teaching Activities:

The course will be mainly delivered by lectures, supplemented by discussions and workshops to explore legal concepts.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Minimum Pass Mark	Weighting %	Outline Details
Assignment		1,500	40%	50%	Portfolio
Written examination	✓		40%*	50%	Two hour unseen paper

* Where a course has both formal examination and coursework the student must obtain a pass grade of minimum 40% for both coursework and exam.

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
1405846941	Cooke, John	2007	The Law of Tort	Longman
0415231078	Chappell, D	2000	Understanding JCT Standard Building Contracts	Spon
0419253106	Murdoch, J & Hughes, W	2000	Construction Contracts; Law and Management	Spon
0632020784	Holyoak, J	1992	Negligence in Building Law	Blackwell
B000S92PX8	Howarth, W	1991	Land Law in a Nutshell	Sweet & Maxwell
0632057416	Stephenson, D	2001	Arbitration Practice in Construction Contracts	Blackwell
0421904208	Uff, J & Furst, S	2005	Construction Law	Sweet & Maxwell

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0094	School:	Architecture, Design and Construction
Course Title:	Management for the Built Environment		
Course Co-ordinator:	Simon Muturi	Department:	Property & Construction Management
Level: 4	Credit: 15		

Introduction and Rationale:

This course will provide an insight into the application of management principles to organizations operating in the built environment. It is also intended that the students will acquire an understanding of the culture that exists within the built environment, together with practices and processes peculiar to it.

Aims:

- To introduce the duties and roles of managers and the management principles as applicable to organisations within the built environment.
- To appreciate and acquire some of the skills to be an effective manager within the built environment.
- To understand the different organisation (al) structures and where they might be found/used in the built environment.

Learning Outcomes:

At the end of the course the student will be able to:

- Acquire an understanding of the nature of management, and how the principles of management are applied in built environment practice(s). Such knowledge will provide a basis for more advanced management education in later years in other courses.
- Comprehension of the activities of the individual manager, and how he or she can improve his or her managerial skills, to include decision making, leadership and management as applied and related to activities within the built environment.

Indicative Content:

The history of management and how the theoreticians and practitioners have viewed it. The nature of management and its purpose, the managerial functions. Missions, objectives, decisions, plans, policies and forecasts. Types of organisational structures within the built environment. The centralisation, decentralisation and divisionalisation of organisations operating within the built environment. Power, leadership, command, control and co-ordination. Motivation.

Main Learning and Teaching Activities:

The course will be taught by means of a combination of formal lectures and assignments, with group tutorials.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3,000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
1858051665	Cole, G A	2000	Management Theory and Practice	Letts
9780273711186	Hannagan, T	2008	Management Concepts and Practices, 5 th Edition	FT Prentice-Hall
9780273716464	Mullins, L J	2008	Essentials of Organisational Behaviour	F T Prentice-Hall
9780230000384	Pettinger, R	2007	Introduction to Management, 4 th Edition	Palgrave-Macmillan

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1101	School:	Architecture, Design and Construction
Course Title:	Measurement and Documentation 1		
Course Co-ordinator:	Julie Adeline	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

The ability to analyse and measure construction work forms a major core skill for quantity surveyors and others involved in the quantification and valuation of construction work. To maximise this ability this Course introduces and develops analytical and problem solving skills relating to the measurement and quantification of construction work. The Course adopts a competency learning approach to the development and assessment of the analytical and quantification skills, and a more traditional approach to the learning and assessment of tender documentation.

Aims:

- introduce and develop and the basic techniques and principles of measurement and quantification of construction work;
- develop the ability to understand construction drawings and to quantify the work contained therein;
- know and apply the published rules of measurement;
- understand the procedures and documentation involved in the production of tender information.

Learning Outcomes:

Upon completion of this Course student should be able to:

- measure low rise construction in accordance with the standard methods of measurement;
- analyse and evaluate construction information in relation to various purposes;
- appreciate the philosophy and importance of co-ordinated project information;
- prepare bills of quantities and other tender documents;

Content:

Introduction to SMM and the techniques of taking-off and mensuration.

In relation to low rise/simple structures: measurement of sub-structures, brick and block work, pitched and flat roofs, floors, partitions and hollow walls, staircases, internal finishing's, windows, doors and other joinery, mechanical and electrical services, drainage. Preparation of tender documents.

Learning and Teaching Activities:

The Course will be delivered by a combination of methods.

Measurement is workshop based and will be learned using a competency approach whereby students will be introduced to the concepts, techniques and practical approaches to the measurement of each topic. Students then undertake the measurement of an example of the work to develop their skills, the work will be submitted and the competency achieved assessed. Those students who fail to achieve competency at the first attempt will be tutored and given further learning before being given another example to undertake which will be assessed for competency, the process will be repeated until competency is achieved. An in-class test will assess students' understanding of the measurement undertaken.

Practice aspects of the Course will be delivered by a combination of lectures, tutorials, workshops and other student centred learning.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	N/A	100	40%	Series of measurement exercises assessed on a competency basis

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0 85406 360 9	RICS/BEC	1998	SMM7 and Code	RICS
0 333 48206 9	Seeley	2005	Building Quantities Explained, 6 th Edition	Macmillan

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1102	School:	Architecture, Design and Construction
Course Title:	Measurement and Documentation 2		
Course Co-ordinator:	Simon Muturi	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

The ability to analyse and measure construction work forms a major core skill for quantity surveyors and others involved in the quantification and valuation of construction work. To maximise this ability this course further develops analytical and problem solving skills relating to the measurement and quantification of construction work. The course adopts a competency learning approach to the development and assessment of the analytical and quantification skills.

Aims:

- Develop the techniques and principles of measurement and quantification of construction work;
- Further develop the ability to understand construction drawings and to quantify the work contained therein;
- Further develop the procedures and documentation involved in the production of tender information.

Learning Outcomes:

Upon completion of this course student will be able to:

- measure construction in accordance with the standard methods of measurement;
- prepare tender documentation.

