

BSc Building Surveying
For students entering Part 1 in 2014/5

UCAS code: K230

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| Awarding Institution: | University of Reading |
| Teaching Institution: | University of Reading |
| Relevant QAA subject Benchmarking group(s): | Construction, Property and Surveying |
| Faculty: | Science Faculty |
| Programme length: | 3 years |
| Date of specification: | 11/May/2015 |
| Programme Director: | Dr Tabarak Ballal |
| Programme Advisor: | |
| Board of Studies: | Construction Management |
| Accreditation: | Chartered Institute of Building; Royal Institution of Chartered Surveyors |

Summary of programme aims

The aim of the four undergraduate degree programmes in the School of Construction Management and Engineering is to provide programmes which are designed for those who will become leaders and senior managers in the construction and property industries and in their related professions. The programme in Building Surveying is aimed particularly at those who will become senior managers or consultants responsible for the processes of the management, maintenance, rehabilitation and refurbishment of built facilities.

It achieves this aim by the means of learning outcomes which will provide to students a broad education in the academic disciplines related to building design and construction, the management of property, built facility procurement and construction operations. In addition, it will provide a knowledge and understanding of the latest, basic techniques and skills related to built facility maintenance, refurbishment and rehabilitation, and will give to students a potential for the acquisition in practice of an ability to manage the processes of maintenance, refurbishment and rehabilitation of built facilities.

To achieve this, the student will be provided with:

- A knowledge and understanding of the principles of design, construction and maintenance of buildings and built facilities and an understanding of the principles of science that underpin these processes;
- A knowledge and understanding of the basic principles of management and their application to the development process (design and construction);
- A knowledge and understanding of the economics, finance and accounting processes of property development, construction procurement and construction operations;
- A knowledge and understanding of the principles of law that underpin relations in the construction industry and development process and how these are applied in development and construction situations;
- The development of IT, drawing, written and oral skills in the communication of design, technical and analytical information;
- An ability to develop the expertise and the skill to assess the physical and material condition of built facilities and identify the needs and requirements of the building for its effective condition and operation;
- An ability to develop the expertise and the skill to plan, programme, organise and manage the process of the physical maintenance of a built facility.

Transferable skills

During the course of their studies at Reading, all students will be expected to enhance their academic and personal transferable skills. In following this programme, students will have had the opportunity to develop such skills, in particular relating to career management, communication (written, oral and graphical), information handling, numeracy, problem-solving, team working and information technology, and will have been encouraged to further develop and enhance the full set of skills through a variety of opportunities available outside their curriculum.

As part of the programme, students are expected to have gained experience and show competence in the following transferable skills: IT (word processing, spreadsheets, computer-aided design and planning software), report writing, oral and graphical presentation, team working, problem-solving and use of library resources.

Work Experience

The programme is vocational, therefore, in addition to the general transferable skills required for all work, students gain specific work experience of professional and managerial practice in construction and surveying in different ways:

First, through the nature of the programme and its content, significant parts of which are concerned with professional and managerial practices and procedures. This is reinforced in those modules which include project work, group and individual. At Year 3, a specific vocational module is included with a project module linked to it. The completion of these modules involves the undertaking of professional and managerial activities which provide, effectively, experience of work.

Second, students are able and encouraged to take employment with the firms with whom the School has firm contacts, who often seek students to offer this experience, either in the form of a year's placement in employment, at the end of Year 2, or work during the summer vacation. These work experience activities often lead to offers of full-time, permanent employment on graduation.

Third, the programme offers an elective, Year 3, Work Experience, ten credit module in which the student undertakes approximately 60 hours of employment with an approved employer in surveying or construction and completes an analytical report on the experience.

Programme content

The Degree is divided into three Parts. The first Part of the programme covers the fundamental principles of economics, law and management and the scientific and technical principles of building design and construction. The second Part builds on these modules, with greater emphasis in the economics, law and management modules on their application to the construction and property industries. In the third Part, students take those modules which relate directly to the vocational specialism of the programme, one of which is a project module. In addition, at Part 3, the student takes elective modules which are related to the particular expertise and research activities of the School. A dissertation is prepared by students at Part 3.

