

MSc (External) in Facilities Management

Awarding Institution:	The University of Reading
Teaching Institution:	The College of Estate Management
Faculty:	Faculty of Science
For students entering in:	2003-2004
Programme length:	28 months
Date of Specification:	March 2003
Programme Directors:	Alan Jordan (Internal) Dr Ashley Dabson (External)
Board of Studies :	Postgraduate Courses in the School of Construction Management and Engineering
Accreditation: (to be sought)	The Royal Institution of Chartered Surveyors The British Institute of Facilities Management

Summary of programme aims

The degree examines the theories, concepts, principles and variables that influence the practice of facilities management. These are considered within both the micro-context of maintenance, service delivery and management, and the macro-context of business demands, constraints and impacts. In comparison with established masters' programmes, this focus offers a wider dimension to the qualification and fills a gap in the market for investigation and enquiry into the broader academic issues that surround facilities management, through distance learning.

The MSc is a web-supported distance taught course designed to provide students with advanced academic understanding of legal, economic, technological and management processes.

Transferable skills

The MSc is designed to enable students to develop their skills relating to communication, information handling, numeracy, problem-solving, self-management and use of information technology. Oral presentation skills will be encouraged within the limited parameters of the face-to-face elements of the distance-taught programme, but team working and collaborative learning are positively structured into many of the online activities.

These transferable skills are developed progressively and in parallel with the specific subject competencies studied. The distance learning nature of the programme promotes self-discipline, self-motivation and effective time management.

Programme structure and content

Structure

The MSc is delivered through supported distance learning and extends over three academic years starting in February each year. The programme is divided into three parts.

Part 1: Foundation and Fundamentals is a series of five modules that set out the context of facilities management in the public and private sectors and provide students with a grasp of the fundamental skills required within the profession. The modules cover the history and development of facilities management, space management, building technology, financial management and legal studies.

There are no exemptions.

Part 2: Application is a further sequence of six modules designed to provide a broader framework of study and to consolidate the knowledge base gained in Part 1 of the programme by means of integrated projects. The emphasis is on investigating alternative ways of resourcing facilities management operations, overcoming inherent defects in an existing property portfolio, and harnessing facilities management to underpin the strategic aims of an organisation.

There are no exemptions.

Part 3: Research is structured for the student to complete a research methodology module before undertaking a dissertation that critically examines a specific aspect of facilities management practice.

The structure components are outlined in Table 1. Study is designed to meet the Quality Assurance Agency National Qualifications Framework for awards at M level. In addition to the framework requirements, the design also takes account of professional body guidelines, specifically those issued by the RICS for accredited courses.

A calendar of studies is shown at Appendix 1.

Content

The programme comprises the following learning components: structured independent study, online interactivity, and formative and summative assessment. The summative assessment includes assignments, examinations and dissertation assessed by course tutors. Students are expected to complete 15 hours of study per week, with an additional 5 hours of experiential learning within their workplace.

All students studying for the MSc are required to complete a total of 13 prescribed modules. Each module carries an allocation of credits as set out in Table 2, with each credit equating to ten hours of combined study.

The formal research component of the programme is completed at Part 3. The taught *Research Methods* module and *Dissertation* together constitute 60 credits and require students to spend about 400 hours preparing their dissertation on a practical aspect of a Part 2 related subject.

Table 1: Component of the MSc in Facilities Management

Part	Stage	Modules	Required	Hours	Credits
1	Foundation & Fundamentals	The overview of Facilities Management	Compulsory	200 hours - 160 study - 40 experiential	20 at M
		The Workplace: Space Management & Building Technology	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Management	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Financial Management Principles	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Legal studies	Compulsory	100 hours - 80 study - 20 experiential	10 at M
2	Application	Information Technology	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Operational Property Portfolio Planning	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Financial Planning & Control of Facilities	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Property Asset Management	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		The Facilities Support Services	Compulsory	100 hours - 80 study - 20 experiential	10 at M
		Integrated Assignments	Compulsory	100 hours - 80 study - 20 experiential	10 at M
3	Research	Research Methods	Compulsory	200 hours - 200 study	20 at M
		Dissertation	Compulsory	400 hours - 400 study	40 at M