Content:

In relation to larger and more complex construction: measurement of reinforced concrete, advanced excavations and earthworks, basements and substructures, steelwork, mechanical and electrical services, underpinning, demolition and alterations; civil engineering.

Learning and Teaching Activities:

The Course will be delivered by a combination of methods.

Measurement is workshop based and will be learned using a competency approach whereby students will be introduced to the concepts, techniques and practical approaches to the measurement of each topic. Students then undertake the measurement of an example of the work to develop their skills, the work will be submitted and the competency achieved assessed. Those students who fail to achieve competency at the first attempt will be tutored and given further learning before being given another example to undertake which will be assessed for competency, the process will be repeated until competency is achieved. An exam will test the measurement knowledge of the student.

Practice aspects of the course will be delivered by a combination of lectures, tutorials, exams, workshops and other student centred learning.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		N/A	50%	40%	Series of measurement exercises assessed on a competency basis.
Exam	✓	N/A	50%	40%	2 hours formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0 85406 360 9	RICS/BEC	1998	SMM7 and Code	RICS
0 333 48543 2	Seeley	1989	Advanced Building Measurement, 2 nd Edition	Macmillan

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0097	School:	Architecture, Design and Construction
Course Title:	Project and Construction Management		
Course Co-ordinator:	Brian Cato	Department:	Property & Construction Management
Level: 6	Credit: 15		

Introduction and Rationale:

The effective management of construction projects is essential to their successful completion. The management of construction is recognised to be a complex and difficult undertaking that requires a broad range of management knowledge and skills that can be adapted and applied to the particularities of construction. The Course adopts an integrated 'management' approach to construction, rather than the more narrow 'construction management' or 'project management' approach. It develops the management knowledge, abilities and skills required for the effective management of projects and people, then seeks to apply these to the management of construction.

Management abilities are increasingly being recognised as an essential part of a graduate's education, particularly in the rapidly changing environment of the construction industry. The Course is intended to develop the student's managerial basis for future career progression and continued management development.

Aims:

- To further develop the theories and principles of management learned at Level 1.
- To develop students' management knowledge, techniques and abilities with regard to construction.
- To provide the basis for continued management development.

Learning Outcomes:

On completion of this course, the student will:

- Analyse and evaluate construction projects, firms and problems from a management perspective.
- Understand the management requirements of construction projects and firms.
- Select and apply appropriate management theories, techniques and skills to the management of construction firms and projects.
- Appreciate the management principles and techniques used to manage comparable aspects in other industries, and to be able to adapt and apply these to construction.
- Understand the principles and techniques of construction management and their application in the construction industry.
- Understand the principles and techniques of project management and their application to the management of projects in the construction industry.

Indicative Content:

With specific application to construction:

Organisation of construction teams and projects, New directions and Lean construction, Supply chain management; resource management, Partnering , Performance management; benchmarking and KPI's , Management of human resources, Group and team management, Motivation; rewards; job design and work organisation, Leadership

Management of time; planning theories and techniques, Production management, Stakeholder needs; project definition; project close-out, Design management; change management; , Information management; , Quality management, Value management, Project risk management, Health and safety and its management, Conflict management and resolution

Learning and Teaching Activities:

The course will be delivered by a combination of lectures, seminars, workshops and tutorials

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1500	50	40%	Portfolio of activity including essays and presentations as appropriate.
Examination	✓		50	40%	3 hour formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0-582-36909-6	Ashworth , A.	2005	Cost Studies of Buildings, 3 rd Edition	Longman
0470851244	Burke, R.	2003	Project Management – Planning and Control Techniques, 4 th Edition	Wiley
0-333-62111-5	Cooke, A. J.	1996	Economics and Construction	Macmillan
0632028270	Fryer, B.	2004	The Practice of Construction Management, 4 th Edition	Blackwell
1405131985	Hackett, M. et al.	2007	Procurement Tendering & Contract Administration	Blackwell Publishing
0789731975	Horine, G.	2009	Absolute Beginner's Guide to Project Management, 2 nd Edition	QUE
0566087723	Lock, D.	2007	Project Management, 9 th Edition	Collins
0415260566	Loosemor ,M. et al.	2006	Risk Management in Projects, 2 nd Edition	Taylor and Francis

1405854766	Mullins, L.	2007	Management and Organisational Behaviour, 8 th Edition	Financial Times/ Prentice Hall
9780415421638	Reisse, G.	2007	Project Management Demystified, 3 rd Edition	Taylor Francis
0-333-63835-2	Seeley, I. H.	1995	Building Economics, 4 th Edition	Macmillan
9781405184571	Winch, G.	2010	Managing Construction Projects, 2 nd Edition	Wiley-Blackwell

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1098	School:	Architecture, Design and Construction
Course Title:	Project and Safety Risk Management in Construction		
Course Co-ordinator:	Karl Bunting	Department:	Property & Construction Management
Level: 6	Credit: 15		

Introduction and Rationale:

The effective identification and management of risk in the construction industry is growing in importance as a tool to prevent accidents and ill-health and to improve project performance. While health and safety risk management and project risk management have different emphases, there is a synergy between the two processes. The relationship between project risk management and health and safety risk management will be examined in this course along with the more specific elements of the risk management process.

Aims:

The aim of this course is to build upon the project and health and safety management skills the students have already developed, focusing on the risks associated with the construction process. The importance of risk identification, analysis, assessment and response will be discussed including the causes of failure and how they could have been prevented.

Learning Outcomes:

On completion of this course, the student will:-

- Have developed a full awareness of the importance of risk management in the construction industry;
- Be able to investigate and critically analyse the root causes of project failure;
- Be aware of the immediate and root causes of accidents in the construction industry and the importance of monitoring, review and the evaluation of accidents;
- Be able to review and critically evaluate the risk management processes applicable to projects and health and safety including risk identification, analysis, evaluation, response and review;
- Be able to contribute to the development of an effective risk management strategy;
- Be aware of different perspectives of health and safety and project risk management.