Part 1 (three terms)

Compulsory modules

| <i>Code</i> | <i>Module title</i> | <i>Credits</i> | <i>Level</i> |
|-------------|--|----------------|--------------|
| CE1CUC | Understanding Construction | 10 | 4 |
| CE1CIC2 | Information and Communication | 20 | 4 |
| CE1CES | Empirical Studies | 10 | 4 |
| CE1CSE | Construction Site Engineering | 10 | 4 |
| EC103 | Economics for Construction and Engineering | 10 | 4 |
| LW1A05 | General Introduction to Law | 10 | 4 |
| CE1CMP | Principles of Management | 10 | 4 |
| CE1CCS | Construction Science | 20 | 4 |
| CE1CCT | Construction Technology | 20 | 4 |

Part 2 (three terms)

Compulsory modules

| <i>Code</i> | <i>Module title</i> | <i>Credits</i> | <i>Level</i> |
|-------------|--|----------------|--------------|
| CE2CMB | Management in the Built Environment | 10 | 5 |
| CE2CRS | Research Skills and Statistics | 10 | 5 |
| CE2CCE | Construction Economics | 10 | 5 |
| CE2QCT | Introduction to Quantification and Computerised Taking Off | 10 | 5 |
| CE2CBP | Building Pathology | 10 | 5 |
| CE2CBT2 | Building Technology | 20 | 5 |
| CE2BES2 | Building Environmental Systems | 20 | 5 |
| CE2CPR | Projects | 20 | 5 |
| CE2CPT | Construction Procurement | 10 | 5 |

Part 3 (three terms)

Compulsory modules

| Code | Module title | Credits | Level |
|--------|--|---------|-------|
| CE3CCD | Dissertation | 40 | 6 |
| CE3CSP | Commercial Surveying Practices and Advanced Building Pathology | 10 | 6 |
| CE3CBP | Building Surveying Projects | 20 | 6 |

In addition, students must select a minimum of 10 credits from the list below:

| Code | Module title | Credits | Level |
|--------|---|---------|-------|
| CE3CS1 | Sustainability | 10 | 6 |
| CE3HBE | Historic Built Environment | 10 | 6 |
| CE3EMA | Environmental Management and Assessment | 10 | 6 |
| CE3CIB | Intelligent Buildings | 10 | 6 |
| CE3GIC | Green Innovation in Construction | 10 | 6 |

Optional modules (max. 40 credits)

The optional modules available to students from year to year may vary, but are likely to include:

| | | | |
|--------|--|----|---|
| CE3HBE | Historic Built Environment | 10 | 6 |
| CE3GIC | Green Innovation in Construction | 10 | 6 |
| CE3CBM | Business Organisation and Management | 10 | 6 |
| CE3CDT | Digital Technology in Construction | 10 | 6 |
| CE3CFM | Facilities Management | 10 | 6 |
| CE3CHR | Human Resource Management | 10 | 6 |
| CE3CIE | Inclusive Environments | 10 | 6 |
| CE3CCL | Construction Contract Law | 20 | 6 |
| CE3CIB | Intelligent Buildings | 10 | 6 |
| CE3CIC | International Construction | 10 | 6 |
| CE3CME | Management of Construction Projects | 10 | 6 |
| CE3CCX | Career Development | 10 | 6 |
| CE3CQC | Quantification and Costing | 10 | 6 |
| CE3EMA | Environmental Management and Assessment | 10 | 6 |
| LA1XX1 | Institution Wide Language Programme | 20 | 4 |
| LW1A06 | Introduction to Business Law | 10 | 4 |
| LW101F | Introduction to Property Law | 10 | 4 |
| CE3CHS | Health and Safety Management and Culture in Construction | 10 | 4 |

Progression requirements

To be considered to have achieved a threshold performance at Part 1 a student shall normally be required to:

- achieve an overall average of 40% over 120 credits taken in Part 1
- achieve a mark of at least 30% in individual modules amounting to not less than 100 credits taken in Part 1

Threshold Performance at Part 2:

To be considered to have achieved a threshold performance at Part 2 a student shall normally be required to:

- achieve an overall average of 40% over 120 credits taken in Part 2
- achieve a mark of at least 40% in 80 credits in Part 2, and a mark of at least 30% in 120 credits taken in Part 2

Assessment and classification

The University's honours classification scheme is:

| <i>Mark</i> | <i>Interpretation</i> |
|-------------|------------------------|
| 70% - 100% | First class |
| 60% - 69% | Upper Second class |
| 50% - 59% | Lower Second class |
| 40% - 49% | Third class |
| 35% - 39% | Below Honours Standard |
| 0% - 34% | Fail |

For the University-wide framework for classification, which includes details of the classification method, please see: www.reading.ac.uk/internal/exams/Policies/exa-class.aspx.

