# **MSc in Project Management**

Awarding Institution: The University of Reading
Teaching Institution: The University of Reading
Faculty of Science Programme length: Minimum

Programme length: Minimum of 24 months and normally maximum of 60 months part time (12 months full

time by agreement)

For students entering in October 2003 Date of specification: April 2003

Programme Director: Dr Stuart Green

Board of Studies: Construction Management & Engineering Framework Board

Accreditation: Royal Institution of Chartered Surveyors

## Summary of programme aims

This programme builds upon the management capabilities in the School. Its aim is to develop a high quality project management capacity for those working in construction and property development, who seek top management and board level positions in their organisations.

#### Transferable skills

The University's Strategy for Teaching and Learning has identified a number of 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 had the opportunity to enhance their skills relating to career management, communication (both written and oral), information handling, numeracy, problem-solving, team working and use of information technology.

The programme will develop the following transferable skills:

- Critical systems theory skills (CEMC01)
- Systems dynamics and systems evolution analysis skills (CEMC01)
- Reflective practitioner skills (CEMO33)
- Inter-professional team working skills (CEMC01, CEMC05)

## **Programme content**

The Modules are all existing Modules from the Masters Training Package, developed for Project Management and Construction Cost Management funded by the EPSRC.

# **Compulsory Modules**

		Credits	Level
CEMC01	Principles of Project Management	20	M
CEMC07	Design Management	20	M
CEMC05	Human Resource Management	20	M
CEMC06	Construction Law	20	M

# **Elective Modules**

		Credits	Level
CEMO20	Risk and Value Management	10	M
CEMO22	Accounting and Project Finance	10	M
CEMO28	Construction Economics	10	M
CEMO33	Learning from Other Industries	10	M
CEMO32	International Construction	10	M
CEMO38	Construction Cost Engineering	10	M
CEMO25	Sustainable Construction	10	M
CEMO37	Strategic Management	10	M
CEMO34	Production Engineering	10	M

CEMO21	Professional Construction Management	10	M
CEMC10	Dissertation	60	M

## Part-time/Modular arrangements

Modules will be provided in one week attendance periods at the University.

# **Progression requirements**

## Masters Award

To obtain the Masters award a student must take 180 credits consisting of the four compulsory core modules, four elective modules and the dissertation. In the usual part-time pattern, there will be no formal interim progression stages. In this usual pattern a student will commence the dissertation module at the beginning of the second year when four modules will have been successfully completed. To pass the MSc students must gain an average mark of 50 or more overall 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 for all modules marked below 50 must be less than 60 credits.

Students who gain an average mark of 70 or more overall including a mark of 70 or more for the dissertation and have no mark below 40 will be eligible for a Distinction. Those gaining an average mark of 60 or more overall including a mark of 60 or more for the dissertation and have no mark below 40 will be awarded eligible for a Merit.

## Diploma Award

To obtain the Diploma award a student must take 120 credits including at least three compulsory core modules. To pass the Postgraduate Diploma students must gain an average mark of 50 or more. In addition the total credit value of all modules marked below 40 must not exceed 30 credits and for all modules marked below 50 must be less than 60 credits.

Students who gain an average mark of 70 or more and have no mark below 40 will be eligible for the award of a Distinction. Those gaining an average mark of 60 or more and have no mark below 40 will be awarded eligible for a Merit.

#### Certificate Award

To obtain the Certificate award a student must take 60 credits consisting of three compulsory core modules. To pass the Postgraduate Certificate students must gain an average mark of 50 or more. In addition the total credit value of all modules marked below 40 must not exceed 10 credits.

The provision to permit a candidate to be passed overall with a profile containing marks below 40 is made subject to the condition that there is evidence that the candidate applied his or herself to the work of those modules with reasonable diligence and has not been absent from the examination without reasonable cause.

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

### **Summary of teaching and assessment**

The full detail of teaching and assessment in each module is given in the module descriptions.

### **Teaching**

The general approach is to deliver lectures during study visits, usually of one-week module duration per module suited to the part-time mode of studying. This attendance period is supported with guided study through traditional private study and through web based learning;

### **Assessment**

The general assessment pattern for each module is by examination and coursework, if the module is core/compulsory and by examination if the module is an elective. The detail assessment regulations are given in the module descriptions.

The overall grade for the programme will be the aggregate mark of modules passed, weighted by credit value and classified as below.

The programme will use the University's classification scheme:

■ 70 - 100% Distinction

■ 60 - 69% Merit

■ 50 - 59% Pass

Failing categories:

40 – 49% Work below threshold standard

0 – 40% Unsatisfactory Work

### **Admission requirements**

Entrants to this programme are normally required to have obtained:

- a good first degree, normally at least an upper second, or equivalent in a relevant area
- at least two years in a position of management responsibility, commanding people and resources, within the project or construction working environment is required for entry.

# Support for students and their learning

University support for students and their learning falls into two categories. Learning support includes IT Services, which has several hundred computers and the University Library, which across its three sites holds over a million volumes, subscribes to around 4,000 current periodicals, has a range of electronic sources of information and houses 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. Programme Directors, the Careers Advisory Service, the University's Special Needs Advisor, Study Advisors, Hall Wardens and the Students' Union provide student guidance and welfare support.