Content:

Project failure and accidents in the workplace; probability and uncertainty; risk attitudes; risk and uncertainty; risk identification, analysis, evaluation and response; review and reiteration; relationship between project risk management and health and safety risk management; relevant legislation; national and international standards; environmental and other risk

Learning and Teaching Activities:

This course will be delivered mainly by lectures and the use of online resources including WebCT.

Assessment Details:

Methods of Assessment	LAST item of assessment	Weighting %	Minimum Pass Mark	Words Length	Outline Details
Assignment	✓	100	40%	3000	Portfolio of activity including essays and presentations as appropriate

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0 9013 5732 4	Boyle, T.	2002	Health and Safety: Risk Management	IOSH
0 7277 2063 5	James, M. (ed.)	1996	Risk Management in Civil, Mechanical and Structural Engineering	Thomas Telford
0 86017 441 7	Godfrey, P.	1996 (reprinted 2004)	Control of Risk. A Guide to the Systematic Management of Risk from Construction	CIRIA/DTI
+0 7176 1276 7	HSE	1997	Successful Health and Safety Management: HSG65	HSE
*0 419 26210 5	Lingard, H. and Rowlinson, S.	2005	Occupational Health and Safety in Construction Project Management	Spon Press
0 415 26056 6	Loosemore, M., Raftery, J., Reilly, C., Higgon, D.	2006	Risk Management in Projects	Taylor and Francis

Further Reading:

* 0 41918420 1 Raftery, J. 1993 'Risk Analysis in Project Management: An Introduction' E & F N Spon (Chapman and Hall)

* These texts are available through MyiLibrary

+ Available as a free download from HSE Books website

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 0010	School:	Architecture, Design and Construction
Course Title:	Rehabilitation Studies (with Structures)		
Course Co-ordinator:	Carl Woodham	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

The importance of rehabilitation studies for building surveyors cannot be over-emphasised. It encompasses the diverse knowledge and skills associated with the repair, adaptation and improvement of existing buildings. The study of the subject depends on a sound understanding of the principles of building construction, coupled with knowledge of diverse legislation. These principles are constantly being applied to practical situations when dealing with existing buildings and this frequently calls for an imaginative and enterprising approach to problem-solving, but this must always be done by applying the established principles of building construction. An awareness of the characteristics and properties of building materials is also called for, as are the principles of design, layout and division of space within and around buildings.

This course extends and consolidates the learning from previous courses by application to rehabilitation work. The study is mainly based on domestic and commercial buildings of traditional construction. The complimentary courses in Building Rehabilitation & Defects and Construction Technology at stage two and Building Surveying Practice at stage three will further extend this course.

Aims:

The course aims to;

- Consolidate and extend knowledge gained in previous courses
- Equip the student with the requisite knowledge and skills appropriate to maintenance and rehabilitation work
- Investigate the processes of deterioration in material performance and durability
- Develop an understanding of traditional building techniques
- Appraise alternative technical solutions and innovations in techniques and materials for the repair of existing buildings
- Raise awareness of the design 'first principles' and constraints on rehabilitation work
- Develop an awareness of the key legislation affecting the rehabilitation of existing sites

Learning Outcomes:

At the end of the course the student should be able to;

- Work independently, research relevant material to support and extend knowledge of each topic of study
- Appraise the options for the repair and refurbishment of older existing building stock from a knowledge of material performance, durability and compatibility
- Analyse and diagnose problems particular to the rehabilitation of older buildings and apply current knowledge to facilitate their rehabilitation
- Evaluate the structural and environmental implications in converting, extending and adapting existing buildings
- Assess the constraints imposed by statutory regulation
- Gauge the potential for adaptation of some common building types

Content:

General principles influencing rehabilitation work, focussing on the application of practical building maintenance techniques. Core areas covered will include;

- The development of site data collection and surveying techniques
- The application of statutory controls affecting the maintenance and adaptation of existing buildings. These include; party wall, planning and building control legislation, health and safety and accessibility issues
- The principles governing the approach to rehabilitation work. Typical construction techniques involved in extension and adaptation work. The potential for rehabilitation of some common traditional building types.

Learning and Teaching Activities:

The course will be taught using a combination of formal lectures and tutorial sessions, reinforced by the studio three and four courses which will run concurrently. Teaching sessions will primarily focus on traditional construction techniques, materials deterioration and building maintenance. Sessions will also encompass practical surveying techniques; building adaptation and basic structural design. Studio work will provide an opportunity for students to explore issues with the peer group through the use of case studies and projects.

Assessment Details:

Methods of assessment	Last item assessed	Grading mode	Weight	Minimum pass mark	Word length	Outline details
Assignment		%	50%	40%	1500	Portfolio of activity including essays and presentations as appropriate.
Examination	✓	%	50%	40%	2hrs	2hr formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
9780750686228	Chudley. R. & Greeno, R.	2008	Building Construction Handbook, 7 th Edition	Elsevier Ltd, Oxford
9780750666671	Douglas, J.	2006	Building Adaptation	Butterworth-Heinemann, Oxford
9780582236585	Gauld, B. J.	1994	Structures For Architects, 3 rd Edition	Longman, Harlow
9781842191927	Hollis, M.	2005	Surveying Buildings, 5 th Edition	RICS Books, Coventry
0632028130	Noy, E.	1992	Building Surveys & Reports	BSP Professional Books, Oxford

9780415452724	Polley, S.	2008	Understanding the Building Regulations	RICS Books, Coventry
9781842192917	Rushton, T.	2007	Investigating Hazardous & Deleterious Building Materials	RICS Books, Coventry
0333457013	Seeley, I. H.	1989	Building Maintenance, 2 nd Edition	Macmillan Press Ltd, London
978033962558	Smith, P. S.	2001	Introduction To Structural Mechanics	Macmillan, Basingstoke

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1094	School:	Architecture, Design and Construction
Course Title:	STUDIO 1 (Building Surveying Commercial Management)		
Course Co-ordinator:	Anthony Kelly		
Level: 4	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

Building surveyors are employed in an industry where they must bring together many different ideas, concepts and details to produce a solution that satisfies clients' demands / needs. They are involved in the management of new building works as well as the rehabilitation and refurbishment of existing buildings. The building surveyor requires specialist skills to interpret and analyse the clients' brief(s) to enable him/her to produce a valid solution(s).