Table 2: Programme Modules

Module Code	Module Title	Credits	Assessment	NQF Level
Part 1 – Foundation and Fundamentals				
CEMMOV	The Overview of Facilities Management	20	Course Work & Exam	M
CEMMTW	The Workplace: Space Management and Building Technology	10	Course Work & Exam	M
CEMMMGM	Management			
CEMMFP	Financial Management Principles	10	Course Work & Exam	M
CEMMLS	Legal Studies	10	Course Work & Exam	M
Part 2 – Application				
CEMMIT	Information Technology	10	Exam	M
CEMMOP	Operational Property Portfolio Planning	10	Exam	M
CEMMPC	Financial Planning and Control of Facilities	10	Exam	M
CEMMAM	Property Asset Management	10	Exam	M
CEMMSS	The Facilities Support Services	10	Exam	M
CEMMC8	Integrated Assignments	10	Course Work	M
Part 3 – Research				
CEMMRM	Research Methods	20	Course Work	M
CEMMFD	Dissertation	40	Course Work	M

Modular arrangements

The programme is distance taught and designed for students who are fully employed within the facilities management or allied industries and professions.

Each module is designated credits at M level. Parts 1 and 2 taken together are designed as stand-alone units of study and are offered within a discrete distance taught Diploma programme.

A student leaving the programme at the end of Part 2 will be entitled to the award of a Postgraduate Diploma in Facilities Management on completion of 120 credits.

Progression rules

All modules studied within the programme must be passed.

Part 1 to Part 2 progression

Part 1 accounts for 60 credits. The programme assumes that all students will have achieved a thorough grounding in the Part 1 subject areas before progressing to Part 2. Candidates are to achieve an overall result of not less than 50% in the written examinations and assignments combined, with not less than 40% in each of the two elements. Assignments account for 50% of the marks in each module.

Part 2 to Part 3 progression

Part 2 accounts for 60 credits and Part 3 for 60 credits. All six modules at Part 2 must be passed before a student will be permitted to undertake the Part 3 research year. Assessment of modules 6 to 10 consists of a single examination in each module. To pass each, candidates must achieve a minimum mark of 50%. Module 11, the 'Communic8' project, consists of a series of integrated assignments. To pass this module candidates must achieve an overall average mark of not less than 50%.

If a candidate fails one or more modules in Parts 1 or 2, he or she will be allowed one further opportunity to pass the module(s), including all coursework and examinations, not more than two years later.

Summary of teaching and assessment

The MSc is distance-taught and makes use of a variety of pedagogic and assessment methods suited to this mode of study. All students will be required to have access to a computer and appropriate software applications, have an email address, and have access to the Internet. The course and module designs incorporate best practice in the design, delivery and support of online-enhanced distance learning. Co-ordination of internal and external staff will be provided through a teaching and learning handbook written for the course (see Appendix 5.8).

Teaching

Students entering the programme have studied a discipline to degree level, or have an extensive background in Facilities Management, and are assumed to possess well-developed cognitive abilities and learning skills. Consequently it is anticipated that they can progress rapidly with their study. The programme allows only a limited period of time for study of each subject area, enforcing a need to direct students' attention to the primary knowledge areas that affect and influence practice.

Problem-based learning (PBL)

In completing a programme at masters' level, students are expected to make sound judgements and be self directed and original in solving problems. They must also be able to act autonomously, exercise personal responsibility, and be informed decision makers. These factors point to PBL as the most suitable approach to delivering the outcomes. The key is to have the transferable skills to question, develop, improve and extend knowledge in order to arrive at appropriate solutions.

