

MSc Construction Cost Management (full-time)
For students entering in 2017/8

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| Awarding Institution: | University of Reading |
| Teaching Institution: | University of Reading |
| Relevant QAA subject Benchmarking group(s): | |
| Programme length: | 12 months |
| Date of specification: | 04/Aug/2017 |
| Programme Director: | Dr Florence Phua |
| Board of Studies: | SCME Board of Studies for Postgraduate |
| Programmes | |
| Accreditation: | Chartered Institute of Building Royal Institution of Chartered Surveyors |

Summary of programme aims

The programme provides an opportunity for new entrants to the professional practice of Construction Cost Management, who have taken degrees in non-related disciplines. It introduces the fundamental academic subjects related to Construction Cost Management and an understanding of the latest academic theories and research, which inform vocational practice in the financial management of construction projects.

Transferable skills

The University's Strategy for Teaching and Learning has identified several generic transferable skills, which all students are expected to have developed by the end of their degree programme. In following this programme, students will have the opportunity to enhance their skills relating to career management, communication, information handling, numeracy, problem-solving, team working and use of information technology.

The programme will develop the following transferable skills:

- Critical, analytical thinking in a construction project context
- Research skills
- Reflective practitioner skills
- Inter-professional team working skills
- General professional capabilities, including: time management and managerial skills

Programme content

The programme offers six core modules and four optional modules to be taken from the list below. Flexibility in the choice of optional modules enables candidates to tailor the programme to their own learning requirements.

Core modules:

| <i>Code</i> | <i>Title</i> | <i>Credits</i> | <i>Level</i> |
|-------------|---|----------------|--------------|
| CEM100 | Dissertation and research skills | 60 | 7 |
| CEM104 | Construction Cost Management: Principles and Practice | 40 | 7 |
| CEM202 | Construction Project Management | 10 | 7 |
| CEM206 | Construction Contract Law | 10 | 7 |
| CEM228 | Construction Economics | 10 | 7 |
| CEM238 | Construction Cost Engineering | 10 | 7 |

Optional modules – Any four from this list:

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|--------|---|----|---|
| CEM203 | Financial and Management Accounting in Construction | 10 | 7 |
| CEM204 | International Construction | 10 | 7 |
| CEM205 | Human Resource Management | 10 | 7 |
| CEM208 | Information Systems in Construction | 10 | 7 |
| CEM213 | Urban Sustainable Development in Emerging Economies | 10 | 7 |
| CEM225 | Building Information Modelling | 10 | 7 |
| CEM230 | Design Management | 10 | 7 |
| CEM242 | Advanced Visualisation and Interactive Technologies | 10 | 7 |
| CEM243 | New Technology, Management and Change | 10 | 7 |
| CEM244 | Analysing Construction Processes | 10 | 7 |
| CEM302 | Strategic Management | 10 | 7 |

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|--------|--|----|---|
| CEM303 | Sustainable Design, Construction and Operation | 10 | 7 |
| CEM334 | Innovative Developments in Construction | 10 | 7 |
| CEM335 | Real Estate Development Appraisal and Analysis | 10 | 7 |

Part-time or modular arrangements

This programme may be taken on a flexible-modular basis, normally over 24 months, up to a maximum of 63 months, with a choice of September or January start. January starts involve spreading the period of study over three academic years, with a view to graduating in December of the third year.

All 10-credit modules will be provided in one-week attendance periods at the University.

Any 10-credit module provided by the School can be taken as a short course on an ad-hoc basis.

Progression requirements

There are no intermediate progression requirements in this programme.

Summary of Teaching and Assessment

The general assessment pattern for each module is by coursework. Detailed assessment regimes are specified in the relevant module descriptions.