Studio 1 will provide students with the opportunity to understand the principles underpinning Building Surveying in a practical context. These studios will focus on key skills (e.g. Land Surveying, IT, Drawing Skills, Study Skills and Health and Safety)

Aims:

- To introduce a range of practical skills to develop valid solutions to fit given criteria
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student will have:

- a greater understanding of the Building Surveying profession and their role in it;
- will be able to provide a detailed and valid structured solution to set problems in a professional format;
- will appreciate the complex nature of building issues and be aware of the need to consider solutions in the wider Built Environment context.

Indicative Content:

Introduction to the profession, Study Skills, Land Surveying, Measured survey, Presentation skills, Health and safety.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0582009715	Reid, Esmond	1988	Understanding Buildings	Longman
0077111141	Irvine, W	2005	Surveying for Construction	McGraw-Hill
0-14-013597-9	Gordon, J.E	1991	New Science of Strong Materials	Penguin
0-14-013628-2	Gordon, J.E	1991	Structures, or why things don't fall down	Penguin
0-582-40447-9	Foster, J.	2000	Mitchell's Structure and Fabric Part 1 (6th edition)	Pearson Education
0-582-40520-3	Foster, J.S. & Harrington, R.	2000	Mitchell's Structure and Fabric Part 2 (6th edition)	Pearson Education

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1095	School:	Architecture, Design and Construction
Course Title:	STUDIO 2 (Building Surveying Commercial Management)		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 4	Credit: 15		

Introduction and Rationale:

Studio 2 will provide students with further opportunities to understand the principles underpinning Building Surveying in a practical context. These studios will focus on key skills (e.g. Land Surveying, IT, Drawing Skills, Study Skills and Health and Safety)

Aims:

- To introduce a range of practical skills to develop valid solutions to fit given criteria
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student will have:

- a greater understanding of the Building Surveying profession and their role in it;
- will be able to provide a detailed and valid structured solution to set problems in a professional format;
- will appreciate the complex nature of building issues and be aware of the need to consider solutions in the wider Built Environment context.

Indicative Content:

Study skills review, Presentation skills, Management of space, Team building, Health and safety

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Project

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0-58-200971-5	Reid, Esmond	1988	Understanding Buildings	Longman
0-14-013597-9	Gordon, J.E	1991	New Science of Strong Materials	Penguin
0-14-013628-2	Gordon, J.E	1991	Structures, or why things don't fall down	Penguin
0-582-40447-9	Foster, J.	2000	Mitchell's Structure and Fabric Part 1 (6th edition)	Pearson Education
0-582-40520-3	Foster, J.S. & Harrington, R.	2000	Mitchell's Structure and Fabric Part 2 (6th edition)	Pearson Education

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COURSE SPECIFICATION

Course Code:	BUIL 1096	School:	Architecture, Design and Construction
Course Title:	STUDIO 3 (Building Surveying Commercial Management)		
Course Co-ordinator:	Mark Michel	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Building surveyors must be able to bring together a variety of skills and knowledge in the field of construction and rehabilitation of buildings. They are involved in the management of new building works, rehabilitation and refurbishment of existing buildings and their maintenance requirements. The building surveyor requires specialist skills to interpret and analyse the clients' brief(s) as well as understanding buildings and their problems to enable him/her to produce a valid solution(s).

Studio 3 will provide the students with the opportunity to apply knowledge and skills in a practical context based on the course taken at this level. This studio will focus on the application of core skills to simple BS projects.

Aims:

- To understand the problems of interpreting a client brief.
- To develop analytical skills and develop valid solutions in response to the client brief within the context of building rehabilitation/reuse.
- To develop skills associated with communicating/presenting solutions to clients.

Learning Outcomes:

At the end of the course, the student should be able to:

- further understand the problems of interpreting client needs / wants;
- provide a detailed and valid structured solution to set problems;
- demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines, and presenting these to clients.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student's knowledge across built environment disciplines. Emphasis is placed on applying theory to practice.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise at tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1097	School:	Architecture, Design and Construction
Course Title:	STUDIO 4 (Building Surveying Commercial Management)		
Course Co-ordinator:	Carl Woodham		
Level: 5	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

Building surveyors must be able to bring together a variety of skills and knowledge in the field of construction and rehabilitation of buildings. They are involved in the management of new building works, rehabilitation and refurbishment of existing buildings and their maintenance requirements. The building surveyor requires specialist skills to interpret and analyse the clients' brief(s) as well as understanding buildings and their problems to enable him/her to produce a valid solution(s).

This studio course provided the opportunity to further explore the design and maintenance relationship of buildings and how this may be improved. This studio will focus on the application of core skills to simple BS projects.

- To understand the problems of interpreting a client brief.
- To develop analytical skills and develop valid solutions in response to the client brief within the context of building rehabilitation/reuse.
- To develop skills associated with communicating/presenting solutions to clients.

Learning Outcomes:

At the end of the course, the student should be able to:

- further understand the problems of interpreting client needs / wants;
- provide a detailed and valid structured solution to set problems;
- demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines, and presenting these to clients.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student's knowledge across built environment disciplines. Emphasis is placed on applying theory to practice.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise at tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1007	School:	Architecture, Design and Construction
Course Title:	STUDIO 5 (Building Surveying Commercial Management)		
Course Co-ordinator:	Carl Woodham		
Level: 6	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

All Built Environment professionals are employed in an industry where they must bring together many different ideas, concepts and details to produce a solution that satisfies clients' requirements. The professional engineer/builder/surveyor requires specialist skills to interpret and analyse the clients' brief(s) to enable him/her to produce a valid solution(s). This studio will focus on the integration of key building surveying skills across a number of key emerging issues (typically two – three small projects).