A cornerstone of PBL is the use of learning materials through which students engage with problems in situations as near 'real life' as possible. By devising solutions to real life case studies, problems or scenarios, students direct their own learning by identifying the necessary learning objectives. PBL means crossing disciplinary boundaries, and as part of the programme students will work to define and solve problems applicable to their own workplace. The integrative coursework in Part 1 and the series of integrative assignments at Part 2 are good examples of PBL. Students will accomplish this by accessing research papers, reference materials specially written for them by course tutors, workplace documentation and technical information, with supporting tutor(s) acting as facilitator(s) of learning.

The iterative nature of learning within this programme means that students will visit and revisit concepts, form new relationships, develop new links, gain new insights and intuitions, experience new perspectives, and develop different interpretative possibilities. The sequence of module study enables a continuous build-up of knowledge and competence in areas chosen by students as they progress through the programme. Additionally, the design of learning activities encourages students to be reflective in both formal and informal learning situations.

Structure of learning

The programme will have a broad cross-section of participants with a wide range of experience. The knowledge content will cover the fundamentals of the facilities management discipline and will have strong strategic focus. The learning method will be intensive and challenging, and considerable autonomous learning will be required. In addition to being familiar with recent research, graduates of the programme will also have an understanding of leading edge practice based on rigorous evidence.

The underlying structure of learning will be based on a programme of distance learning supported by face-to-face days and site visits. Internal and external tutors will lead and

present seminars and workshops, while distance learning study materials and reference work will be supplemented by College on-line resources.

Online learning component

An educational aim of the programme is to progressively develop the online learning skills of the student. Each module within the programme will be included in the Blackboard virtual learning environment through which students can access academic and support staff, each other, the learning pool activities and resources. Successful online learning includes the four components of dialogue, involvement, support and control.

Within the programme *dialogue* occurs on a one-to-one, one-to-many or many-to-many basis, presenting opportunities for a range of individual and collaborative learning activities. Students do not volunteer willingly and will avoid tasks which they see as irrelevant or time-wasting. Therefore asynchronous interaction between students and tutors will be carefully structured and facilitated by moderators working with clearly defined questions to guide the flow.

Active involvement in study is at the heart of the programme design and includes making responses to structured tasks, engagement with course materials, participation in student-centred collaborations, and student direction of their own learning.

Support is considered in more detail at 3.8 below. At a learning level the programme includes provision for periodic face-to-face, online tutor supervision, peer support, advice from experts, and feedback on performance which is critical to the retention of students and maintenance of motivation.

Students are expected to take responsibility for their learning and to *control* key learning activities. Within the programme students have complete or significant control over their responses to tasks, pace and timing, choice of content, management of learning activity, learning goals and outcomes, overall direction, and assessment of performance.

As the student progresses through the programme, the design assumes that the balance of these factors will change. A structured approach, with the tutor controlling specified learning activities, may be appropriate at the start of Part 1, but by its end students should be taking increased control for themselves of specified learning activities. At Part 2 it is anticipated that students will require some direction from tutors, but should increasingly be responsible for their own learning and be formulating problems and solutions for themselves. By the time students reach Part 3 they should be able to manage their own open-ended activity which is implicit to dissertation research.

College produced resources

The College is concerned to produce learning materials which match the best standards in distance learning from a didactic point of view, and in this way to ensure the quality of the student's learning experience.

Quality control of written texts is maintained through the Subject Advisory Committees. These have responsibility for reviewing the content of study material and its relevance to

examinations. Practitioner members provide valuable insights into current issues of importance in practice. There is normally at least one former College Student on such committees. Further evaluation of the material takes place through feedback from questionnaires to students.

All study material is reviewed annually by the relevant College subject tutor. For example, new case law and legislation would normally be incorporated into the material every year. Any interim changes are communicated to students through the College's in-house student journal, *Cemicircular*, which is published bi-annually.

Text books are supplied to supplement the College's own material, especially to elaborate on key areas of the syllabus. These help to promote the discursive abilities of the students, and are particularly helpful for those who do not have ready access to library facilities.

Increasingly, learning resources are being made available to students on CD-ROM produced with the College.