The overall mark for the programme will be the aggregate mark of modules, weighted by credit value and classified as below. For further details see 'How to calculate an award' at <http://www.reading.ac.uk/exams/>

The programme uses the University's classification scheme:

Passing categories:

70-100% Work of distinction standard

60-69% Work of merit standard

50-59% Work of good standard

Failing categories:

40-49% Work below threshold standard (BTS)

0-40% Unsatisfactory Work

Further information on the classification conventions, including borderline criteria, are available at

<http://www.reading.ac.uk/internal/exams/Policies/exa-class.aspx>

Masters award

To obtain the Masters award a student must take 180 credits consisting of the six compulsory core modules and four optional modules. To pass the MSc students must gain an average mark of 50 or more over 180 credits including a mark of 50 or more for the dissertation. In addition, the total credit value of all modules marked below 40 must not exceed 30 credits and the total credit value of all modules marked below 50 must not exceed 55 credits.

Students who gain an average mark of 70 or more overall or an average mark of 68 or more and a mark of 70 or more in 90 credits, including a mark of 60 or more for the dissertation, and have no marks below 40 will be eligible for a Distinction. Those gaining an average mark of 60 or more overall or an average mark of 58 or more and a mark of 60 or more in 90 credits, including a mark of 50 or more for the dissertation, and have no mark below 40 will be awarded a Merit.

Diploma Award:

To obtain the Postgraduate Diploma a student must take 120 credits including at least three compulsory core modules (not including 'CEM100 Dissertation and Research Skills' or 'CEM105 Emerging Economies Integrating Studies'). To pass the Diploma students must gain an average mark of 50 or more over the 120 credits. In addition, the total credit value of all modules marked below 40 must not exceed 30 credits and the total credit value of all modules marked below 50 must not exceed 55 credits.

Students who gain an average mark of 70 or more over 120 credits or an average mark of 68 or more over 120 credits and a mark of 70 or more in 60 credits and have no mark below 40 will be awarded a Distinction. Those gaining an average mark of 60 or more over 120 credits, or an average mark of 58 or more and a mark of 60 or more in 60 credits and have no mark below 40 will be awarded a Merit.

Certificate Award

To obtain the Postgraduate Certificate a student must take 60 credits consisting of three compulsory core modules (not including 'CEM100 Dissertation and Research Skills' or 'CEM105 Emerging Economies Integrating Studies'). To pass the Certificate, students must gain an average mark of 50 or more over the 60 credits. In addition, the total credit value of all modules marked below 40 must not exceed 10 credits.

Note: A module cannot be credited for more than one award.

Admission requirements

Applicants are normally required to have a good undergraduate honours degree, preferably with some relevant industrial experience. Candidates with a lesser degree and relevant professional qualifications (e.g. RIBA, ARICS, MICE, MCIOB, MCIBSE) may also be considered.

Admissions Tutor: Dr Florence Phua

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, In-session English Support Programme, the Study Advice and Mathematics Support teams and IT Services. 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 the Support Centres. If a student has a general enquiry and is unsure where to seek help, they should visit their Support Centre. There are five Support Centres across the University, including one based at the London Road Campus. The Support Centre will be able to advise on matters such as extenuating circumstances, module selection, suspensions, withdrawals, timetable queries and transferring programme. The Support Centre will also be able to signpost students to Carrington building where other University services related to disability, financial support, counselling and wellbeing, accommodation and careers can be found. More information on what student services are available can be found here: <http://student.reading.ac.uk/essentials>.

All students in the School are provided with guidance and support for their learning in a variety of ways. Interaction takes place with the Programme Director, Lecturing Staff and Dissertation Supervisors who provide guidance throughout the period of study. Dissertation Supervisors will guide students through the dissertation by organising regular structured meetings. A minimum of 12 supervision meetings would be expected during the programme at times that are mutually convenient. Furthermore all students will be able to meet the Programme Director and lecturing staff at mutually convenient times throughout the year. The School's administrative, support and technical staff help to support and personalise students' experience with the School. In addition to the above, students will have access to the SCME Resource Room and receive a detailed programme handbook and other relevant information packages. The Programme Director will also organise an annual induction event where all students will be welcomed by their lecturing staff in a friendly and informal setting.