Department support includes, in addition to the lecture programme during the week attendance period, access to a web based system providing course material, self assessment questions and tutorial discussions. An induction programme is provided, which is incorporated into the first visit.

## Career prospects

The specific aim is to develop specialist skills in project management. These arise from the students being exposed to theory, research and methods of critical evaluation, bringing their work-based skills to bear in applying the lessons to their career environment. This will equip students who successfully complete the programme to:

- operate with increased authority within their area of core expertise
- manage others in a team environment
- obtain promotion within or outside their organisation of employment

# Opportunities for study abroad or for placements

At present there are no requirements, nor placement opportunities, for a period abroad. This is a reflection of the part-time nature of study, although there have been a number of students from other countries who have studied on Masters Programmes within the Framework of Modules to which this Programme belongs.

However, client organisations, especially in a European context may require this to be an opportunity for students, whereby the Programme offers a reverse study opportunity, that is in the UK at Reading. This would be addressed as special requirements under any proposal.

## Educational aims of the programme

The programme aims to develop in students a capacity for management of complex projects, specifically in a construction related environment. In particular students will develop: Abilities to listen to others, co-ordinate and influence peer management in a co-operative and assertive way

The capacity to evaluate complex management situation, draw upon concepts and ideas and act decisively

Develop confidence to make judgements where data is partial or lacking, drawing upon the learning from the Programme in the light of experience.

# **Programme Outcomes**

# Knowledge and Understanding

# A. Knowledge and understanding of:

- 1. Management strategies and operational response in a project management environment
- 2. Human resource management, particularly in work undertaken to contract
- 3. Strategic management theories and approaches in practice
- 4. Marketing, sales and delivering client satisfaction through effective management
- 5. Evaluating risk and generating value in a project management environment
- 6. Financial management and accounting in a project environment
- 7. Construction economics and the firm
- 8. Understanding management strategy and practice in other industries
- 9. Management of international construction
- 10. Business systems to integrate real estate and management
- 11. Legal requirements of operating in a project environment
- 12 Process management

# Teaching/learning methods and strategies

The knowledge required for the theory and practice is delineated in formal lectures and seminars. Problem solving exercises are a common feature, which are used to articulate the concepts and relate them to the practical organisation setting and project working environment.

This is supported by conventional private study and web-based learning, some of which is to be taken up by the student on the same basis as conventional private study and some is directed learning based upon interactive discussion and problem solving exercises. Tutorials, through which students can obtain feedback on their non-assessed work, are conducted through the web. Feedback is also provided through coursework and tutorials, especially at the Dissertation stage of study.

### Assessment

Most knowledge is tested through a combination of coursework and unseen formal examinations. Dissertation and oral presentations also contribute.

#### Skills and other attributes

### **B.** Intellectual skills – able to:

- 1. Analyse and solve problems
- 2. Think strategically
- 3. Synthesis complex sets of information
- 4. Understand the changing nature of knowledge and practice in the management of project environments and construction organisations
- 5. Select and transfer knowledge and methods from other sectors to the project and construction based organisation.

### Teaching/learning methods and strategies

Opportunities to understand theory and evaluate concepts are embedded throughout the programme. Emphasis is placed upon making judgements as to what bodies of knowledge and concepts are applicable to situations - which can be integrated, used in parallel or are in conflict or opposition to each other.

#### 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. Understand and construct business planning and implementation
- 2. Formulate and solve management problems within and across functional areas of the project and construction based organisation
- 3. Show a capability to act decisively in a coordinated way using theory, better practice and harness this to experience
- 4. use concepts and theories to make judgements in the absence of complete data.

### Teaching/learning methods and strategies

The Core Modules are designed to introduce the key theories and concepts to the student. Opportunities are provided to apply these to specific situations through problem solving exercises and through coursework.

The Elective Modules focus upon specialist areas in which the practical lessons are explored.

Through this process the student is required to make connections between the course related material and their in-career work experience and/or their prior working experience in the field of management.

#### Assessment

The examinations test the breadth of practical knowledge application. Coursework assesses the depth of understanding of knowledge, which required articulation of both the practical implication and application of knowledge.

### **D.** Transferable skills – able to:

- 1. Develop the capacity to analyse and articulate complex management issues in the project and construction environment
- 2. Assess what knowledge is transferable from other context into the management approaches within this working context
- 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
- 6. Attain and apply knowledge and information that will help develop their career.

## Teaching/learning methods and strategies

In depth evaluation of ideas and issues through seminar discussion, problem solving exercises conducted individually and in groups, plus coursework provide the mix to articulate these aspects both separately and together through different learning methods

#### Assessment

Coursework provides the main means of assessing how the introduction and development of these skills is progressing. The coursework will assess all the skill aspects to a general level of transfer appropriate at Masters level. The Dissertation provides the main means to ascertain maturing in some of these areas within a focussed 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 expect 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 module and programme handbooks.