Assessment

Assessment is in accordance with the University's Statutes and Ordinances.

The College continually strives to ensure that the assessment vehicles employed in each module fairly assess both the breadth and depth of student learning within the general framework of the course aims and objectives, and within the constraints of the distance learning process. In particular, assignments, especially later in the course, require students to combine elements of the study material with material from other modules, their own working experience, and facilities management practice identified from a study of current relevant professional journals. The programme designates modules as either examined, assessed or a combination of each, depending on which is most appropriate for providing meaningful assessment of the syllabus content. The weighting of the assessment components for the different modules is shown in Table 3 overleaf.

Coursework

The coursework for each taught module is designed to test the students' understanding of a significant proportion of the syllabus studied in the module and are assessed by the course tutors. Copies are sent to the University's Course Director.

The size and weighting of the assignments for assessed-only modules is considerably higher than for examined modules and will involve students in the preparation of project solutions and substantive reports. Much of this will be based on workplace practice and procedure. The major assessment for Part 2 will be a series of Integrated Reports which will integrate study from across the subjects studied during Parts 1 and 2.

TABLE 3 Assessment Weighting

PART 1	10 Credit Module				20 Credit Module			
Assessment	Examined		Assessed		Examined		Assessed	
	Weighting	Word limit	Weighting	Word limit	Weighting	Word limit	Weighting	Word limit
Assignment 1			50%	3,500			25%	3,500
Assignment 2			50%	3,500				
Assignment 3			50%	3,500				
Assignment 4			50%	3,500				
Assignment 5			50%	3,500				
Assignment 6								
Examination	50%	N/A			50%	N/A	25%	3,500
PART 2	10 Credit Module				10 Credit Module			
Assessment	Examined				Assessed			
	Weighting		Word limit		Weighting		Word limit	
Assignment 1					25%		3,500	
Assignment 2					25%		3,500	
Assignment 3					25%		3,500	
Assignment 4					25%		10,000	
Examination	100%		N/A		N/A			
PART 3	20 Credit Module				40 Credit Module			
Assessment	Assessment				Dissertation			
	Weighting		Word limit		Weighting		Word limit	
Assignment 1	40%		4,000		100%		15,000	
Assignment 2	60%		6,000					
Examination	N/A				N/A			

Students must submit the coursework assignments to arrive at the College by dates stipulated in the course timetable, which is included in the study material. Submission may be made electronically via the Internet.

Assignments are normally marked by members of the College's panel of external markers nominated to mark for this course (see 2.5.1.3.). Assignments are received by the College and sent out to these markers. Markers are instructed to return them to the College within two weeks of receipt.

Markers are reminded by the Assignment Officer after 2½ weeks, if this proves necessary. Persistent late return of assignments by an external tutor will lead to their removal from the panel of markers by the College's Course Director.

The College returns the marked assignment, together with a guideline answer if appropriate, to the student. The guideline answer will also be published in the Blackboard VLE.

Examinations

Formal unseen examinations are held in November of each academic year. The examined subject areas for the MSc are all the modules at Part 1 and modules 6 to 10 at Part 2. Module 11 is assessed by assignments only and Part 3 is assessed by coursework and the dissertation. On this basis 110 credits that count towards the MSc are examined, 30 credits are assessed-only, and 40 credits are assessed by the dissertation.

Threshold marks and results

Students must achieve a minimum mark of 50% in each module at Part 1 and Part 2. The pass mark for the Research Methods and Dissertation at Part 3 is also 50%.

A student averaging 50-59% in the modules studied at Parts 2 and 3 will be awarded the MSc. A student who leaves the programme at the end of Part 2, having achieved the minimum pass marks at Parts 1 and 2, will be awarded a Postgraduate Diploma in Facilities Management.

A student averaging 60-69% in the modules studied at Parts 2 and 3 will be awarded the MSc with Merit.

A student averaging 70% or higher in the modules studied at Parts 2 and 3 will be awarded the MSc with Distinction.