Studio 5 will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop the skills associated with researching the background to a complex “real life” project and synthesising the outputs into a feasibility report.
- To further develop the analytical/design skills required to produce a practical solution.
- To develop skills associated with communicating/presenting solutions to clients and instigating discussions to refine the client brief.
- To further develop management skills associated with working in groups.

Learning Outcomes:

At the end of the course, the student should be able to:

- further understand the problems of interpreting client requirements;
- provide a detailed and valid structured solution to a complex real life problem;
- demonstrate the ability to solve a conceptual Building Surveying problem, integrating relevant ‘built environment’ disciplines.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student’s knowledge across built environment disciplines. Emphasis is placed on applying theory to practice.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise at tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Examination			50%	40%	3 Hours duration – unseen examination paper
Assignment	✓	3000	50%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1008	School:	Architecture, Design and Construction
Course Title:	STUDIO 6 (Building Surveying Commercial Management)		
Course Co-ordinator:	Karl Bunting	Department:	Property & Construction Management
Level: 6	Credit: 15		

Introduction and Rationale:

All Built Environment professionals are employed in an industry where they must bring together many different ideas, concepts and details to produce a solution that satisfies clients' requirements. The professional engineer/builder/surveyor requires specialist skills to interpret and analyse the clients' brief(s) to enable him/her to produce a valid solution(s). The project will focus on contemporary challenges facing the Building Surveying professional.

Studio 6 will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop the skills associated with researching the background to a complex “real life” project and synthesising the outputs into a feasibility report.
- To further develop the analytical/design skills required to produce a practical solution.
- To develop skills associated with communicating/presenting solutions to clients and instigating discussions to refine the client brief.
- To further develop management skills associated with working in groups.

Learning Outcomes:

At the end of the course, the student should be able to:

- further understand the problems of interpreting client requirements;
- provide a detailed and valid structured solution to a complex real life problem;
- demonstrate the ability to solve a conceptual Building Surveying problem, integrating relevant ‘built environment’ disciplines.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student’s knowledge across built environment disciplines, including building performance. Emphasis is placed on applying theory to practice.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise at tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1013	School:	Architecture, Design and Construction
Course Title:	STUDIO 1 (Design & Construction Management)		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 4	Credit: 15		

Introduction and Rationale:

Construction Management professionals operate in an industry where they must bring together many different organisations and trades to produce solutions that satisfy client needs. Professional builders need to develop key skills in order to interpret and analyse a client's requirements and then develop appropriate solutions.

Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student should be able to:

- Further understand the problems of interpreting client needs / wants;
- Provide a detailed and valid structured solution to set problems;
- Demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines.

Indicative Content:

Introduction to the profession; study skills; land surveying; measured surveys; presentation skills; health and safety.

Main Learning and Teaching Activities:

These will include tutorials; seminars; group work on project; practical work; etc.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0-582-40447-9	Foster, JS	2000	Mitchell's Structure and Fabric Part 1 (6th edition)	Pearson Education
0077079981	Irvine, W	2006	Surveying for Construction	McGraw-Hill
0132325713	Osbourn, D & Greeno, R	2006	Mitchell's Introduction to Building	Prentice Hall
0340573244	Reekie, F	1995	Reekie's Architectural Drawing	Architectural Press
0582009715	Reid, E	1988	Understanding Buildings	Longman

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1014	School:	Architecture, Design and Construction
Course Title:	STUDIO 2 (Design & Construction Management)		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 4	Credit: 15		

Introduction and Rationale:

Construction Management professionals practice in an ever changing industry where they must bring together many different organisations and trades to produce solutions that satisfy client needs. The role of the construction manager requires an in depth knowledge of relevant legislation and how this affects the working environment.

Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student should be able to:

- Further understand the problems of interpreting client needs / wants;
- Provide a detailed and valid structured solution to set problems;
- Demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines.

Indicative Content:

Study skills review; building design; land surveying; ICT skills (spreadsheets and CAD).

Main Learning and Teaching Activities:

These will include tutorials; seminars; group work on projects; practical fieldwork; etc.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0-582-40447-9	Foster, JS	2000	Mitchell's Structure and Fabric Part 1 (6th edition)	Pearson Education
0077079981	Irvine, W	2006	Surveying for Construction	McGraw-Hill
0132325713	Osbourn, D & Greeno, R	2006	Mitchell's Introduction to Building	Prentice Hall
0340573244	Reekie, F	1995	Reekie's Architectural Drawing	Architectural Press
0582009715	Reid, E	1988	Understanding Buildings	Longman

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1015	School:	Architecture, Design and Construction
Course Title:	STUDIO 3 (Design & Construction Management)		
Course Co-ordinator:	Terry Phillips	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Construction Management professionals practice must bring together many different organisations and trades to produce solutions that satisfy client needs. The role of the construction manager requires an in depth knowledge of relevant legislation and how this affects the working environment. The organisation of works are an important aspect of the role and this studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student should be able to:

- Further understand the problems of interpreting client needs / wants;
- Provide a detailed and valid structured solution to set problems;
- Demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student's knowledge across built environment disciplines. Emphasis is placed on applying theory to practice.

Main Learning and Teaching Activities:

These will include tutorials; seminars; group work on projects; practical fieldwork; etc.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1016	School:	Architecture, Design and Construction
Course Title:	STUDIO 4 (Design & Construction Management)		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Construction Management professionals practice must bring together many different organisations and trades to produce solutions that satisfy client needs. The role of the construction manager requires an in depth knowledge of relevant legislation and how this affects the working environment. The organisation of works are an important aspect of the role and this studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

This studio course will build on the knowledge and skills already achieved in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student should be able to:

- Further understand the problems of interpreting client needs / wants;
- Provide a detailed and valid structured solution to set problems;
- Demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student's knowledge across built environment disciplines. The emphasis is on applying theory to practice.