The weighting of the Parts/Years in the calculation of the degree classification is

Three-year programmes

Part 2 one-third

Part 3 two-thirds

Teaching

Students are provided with a variety of formal teaching, which includes lectures, tutorials, supervised project work (individually and in groups), seminars and presentations. Module material is provided to students through Blackboard, which is also used in some modules to generate discussion.

Learning

Students are required to manage their own learning. The importance for personal and academic development of individual study, research and analysis is stressed to, and facilitated for, all students from the beginning of the programme.

Assessment

A wide variety of assessment methods is used throughout the programme, including unseen written examinations and assignments. The assignments may consist of essays or reports or practical projects (individually or in groups), or oral and pinboard presentations. In Part 3, students undertake a dissertation and a practical vocational project.

Admission requirements

Entrants to this programme are normally required to have obtained:

Grade C or better in English and Mathematics at GCSE

UCAS tariff: 300 points from 3 A-levels or 320 points from 3 A-levels and 1 AS-level.

Subjects and levels: There are no required subjects although Economics, Business Studies, Mathematics or Geography are all relevant.

AS: 2 AS grades are accepted as 1 A level

BTEC ONC and OND with 2 distinctions and 4 merits at Level III

HNC and HND with 1 distinction and 4 merits at Levels IV and V.

Applications are welcome from international applicants, mature students and from those coming from other educational routes.

Second Year Entry is considered for those applicants with higher qualifications than those required for Year 1 entry. Applicants with BTEC HND with 2 distinctions and 4 merits will be considered for advanced entry.

Admissions Tutor: Mrs Christina Duckett

Support for students and their learning

University support for students and their learning falls into two categories. Learning support is provided by a wide array of services across the University, including: the University Library, the Careers, Placement and Experience Centre (CPEC), In-session English Support Programme, the Study Advice and Mathematics Support Centre teams, IT Services and the Student Access to Independent Learning (S@il) computer-based teaching and learning facilities. There are language laboratory facilities both for those students studying on a language degree and for those taking modules offered by the Institution-wide Language Programme. Student guidance and welfare support is provided by Personal Tutors, School Senior Tutors, the Students' Union, the Medical Practice and advisers in the Student Services Centre. The Student Services Centre is housed in the Carrington Building and offers advice on accommodation, careers, disability, finance, and wellbeing, academic issues (eg problems with module selection) and exam related queries. Students can get key information and guidance from the team of Helpdesk Advisers, or make an appointment with a specialist adviser; Student Services also offer drop-in sessions and runs workshops and seminars on a range of topics. For more information see www.reading.ac.uk/student

The School's Resources Room contains a variety of information sources relevant to the property and construction industries. It has a wide ranging reference collection of textbooks, journals, videos and information from companies in the property and construction industries. The School has its own IT Suite which contains software relevant to construction and surveying including AutoCAD for computer-aided design.

Career learning

Career prospects

Graduates from undergraduate programmes in the School have been regularly employed by the largest and most prestigious firms of constructors, project management consultants, surveyors and property managers including Davis Langdon, E.C. Harris, Gardiner and Theobald, Gleeds, Turner and Townsend, Citex, Ridge and Partners, Bovis, Carillion, Keir, Costain, Taylor Woodrow, Wates, Schal, Mace, Jones Laing LaSalle, Weatherall, Smith and Green, Chestertons, Donaldsons Drivers Jonas and King Sturge.

Graduates from the Building Surveying programme most frequently enter employment with consultants who offer building surveying services or property management consultants or owners, including E.C. Harris, Ridge and Partners, Jones Laing LaSalle, Weatherall, Smith and Green, Chestertons, Donaldsons, Drivas Jonas and King Sturge.

These companies are willing to offer sponsorship in terms of work in the summer vacations or for year-out placements, for which students are permitted to suspend their studies.

Opportunities for study abroad

As part of the degree programme students have the opportunity to study abroad at an institution with which the University has a valid agreement.

Study Abroad:

There is no formal requirement for study abroad, but with the agreement and approval of the Programme Director, a student may be permitted to undertake a formal or negotiated period of study abroad, which, with the approval of the Examination Board, may replace a section of the formal programme module content.

Placements:

Students are able and are encouraged to take employment with the firms with whom the School has firm contacts, who often seek students to offer this experience, either in the form of a year's placement in employment (usually at the end of Part 2), or work during the summer vacation. These work experience activities often lead to offers of full-time permanent employment on graduation.