Accreditation by professional bodies

The course will be accredited by the RICS under the University's status as an RICS partner. Application will be made upon successful validation for accreditation by the BIFM. Further professional accreditation may be sought in due course.

Admission requirements

Entrants to the graduate development programme are required to have obtained either:

- An undergraduate degree in any cognate or non-cognate discipline; or
- A relevant examined professional institute membership; or
- Equivalent professional qualifications with extensive relevant experience.

Students will register for the MSc in Facilities Management during their Part 1 study at the time that they make their Part 3 module selections.

English Language

The language of instruction is English.

For those students whose first language is not English, there is an English language requirement of:

- O-level English language (Syllabus B Hong Kong. Grade B or above)
- IELTS British Council test 6.5
- TOEFL 570
- Use of English A/S –level grade C or above
- Proof of prior University level study conducted in the English language medium

The English language requirements are interpreted strictly, owing to the amount of learning material supplied in the English language medium to the students.

Admissions arrangements

All standard applications for admission to the course are determined by the Admissions Officer. More complex, exceptional or unusual cases are dealt with by an Admissions Committee in conjunction with the University of Reading.

Applicants who do not hold a first degree may be required to submit a 2000-word essay on a facilities management topic selected by the Course Director as part of the admission procedure.

Arrangements for transfer between programme routes

All modules within the programme will be taught at an academic level consistent with the NQF level and the QAA module descriptors. However, not all students may wish to achieve the standards expected for the award of a masters degree. The programme therefore allows for two routes to the award of either a University or a College awarded qualification. The following arrangements are proposed:

- Students will initially register at Part 1 for study within the Diploma in Facilities Management programme. During Part 1, students who wish to study for the MSc will request registration with the University for masters' status from the start of Part 2. Also at this time a fee will be payable for registration.
- A student who does not request masters' status will continue through to the end of Part 2 and, upon successfully completing the required number of credits, will be awarded a College Diploma in Facilities Management. If during the first two months of their Part 2 studies such a student wishes to register for the MSc, then they may apply to the Admissions Officer, who will consult with the Course Director and the University before allowing the registration to be made. A registration fee will be payable to the University, together with an adjustment to agreed *per capita* fees.
- A student who registers for the MSc during Part 1 but subsequently decides not to pursue the masters' degree may, upon payment of an administration fee, relinquish their masters' status and revert to study for the College Diploma in Facilities Management.
- A student who completes the College diploma course and subsequently wishes to study for the MSc will be required to register for Part 2 and complete all modules in accordance with the progression rules before proceeding to Part 3. A Registration fee will be payable to the University together with an adjustment to agreed *per capita* fees.
- A student who wishes to leave the programme with a Postgraduate Diploma in Facilities Management at the end of Part 2 may, within 3 years, return their diploma and commence the Part 3 research study to gain the MSc award.

Support for students and their learning

Students will have access to module tutors and support staff involved in the programme through email and the Blackboard virtual learning environment. They will be issued with the *contact details* of other students studying the programme. Each student will be provided with a comprehensive *programme of studies* for each module and a *course handbook* containing full details of the course, the modules, study techniques and the administrative rules, regulations and procedures.

Mentors

Students will be encouraged to identify mentors within their workplace who can guide and assist them in their study. Guidance will be provided for mentors on supporting the learner and ways in which they can assist them in gaining the maximum from the learning experience.

Face-to-face tuition

There will be four intensive face-to-face tuition days arranged during each calendar year for Parts 1 and 2 and two days for Part 3. These are not mandatory given the primarily online nature of the programme but are highly recommended as offering periods of contact during which students will have the opportunity for group work and presentations. Each session will emphasise the problem-based nature of the programme, capitalising on the opportunity to identify, analyse and solve problems in real time.

Face-to-face tuition will also take place during site visits, which are designed to stimulate group discussion.

A workshop approach will be encouraged to help students develop their group working skills through online activity and the accelerated formation of a community of learners.