Main Learning and Teaching Activities:

These will include tutorials; seminars; group work on projects; practical fieldwork; etc.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1111	School:	Architecture, Design and Construction
Course Title:	STUDIO 5 (Design & Construction Management)		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 6	Credit: 15		

Introduction and Rationale:

All Built Environment professionals operate in an industry where they must bring together many different ideas, concepts and details to produce solutions that satisfy client needs. Professional Construction Managers require analytical skills to be able to interpret client requirements and develop appropriate solutions.

Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student should be able to:

- Further understand the problems of interpreting client needs / wants;
- provide a detailed and valid structured solution to set problems;
- demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student's knowledge across built environment disciplines. The emphasis is on applying theory to practice.

Main Learning and Teaching Activities:

These will include tutorials; seminars; group work on projects; practical fieldwork; etc.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Coursework		3000	50%	40%	Portfolio
Written Examination	✓	N/A	50%	40%	3 hours duration – unseen examination paper

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1112	School:	Architecture, Design and Construction
Course Title:	STUDIO 6 (Design & Construction Management)		
Course Co-ordinator:	Anthony Kelly	Department:	Property & Construction Management
Level: 6	Credit: 15		

Introduction and Rationale:

All Built Environment professionals operate in an industry where they must bring together many different ideas, concepts and details to produce solutions that satisfy client needs. Professional Construction Managers require analytical skills to be able to interpret client requirements and develop appropriate solutions.

Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

At the end of the course, the student should be able to:

- Further understand the problems of interpreting client needs / wants;
- provide a detailed and valid structured solution to set problems;
- demonstrate the ability to solve a conceptual design problem, integrating relevant 'built environment' disciplines.

Indicative Content:

The content of this course is flexible but will draw together and integrate a student's knowledge across built environment disciplines. The emphasis is on applying theory to practice.

Main Learning and Teaching Activities:

These will include tutorials; seminars; group work on projects; practical fieldwork; etc.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		3000	50%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1109	School:	Architecture, Design and Construction
Course Title:	STUDIO 1 (Quantity Surveying Commercial Management)		
Course Co-ordinator:	Julie Adeline		
Level: 4	Credit: 15	Department:	Property & Construction Management

Introduction and Rationale:

Quantity Surveyors are employed in the construction industry to provide advice and guidance on many diverse areas. It is essential that the Quantity Surveyor understands how the industry operates and the various roles of the different professionals. Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills.
- To develop presentation skills.

Learning Outcomes:

- Understand the operation of the construction industry.
- Understand the roles of the different professionals within the industry.
- Understand the role of the Quantity Surveyor.
- Understand the sources of construction information

Indicative Content:

The focus of this studio is the quantity surveyor and the construction industry. Content will include an introduction to the construction industry, the operation of the industry, professionals within the industry, the role of the quantity surveyor, report writing, forms and sources of information used in the construction industry.

Main Learning and Teaching Activities:

The course will be delivered through seminars, discussions and workshops related to the course with emphasis on investigations, problem solving and some group working.

Assessment Details:

Methods of Assessment	Last item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Portfolio of written submissions	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1110	School:	Architecture, Design and Construction
Course Title:	STUDIO 2 (Quantity Surveying Commercial Management)		
Course Co-ordinator:	Julie Adeline	Department:	Property & Construction Management
Level: 4	Credit: 15		

Introduction and Rationale:

Quantity Surveyors are employed in the construction industry to provide advice and guidance on many diverse areas. It is essential that the Quantity Surveyor understands how the industry operates and the various roles of the different professionals. Studio will offer the students an opportunity to develop and apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills.
- To develop presentation skills.

Learning Outcomes:

- Understand the operation of the construction industry.
- Understand the roles of the different professionals within the industry.
- Understand the role of the Quantity Surveyor.
- Understand the sources of construction information

Indicative Content:

The focus of this studio is the quantity surveyor and the construction industry. Content will include an introduction to the construction industry, the operation of the industry, professionals within the industry, the role of the quantity surveyor, report writing, forms and sources of information used in the construction industry.

Main Learning and Teaching Activities:

The course will be delivered through seminars, discussions and workshops related to the course with emphasis on investigations, problem solving and some group working.

Assessment Details:

Methods of Assessment	Last item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Portfolio of written submissions	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on project.	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1060	School:	Architecture, Design and Construction
Course Title:	STUDIO 3 (Quantity Surveying Commercial Management)		
Course Co-ordinator:	Yvonne Simpson	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Quantity Surveyors are employed in the construction industry to provide advice and guidance on many diverse areas. Procurement is a key area where the QS will be required to give advice and a clear understanding of the procurement process and the varying procurement options available is essential.

Studio will offer the students an opportunity to develop and apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills.
- To develop presentation skills.

Learning Outcomes:

- Understand the construction process.
- Understand the procurement process and the variety of procurement options available.

Indicative Content:

The focus of this studio is quantity surveying practice and procedure. Content will include the construction process, the procurement process, procedure and documentation. All procurement routes will be identified: traditional, design and build, management, PFI/PPP and partnering.

Main Learning and Teaching Activities:

The course will be delivered through the medium of lectures, seminars and discussions and workshops related to the course.

Assessment Details:

Methods of Assessment	LAST item of assessment	Word Length	Weighting %	Minimum Pass Mark	Outline Details
Portfolio of workshops, practice examples and written work	✓	3000	100%	40%	Portfolio

Indicative texts:

ISBN Number	Author	Date	Title	Publisher
1405131985	Aqua Group	2006	<i>Procurement, Tendering and Contract Administration</i>	Blackwell
0632064668	Morledge, Smith, Kashiwagi	2006	Building Procurement	Blackwell
0415393698	Murdoch Hughes	2007	Construction Contract Law and Management	Taylor & Francis
0750668334	Griffiths Birchall and Ramus	2006	Contract Practice for Surveyors	Butterworth-Heinemann

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1105	School:	Architecture, Design and Construction
Course Title:	STUDIO 4 (Quantity Surveying Commercial Management)		
Course Co-ordinator:	Yvonne Simpson	Department:	Property & Construction Management
Level: 5	Credit: 15		

Introduction and Rationale:

Quantity Surveyors are employed in the construction industry to provide advice and guidance on many diverse areas. Post contract administration and cost control is a key area where the QS will be required to give advice and a clear understanding of this process is essential.