All modules are supported by learning materials on a dedicated website. Students are given access to the material via the Blackboard platform, which can be accessed on or off campus.

Career prospects

Graduates will typically find employment in cost management or quantity surveying with public and private sector clients, consultants, or contractors in the building, civil engineering or oil & gas sectors.

Opportunities for study abroad or for placements

There are no formal arrangements for study abroad or placements.

Programme Outcomes

Knowledge and Understanding

A. Knowledge and understanding of:

1. Cost management strategies and operational responses in a project management environment
2. Applied strategic management theories in relation to projects.
3. Evaluating risk and generating value in a project management environment.
4. Construction contracts and contract law.
5. Financial management and accounting in a project environment

Teaching/learning methods and strategies

The knowledge required for the theory and practice of CCM is delivered in formal lectures and seminars. Problem solving exercises are used in many modules to help students articulate the concepts and knowledge delivered in lecture. This instruction is supported by conventional private study and web-based learning, including interactive discussion and problem-solving exercises.

6. Construction economics and the firm.
7. Understanding management strategy and practice in other industries
8. Legal requirements of operating in a project environment.
9. Commercial project decision-making.

Feedback is also provided through coursework and tutorials, especially at the Dissertation stage of study.

Assessment

Most learning is tested through coursework. Dissertation and oral presentations also contribute to the final mark.

Skills and other attributes

B. Intellectual skills - *able to*:

1. Evaluate the cost implications of design decisions.
2. Evaluate the cost implications of construction and engineering operational requirements.
3. Analyse and solve problems.
4. Think strategically.
5. Synthesise complex sets of information.
6. Understand the changing nature of knowledge and practice in the management of project environments and construction organisations.

Teaching/learning methods and strategies

Opportunities to understand theory and evaluate concepts are embedded throughout the programme. Emphasis is placed on how to deploy analytic concepts and theories and their relevance for and application to different practical situations.

Assessment

The coursework is designed to test the student's ability to develop and command these intellectual skills. The Dissertation is the culmination of this process and a maturity of critical awareness and construction evaluation is tested at stage.

C. Practical skills - *able to*:

1. Calculate and analyse costs of construction operations, design decisions and engineering decisions.
2. Understand and construct financial plans for construction projects.
3. Formulate and solve cost management problems within and across functional areas of projects and construction-based organisations.
4. Show a capability to act decisively in a co-ordinated way using theory and practice.
5. Use concepts and theories to make judgements in the absence of complete data.

Teaching/learning methods and strategies

The teaching is structured around research and theoretical conceptualisations from researchers and practitioners with extensive experience of the construction sector, enabling students to develop and apply practical skills.

Assessment

Case studies in the integrating studies module. Assessed group work. Case-based assignments including reports and presentations, both individually and in teams.

All practical skills will be developed through case-based group assignments and finally demonstrated and improved through a dissertation. In addition to that students will learn practical skills through directed reading and lectures.

D. Transferable skills - *able to*:

1. Develop the capacity to analyse and articulate complex management issues in project and construction environments.
2. Assess what knowledge is transferable from other contexts into the project and construction environments.
3. Be confident in applying learning experience to practical management situations.
4. Work as part of a team.
5. Source material and knowledge from a variety of fields and effectively judge what can be integrated and applied.

Teaching/learning methods and strategies

In-depth evaluation of ideas and issues through seminar discussion, problem solving exercises conducted individually and in groups and coursework focussed on practical applications of knowledge and reasoning are designed to develop and test transferable skills.

Assessment

Coursework provides the main means of assessing the introduction and development of these skills. The coursework will assess all the skill aspects to a general MSc level.

6. Attain and apply knowledge and information that will help develop their career.

The Dissertation provides the main means to ascertain maturation in relation to a focussed research topic and hence in depth.

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.