In addition, the programme offers an optional 10-credit module in Part 3 in which the student undertakes approximately 60 hours of employment with an approved employer in surveying or construction and completes an analytical report on the experience.

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In addition, the programme offers an optional 10-credit module in Part 3 in which the student undertakes approximately 60 hours of employment with an approved employer in surveying or construction and completes an analytical report on the experience.

Programme Outcomes

Knowledge and Understanding

A. Knowledge and understanding of:

1. The nature, roles and structure of the property development and construction industries
2. The processes of design, construction and servicing of buildings
3. The environmental, legal, economic and managerial principles of property development in market economy economies
4. The techniques required for the procurement, planning, management and costing of building development
5. The techniques of cost management and accounting of property development, construction procurement and construction processes
6. The maintenance, refurbishment and rehabilitation of built facilities

Teaching/learning methods and strategies

Core knowledge and understanding is acquired through lectures, tutorials, computer-aided instruction, laboratory practical work, group projects, site visits and guided independent study. Knowledge is further developed through feedback on non-assessed work during tutorial and practical exercises.

Whilst basic facts are obtained in lectures and guided reading, this knowledge is applied through the specialist modules and the practical application of the principles and skills in project work throughout the course and in on-site, building inspections and individual, specialist project working in Year 3.

Deeper knowledge and understanding in the chosen specialisms is also obtained by research in a related subject area and the writing of a dissertation under supervision.

Assessment

Knowledge and understanding in Years 1 and 2 is assessed primarily by unseen examinations and assignments, which take various forms. In Year 3, students prepare a dissertation.

Skills and other attributes

B. Intellectual skills - able to:

1. Think systematically, comprehensively, logically and imaginatively
2. Identify, analyse and solve problems
3. Plan, organise and manage tasks
4. Transfer appropriate knowledge and methods across subject modules
5. Rapidly assimilate, evaluate and communicate graphical and written information
6. Plan, conduct research and write a report

Teaching/learning methods and strategies

These skills are developed through the teaching methods of the programme and through undertaking the required assignments.

Knowledge and understanding are developed by lectures, guided reading and tutorial discussion appropriate to the subject content of the module and through application of the knowledge in project work, which includes group project work in Years 1 and 2 and individual specialist project work and a dissertation in Year 3.

Assessment

Skills in Year 1 are assessed by laboratory reports, tutorial presentations, essays and unseen examination papers. In years 2 and 3, these skills are assessed by group project working, individual project reports and a dissertation.

C. Practical skills - able to:

1. Communicate design and specification information in drawn and written form by hand and by using computer aided techniques
2. Assess the physical condition of built facilities
3. Carry-out land and building surveys
4. Quantify and value building work from design information

Teaching/learning methods and strategies

These skills are promoted through practical class work in Years 1 and 2 and are further developed by group projects and practical surveying exercises on campus. In year 3, students apply these skills in the specific vocational modules and during a number of site visits and in designed practical project tasks in order to produce specific, developed skill potential.

Assessment

Assessment of practical skills is via coursework and the submission of project reports. Unseen examinations are also used where students are encouraged to display knowledge of techniques and skills. Part 3 projects are designed to test students' competence in exercising practical skills

D. Transferable skills - able to:

1. Communicate effectively by oral, written and graphical means
2. Data collection and manipulation
3. Apply numerical skills to financial information
4. Work effectively independently or in a group situation
5. Career management

Teaching/learning methods and strategies

These skills are communicated generally throughout the course through the teaching and learning processes and class activities used in modules. Specifically:

Skills 1 and 4 are required in the project work undertaken and in the presentations that form an integral part of all project work.

Skills 2 and 3 are part of the application aspects in the economic and financial modules of Years 1 and 2 and the laboratory work.

Skill 5, is a continual theme of the course in its industrial and professional practice aspects and in the application of these at Year 3 in project work. Students are provided with the facility to become aware of and study the practices and techniques of professional practitioners and firms through guest lectures and recruitment visits of these organisations as part of course activities and career selection.

Assessment

Transferable skills 1-4 are assessed through coursework and presentations.

Please note - This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the module description and in the programme handbook. The University reserves the right to modify this specification in unforeseen circumstances, or where the process of academic development and feedback from students, quality assurance process or external sources, such as professional bodies, requires a change to be made. In such circumstances, a revised specification will be issued.