Studio will offer the students an opportunity to develop and apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills

Learning Outcomes:

- Understand cost control and accounting techniques used by the quantity surveyor.
- Understand the post contract process and its administration
- Provide usable advice to clients
- Understand the contractual and financial positions and implications for all the parties involved in the construction contract.

Indicative Content:

The focus of this studio is quantity surveying practice and procedure. Content will include valuations and fluctuations, cost control, preliminaries, variations, insurance and indemnity, bonds and collateral warranties, extension of time, loss and expense, final accounts and claims, insolvency and termination.

Main Learning and Teaching Activities:

The Course will be delivered through the medium of lectures, seminars, group discussions and workshops related to the course.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Portfolio of Tutorials, Seminars and Written Submissions.	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
1405131985	Aqua Group	2006	<i>Procurement, Tendering and Contract Administration</i>	Blackwell
0415393698	Murdoch Hughes	2007	Construction Contract Law and Management	Taylor & Francis
0750668334	Griffiths Birchall and Ramus	2006	Contract Practice for Surveyors	Butterworth-Heinemann

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1011	School:	Architecture, Design and Construction
Course Title:	STUDIO 5 (Quantity Surveying Commercial Management)		
Course Co-ordinator:	Yvonne Simpson	Department:	Property & Construction Management
Level: 6	Credit: 15		

Introduction and Rationale:

All Built Environment professionals are employed in an industry where they must bring together many different ideas, concepts and details to produce a solution that satisfies clients' demands/needs. The professional surveyor requires specialist skills to interpret and analyse the clients' brief(s) to enable him/her to produce a valid solution(s).

Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills.

Learning Outcomes:

- At the end of the course, the student should be able to:
- Understand the problems of interpreting client needs/wants.
- Provide a valid structured solution to a set of problems.

Indicative Content:

Researching typical issues and problem-solving construction scenarios to identify their needs and requirements in the industry. Students are requested to present and discuss papers.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on projects	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1106	School:	Architecture, Design and Construction
Course Title:	STUDIO 6 (Quantity Surveying Commercial Management)		
Course Co-ordinator:	Julie Adeline		
Level: 6	Credit: 15	Department:	Property & Construction Management

All Built Environment professionals are employed in an industry where they must bring together many different ideas, concepts and details to produce a solution that satisfies clients' demands/needs. The professional surveyor requires specialist skills to interpret and analyse the clients' brief(s) to enable him/her to produce a valid solution(s).

Studio will provide the students with the opportunity to apply knowledge and skills in a practical context at the appropriate level.

Aims:

- To develop analytical skills and develop valid solutions to fit given criteria.
- To develop communication and management skills associated with working in groups.
- To develop presentation skills.

Learning Outcomes:

- At the end of the course, the student should be able to:
- Understand the problems of interpreting client needs/wants.
- Provide a valid structured solution to set problems.

Indicative Content:

Researching typical issues and problem-solving construction scenarios to identify their needs and requirements in the industry. Students are requested to present and discuss papers.

Main Learning and Teaching Activities:

Studio will take many forms. It may comprise of tutorials, seminars, group work on projects. It is a learning vehicle.

Assessment Details:

Methods of Assessment	LAST item of assessment	Words Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio

Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
			Dependent on projects	

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1161	School:	Architecture, Design and Construction
Course Title:	Sustainable Construction 1		
Course Co-ordinator:	Mark Mulville		
Level: 4	Credit: 15	Department:	Property & Construction Management

Aims:

Built environment students must know how materials are used to design sustainable structures. This requires knowledge of materials science, construction principles and techniques and sustainability.

The course aims to:

- develop an understanding of the impact of construction on the earth's resources;
- develop an understanding of the principles of construction technology;
- introduce the importance of understanding the use and misuse of resources in the built environment;
- develop an understanding of the physical constraints on the built environment now and in the future;
- develop an appreciation of how buildings are used;
- develop research and presentation skills.

Learning Outcomes:

At the end of the course, the student will:

- have an understanding of the principles of design and construction of structures;
- understand the need for and develop the ability to make a rational choice of materials and techniques;
- be able to communicate effectively their understanding of the philosophy and principles of sustainable building construction;
- be able to engage in an activity where issues of protection and care of the natural and built environment are central to the problem.

Content:

The course examines the importance of locality – infrastructure, planning, transport, energy cost, etc, in respect of structures and sustainable building. Locality leads on to the identification and selection of sites, with the specific preparation requirements of any given site. Each site will have its own requirements which will be a function of its physical and environmental conditions, the type of structure, methods and materials and final use.

What a structure is and why one is needed for any given purpose are important design considerations. Design, materials and methods of construction will help to determine a structures success or failure. Novel building techniques taking into account sustainability issues are being increasingly developed to satisfy current needs without prejudicing future generations.

The internal/external environment interface has an important role to play in making a structure wind and weatherproof and providing the necessary longevity, whilst at the same time satisfying aesthetic demands. Whilst traditional materials and methods of construction of this interface continue to be popular amongst developers and clients, there is an increasing use of modern materials and techniques that are more sustainable.

The internal environment of a structure must also satisfy the demands of the occupier. There are basic internal needs and requirements for most structures including services, the internal physical environment and health and safety. There is increasing use of sophisticated control systems for the internal environment intended to make its control more efficient and provide better conditions for occupants.

The effective use of resources is becoming increasingly important and the use of sustainable building materials and techniques has been mentioned previously. The effective use of resources will include other issues such as land and water use, transport, etc.

Sustainable building construction must be seen in local and global context, taking into account the local, national and international political framework.

Specifically the following will be covered:-

Sustainability issues, Design issues; housing design; estate design; aspect and orientation, Site conditions; investigation; soil classification, Setting out of buildings/structures, Substructure and foundations for low rise buildings, Structural form; superstructure; ground and upper floor construction; roof structure

Introduction to structural analysis, Enclosure; external envelope; analysis of the function of raincoats, overcoats, cavity walls, pitched and flat roof coverings, Introduction to materials; examination of properties of materials

Learning and Teaching Activities:

Lectures, tutorials, workshops and student-centred learning.