Face-to-face tuition will be offered at Reading.

As an alternative to proximate face-to-face, video conferencing may be offered to smaller groups subject to the availability of suitable facilities. In recent years video conferencing has successfully been used by CEM tutors to reach groups of students in Hong Kong, Kuala Lumpur, Singapore and Shanghai as either single or bridged connections.

Library and IT Facilities

College and University support falls into two categories. Learning support includes College and University IT Services, which have 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. Within the context of this course, it is not anticipated that students will require automatic access to University library or IT facilities, and any requests to do so will be considered on an individual basis. The College operates its own IT help service for students.

Guidance and care

Student guidance and pastoral care is provided by the Course Director, the Subject Tutors, the Course Administrators and other administrative staff within the College. It is not anticipated that the University Careers Advisory Service, the University's Special Needs Adviser, Study Advisers or the Students' Union will be called upon to support the student's learning experience and welfare support.

Career prospects

It is anticipated that 100% of Programme students will be in relevant full-time employment before and during their studies, and to be seeking the award either for personal development or to further their career prospects or gain membership of one of the professional institutions.

Opportunities for study abroad or for placements

Graduates from more than a dozen countries have been registered on the existing Diploma in Facilities Management course, which the MSc partly replaces. This demonstrates the true global attraction and nature of the international programme. Students wishing to change their employment or location during the programme may do so without penalty.

Programme aims and outcomes

The College of Estate Management and the University of Reading both have a world-wide reputation for delivering education of the highest quality. This programme will continue this tradition by earning recognition and respect as a premier global programme for students working within the facilities management profession.

Educational aims of the programme

The programme provides a combination of academic skills and advanced professional skills commensurate with the Masters' award. It provides the opportunity to attain these skills for those who can not, or choose not to, give up their full-time career status. As such, it enhances on-going career prospects. This achieved in a structured programme that still provides flexibility to the students.

At Part 1 students will receive a grounding in the history and development of facilities management. They will advance and deepen their knowledge and skills in the core areas of Space Management, Building Technology, Management, Financial Management Principles, and Legal Studies.

At Part 2 the more advanced processes associated with Information Technology, Operational Property Portfolio Planning, Financial Planning and Control of Facilities, Property Asset Management and Resource Management are investigated in detail, building on the knowledge gained at Part 1.

At Part 3 students will research skills and techniques to compile an in-depth and substantial dissertation on a closely defined aspect of Facilities Management.

The educational objectives of the programme leading to the MSc in Facilities Management are summarised as:

- To produce independent learners
- To adopt a student centred approach to learning
- To develop active rather than passive learning
- To harness the internet and offer effective web supported learning
- To ensure all students are proficient in the use of information and communications technology
- To provide students with the scholarship and competency associated with practice in their particular discipline and the know-how to extend their capability
- To develop a systematic, investigative and critical approach to solving problems commonly found within facilities management.
- To emphasise creativity, originality and innovation in the development and completion of learning activities
- To provide students with a constructive learning experience in preference to highly structured spoon-feeding of information
- To adopt a reflective transformative approach to student development that harnesses their real-life experience
- To provide generic course materials that have international relevance
- To retain students within the programme by providing an engaging high quality learning experience.

Please note: The specification that follows 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.

Programme Outcomes

Knowledge and understanding

A. knowledge and understanding of:

1. The contexts, people, relationships and activities involved within the FM industry and profession.
2. The management function within the organisation and the sources, measurement, interpretation and presentation of data/information.
3. The principles that influence the design, construction and performance of buildings.
4. The principles of law and the legal framework that underpins practice in the facilities management profession.
5. The practices and procedures involved in the procurement, execution and delivery of facilities management services.
6. The economic and financial frameworks relevant to the facilities management industry.
7. The specific principles of law or statute that affect facilities management issues, particularly in relation to contract law, employment law and Health and Safety at Work.
8. The philosophy and methodology of aspects of management relevant to business, projects, professional practice, strategy, facilities or estates.
9. The professional and personal skills required by managers in formulating strategies/plans to manage human/physical resources.
10. The research process, research methods and presentation of results for facilities management issues.

knowledge and understanding of the following subject matter:

1. The benefits of seeking a broader view of FM by taking several viewpoints of the profession.
2. Evaluation of the practices adopted by different organisations in various market sectors.
3. Assessment of the attributes of building space and the potential for effective utilisation to meet the changing requirements of an organisation.
4. The impact of latest ideas and processes for using building space and how to best to manage the resource.
5. Principles of general management and specific relationships to FM.
6. An overview of the way organisations and people behave.
7. The overall framework for an appreciation of financial management principles.
8. Awareness of what businesses aim to achieve, through short and long-term objectives.
9. The law of contract, tort, employment, Health and Safety at Work.
10. Appreciation of Property Law, and Town and Country Planning.
11. The use of technology in business and the implications for buildings and services.
12. The concept of intelligent buildings.
13. The key components, benefits and disadvantages of different portfolio plans.
14. Production, execution, evaluation and monitoring portfolio plans.
15. An appreciation of how space management and building performance can influence premises expenditure.
16. The evaluation of property options and taking property decisions.
17. Major considerations in freehold and leasehold interests.
18. The management of property costs.
19. Management of support services and FM source decision-making.
20. Adding value to an organisation through effective FM.

Teaching/learning methods and strategies:

- The Programme adheres to best practice in the design and delivery of distance learning.
- The acquisition of knowledge is accomplished in each module of the Programme through the provision of designed distance learning resources including tailored reference material, research reports, textbooks, web-based resources and materials sourced through the student's workplace.
- Development of understanding and intellectual skills will occur through engaging the student in interactive learning activities designed for a problem-based learning approach. Exchanges with tutors and peers and access to resources will be enabled through the Blackboard virtual learning environment. A significant proportion of activities will require the student to undertake research and reflection within their own workplace.
- Additionally support, advice, guidance and real time activity will occur through tutorials, guest lectures, seminars and team project work in face-to-face sessions.
- In the dissertation module, self-directed learning and supervisor consultation will further extend the student's knowledge and understanding.

Assessment:

- Students are required to complete at least one piece of coursework and/or examination in each module which is assessed within strict time frames.
- Coursework will require students to prepare analyses, calculations, critical evaluations, designs, summaries, simulations etc. in the form of extended essays or reports.
- Coursework will be assessed against defined criteria communicated to students beforehand.
- Modules in Years 1 and 2 are examined using an unseen closed book approach and are assessed on major pieces of coursework.
- One module requires a series of formal Business Reports to be written to demonstrate ability to combine concepts and ideas.
- Integration of concepts and principles between modules will be encouraged throughout the Programme.
- Dissertations are assessed according to strict guidelines and a common marking scheme.

Skills and other attributes

B: intellectual skills – able to

1. Integrate theory and practice relevant to their particular learning needs including the ability to transfer knowledge, techniques and methods between subject areas.
2. Research, collect and synthesise information from a variety of sources.
3. Analyse and interpret information in a variety of forms and format.
4. Think logically and critically in respect of the appropriate application of knowledge developed experientially.
5. Reflect on and critically deconstruct workplace practices and procedures.
6. Define, solve and advise on problems, demonstrating powers of critical appraisal and synthesis.
7. Select and apply appropriate quantitative techniques of analysis and appraisal.
8. Plan, execute and write reports appropriate to an internal and external business client.
9. adapt and apply knowledge and skills in a changing professional environment and within varying contexts.

Teaching/learning methods and strategies:

- The problem-based approach to learning will require the student to employ considerable logic and intellectual skills in analysing problems, situations and scenarios before determining the appropriate learning materials to which to make reference in order to arrive at an individual or collective solution.
- The reference materials to be drawn upon include texts, papers and web-based resources provided with the course, workplace documents and information found locally.
- The coursework and self-assessment varies across the modules but collectively covers skills 1-9.
- Feedback includes tutor comments on coursework, e-mailed advice and web-based answer guides.
- Web-based discussion board with Blackboard facilitate communication between tutors and students.
- The dissertation process further embraces intellectual skills 1-7.