Assessment Details:

Methods of Assessment	LAST item of assessment	Word length	Weighting %	Minimum Pass Mark	Outline Details
Assignment	✓	3000	100%	40%	Portfolio of activity including essays and presentations as appropriate

Is the student required to pass ALL elements of assessment in order to pass the course?	NO
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Indicative Texts:

ISBN Number	Author	Date	Title	Publisher
0-582-40447-9	Foster, J.	2000	Mitchell's Structure and Fabric Part 1, 6 th Edition	Pearson Education
0-582-40520-3	Foster, J. S. & Harrington, R.	2000	Mitchell's Structure and Fabric Part 2, 6 th Edition	Pearson Education
0-14-013597-9	Gordon, J. E.	1991	New Science of Strong Materials	Penguin
0-14-013628-2	Gordon, J. E.	1991	Structures, or Why Things Don't Fall Down	Penguin

Other Information Sources:

New Scientist (weekly)

Building Research Establishment (<http://www.bre.co.uk>)

Royal Institute of British Architecture (<http://www.architecture.com>)

Department of Transport, Local Government and the Regions (www.dtlr.gov.uk)

In addition you should consult the University on-line resources. In particular, MyiLibrary contains a range of ebooks. The Construction Information Service (CIS) and Swetswise and Emerald Full Text offer publications. Also look at the journal collections available, Science Direct for example.

COURSE SPECIFICATION

Course Code:	BUIL 1162	School:	Architecture, Design and Construction
Course Title:	Sustainable Construction 2		
Course Co-ordinator:	Mark Mulville		
Level: 4	Credit: 15	Department:	Property & Construction Management

Aims:

Built environment students must know how materials are used to design sustainable structures. This requires a knowledge of materials science, construction principles and techniques and sustainability.

The course aims to:

- develop an understanding of the principles of construction technology relating to the external envelope and internal environment.
- develop an understanding of the physical constraints on the built environment now and in the future with particular reference to the political, social and economic framework.
- introduce the concept of the building life cycle.
- develop research and presentation skills.

Learning Outcomes:

At the end of the course, the student will:

- have an understanding of the principles of design and construction of the internal/external environment interface
- understand the need for and develop the ability to make a rational choice of materials and techniques to provide a satisfactory internal environment
- be able to communicate effectively their understanding of the philosophy and principles of sustainable building construction;
- be able to engage in an activity where the effective use of resources are central to the problem.

Content:

The internal/external environment interface has an important role to play in making a structure wind and weatherproof and providing the necessary longevity, whilst at the same time satisfying aesthetic demands. Whilst traditional materials and methods of construction of this interface continue to be popular amongst developers and clients, there is an increasing use of modern materials and techniques that are more sustainable.

The internal environment of a structure must also satisfy the demands of the occupier. There are basic internal needs and requirements for most structures including services, the internal physical environment and health and safety. There is increasing use of sophisticated control systems for the internal environment intended to make its control more efficient and provide better conditions for occupants.

The effective use of resources is becoming increasingly important and the use of sustainable building materials and techniques has been mentioned previously. The effective use of resources will include other issues such as land and water use, transport, etc.

Sustainable building construction must be seen in local and global context, taking into account the local, national and international political framework.

Specifically the following will be covered:-

Sustainability issues, Modular and dimensional coordination, components and finishes, Principles of light and lighting, day lighting and artificial lighting, Principles of thermal comfort, heat transfer, U-Values, heat losses and gains, Moisture, humidity and condensation; principles of measurement; design implications; potential problems, Principles of sound and noise, Hot and cold water supply, Above and below ground drainage, Heating and cooling of buildings, Electricity supply and distribution

Learning and Teaching Activities:

Lectures, tutorials, workshops and student-centred learning.

Assessment Details:

Methods of Assessment	LAST item of assessment	Word Length	Weighting %	Minimum Pass Mark	Outline Details
Assignment		1500	50%	40%	Portfolio of activity including essays and presentations as appropriate
Examination	✓		50%	40%	2 hour formal examination

Is the student required to pass ALL elements of assessment in order to pass the course?	YES
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Indicative Texts:

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APPENDIX B

Description of academic levels

As you progress through your programme the courses become more complex, more demanding, i.e., they move up a level.

The level of a course indicates its seniority within the Programme Curriculum.

The Framework is divided into a series of sequential levels which relate to the standards of work and not necessarily to the year in which the course is taken during a programme of studies; At each level awards are available in line with the Framework for Higher Education Qualifications (FHEQ).

An appropriate level shall be assigned to a course according to the following definitions:

Level 0 Access to Higher Education.

Level 4 (previously called level 1) Provides basic knowledge, skills and competence.

Level 5 (previously called level 2) Builds on Level 4 and involves an extension and reinforcement of theoretical and/or practical aspects of knowledge.

Level 6 (previously called level 3) Reflects the synthesis of basic knowledge, skills and competence and equips students with tools of analysis and evaluation. Contributes to the Individual's distinctive professional development, where appropriate.

Level 7 (previously called level M or Master level) Provides opportunity to demonstrate:

- (i) the ability to reflect on the significance and inter-relationships of knowledge acquired from a variety of sources
- (ii) the ability on the basis of such reflection to formulate original ideas and innovative proposals
- (iii) the ability to carry out the activities in (i) and (ii) with a fair degree of autonomy.

Level 4 courses are taught early in the undergraduate degree programmes. Level 5 in the middle, Level 6 at the final part of the undergraduate degree programmes.

If you go on to study for either a graduate Diploma, or the post graduate Certificate or a Masters, then most of the courses are taught at a graduate/post-graduate level, at Level 7.

Note: as the level nomenclature has recently been changed at the University, you may still find course specifications with the old nomenclature (e.g. level 1, 2, 3 or M). We are gradually updating all our documentation.