Assessment

- Intellectual skills are assessed through coursework assignments, problems, reports and appraisals and through unseen examination and dissertation submission.
- All summative assessment will be made against defined criteria, including demonstration of intellectual skills.

C: Practical skills – able to

1. Locate information sources, assemble and present information in a variety of contexts and media.
2. Collate, manipulate and store data and information electronically.
3. Provide advice and guidance, communicating both formally and informally either face-to-face, through e-mail or via discussion forum.
4. Collect, record, analyse and present statistical data.
5. Apply a variety of specialist analysis and appraisal techniques applicable to practice in the facilities management industry and profession.
6. Use quantitative techniques as a basis for decision making.
7. Write reports in clear standard English and draft comprehensible sketches and diagrams.
8. Multitask and prioritise work to meet scheduled deadlines.
9. Work collaboratively with other people to complete tasks to deadlines.

Teaching/learning methods and strategies:

- All skills will be developed through completing the module learning activities and coursework.
- In particular, Skills 1, 2, 4, 5, 6 and 7 are developed through the Dissertation Module.
- Skills 3-6 variously developed in face-to-face tutorial discussions, web-based activities and coursework within the taught modules.
- Skills 4-5 further extend through the dissertation process.

Assessment:

- Assessment of these skills is mainly undertaken through module coursework.
- Skills 3, 5, 6, 8 and 9 will be displayed at face-to-face teaching sessions.
- Skills 4-7 are also assessed through unseen examination.

D: Transferable skills -able to demonstrate the following transferable skills:

1. Communication skills
2. IT skills
3. Literacy
4. Numeracy
5. Problem-solving skills
6. Time management skills
7. Autonomous learning
8. Research skills
9. Business awareness

Teaching/learning methods and strategies:

- **Communication skills:** Whereas oral communication is limited by the medium of the Programme, written communication is central to the success of students in the programme.
- **IT Skills:** All MSc students are expected to have access to PCs, e-mail and the Internet. The programme is supported by the open areas of the College web-site. More specifically, the dedicated *Blackboard* virtual learning environment will be used to make learning activities and reference information available and significant use will be made of the discussion boards. Students have the option of submitting their coursework via the web. Completion of coursework will necessitate familiarity with Word and Excel. Students will also have access to online power-point presentations. Support and advice on IT aspects of the course is available to students.
- **Literacy and Numeracy:** These not only relate to desirable minimum requirements for the Programme but are skills that are encouraged and developed through assignment tasks and tutor feedback on style as well as content. Completion of assessment requires a mixture of essays, calculations, reports, graphical presentations as well as dissertation writing. Guidance on the nature of these formats is provided throughout the course.
- **Problem-solving skills:** The fundamental pedagogy underpinning the design and delivery of the programme is centred on problem based learning with the student being introduced to topics through commonly found professional problems for which they must determine appropriate solutions.
- **Time management and autonomous learning:** By its nature distance learning requires students to develop the discipline of independent study. The flexibility on time, place and pace that it offers still requires students to manage their time to complete the required study and coursework by the milestone dates indicated in the programme of studies.
- **Research and business skills:** The programme is geared to the detailed examination of the facilities management industry and profession. During their study students will be expected to investigate and reflect on business practice and to source key documents and information from within their workplace. This enquiry skills developed to support study during the first two years will be formally converted into academic research skills in Part 3 when the taught research methods module is taken and the dissertation is completed.

Assignment:

To a greater or lesser degree all the course work and much of the examination in this course will require student to demonstrate each of these transferable skills. For instance, to complete an assignment they must manage their time, assimilate the problem information forming the assignment, conduct the required research or investigation of their workplace, discuss their findings, generate a solution, create a document with text and calculation, save and send the document electronically.