EXECUTIVE EDUCATION

ADVANCE WITH WORLD CLASS EDUCATION

Master of Science in
FACILITY AND ENVIRONMENT MANAGEMENT

2012 INTAKE
INTRODUCTION
The BCA Academy has partnered with one of the world’s leading universities, University College London (UCL), to deliver the first global postgraduate Master of Science degree in Facility and Environment Management, in Singapore. The programme provides one unified programme taught concurrently in London and Singapore. UCL brings research-led learning that will augment your expertise and challenge your personal aspirations. UCL at the BCA Academy provides an outstanding and distinctive environment for graduate study. Guided by principles of excellence and innovation, this programme offers a unique opportunity enabling you to achieve your personal goals.

UNIVERSITY COLLEGE LONDON (UCL)
University College London (UCL) is a modern, outward-looking institution, committed to engaging with the major issues of our times. One of the world’s leading multidisciplinary universities, UCL today is a true academic powerhouse.

UCL is consistently ranked within Top 10 globally. In 2011, UCL was 7th in the world (Source: QS World University Ranking for 2011/12). More than 20 Nobel prize winners have come from the UCL community.

UCL was founded in 1826 as a radically different university, opening up English higher education for the first time to people of all beliefs and social backgrounds. That radical tradition remains alive today. Our research strategy commits us to addressing UCL’s ‘Grand Challenges’, by working together right across the university in order to tackle major problems that face us today – in global health, sustainable cities, intercultural understanding, and human wellbeing. We believe in undertaking fundamental research and in applying it.

THE BARTLETT
The Bartlett School of Graduate Studies, part of the renowned Bartlett Faculty of the Built Environment, is the home of the MSc in Facility and Environment Management. The Bartlett has more top internationally-rated researchers in architecture and the built environment than any other English university (RAE 2008) and its teaching quality has been rated as excellent.
The BCA Academy of the Built Environment is the education and research arm of the Building and Construction Authority, Singapore. Founded in 1984, the Academy offers a wide range of training and education programmes tailored to the needs of the building and construction industry. These programmes include programmes for professionals, management and executive personnel, and technical specialists.

In support of the national effort to transform Singapore into a green and sustainable global city, the Academy has initiated several training programmes to nurture and develop managerial and technical capability in such niche areas as green building design and technology, renewable energy, and sustainable facility and environment management. To enable our industry leaders and practitioners to learn from the experience and knowledge of leading experts, the Academy collaborates with established tertiary institutions (such as Carnegie Mellon University, Singapore Management University, UniSIM, University College London, Nottingham University and Stuttgart University of Applied Sciences) to conduct degree and post-graduate degree programmes, and executive programmes.
Established in 1992 as the first MSc programme in Facility and Environment Management in England, this programme presents a unique opportunity to experience a research-led learning approach and share learning between peers in London and Singapore, a unified programme taught concurrently to both London and Singapore cohorts.

The UCL lecturers conduct face-to-face teaching, small group discussions and practical site visits to leading facilities in Singapore, while supporting distance-learning with video conferencing at BCA Academy and providing audio and visual recordings and other learning materials online. This approach is designed to empower students with a flexible yet integrated learning experience to hone their interests and extend their capabilities in facility management.

The programme covers the provision and management of facilities and services to support high performing organisations. The multi-sector coverage is ideal for practice-based facility professionals with a variety of experience and backgrounds from all levels of management across a variety of sectors – office, healthcare, retail, education and residential – looking to develop a greater depth of knowledge and practical applications to upgrade and advance their careers. Past graduates of the programme have discovered that the MSc has direct benefits including:

- Positive career opportunities through promotion and increased managerial jurisdiction
- Improved remuneration
- Internationally recognised and accredited academic qualification

Within the Singapore market, this programme will provide competitive advantage to graduates and their sponsoring firms by providing knowledge in capability focus areas that support Singapore’s sustainability agenda for the built environment.
AIMS
The MSc in Facility and Environment Management addresses concerns in the use and performance of buildings and support services over time. Its core focus is the effective planning, design, management, maintenance and adaptation of building stock, to function appropriately and efficiently to meet specified needs.

The primary aim of the programme is for students to achieve an integrated understanding of the basic knowledge and operational skills required for the good management of buildings, their environments, facilities and support services.

STRUCTURE
The programme will be taught part-time over two years. The programme content consists of eight taught modules (120 credits), and an extended piece of original research resulting in a written research report of 10,000 words (60 credits). The modules, each worth 15 credits, have ten learning sessions each, including study visits, and comprise six core and two optional modules.

CORE MODULES
1) Introduction to Facility Management (15 credits)
2) Service Operations Management (15 credits)
3) Facility Management Law (15 credits)
4) Environment Management and Sustainability (15 credits)
5) Management Concepts for Facilities (15 credits)
6) Space and Workplace Management (15 credits)

OPTIONAL MODULES - Select 2
1) Social Dimensions of Sustainability (15 credits)
2) Efficient Building Services Systems (15 credits)
3) Sustainable Facility Management Operations (15 credits)

ASSESSMENT
In addition to the MSc Research Report (60 credits), the assessment for each module is a written report of up to 2,500 words. Furthermore, two modules (4 and 6 in the list above) are also assessed through a 2-hour long closed-book written examination.
1. **Introduction to Facility Management**
   This module introduces participants to the background of facility management, its scope, intentions and value. Futures in Facility Management are considered, including the evolving structure of the industry, professional development, and integrating effects of environmental issues. Study and research methods are addressed.

2. **Service Operations Management**
   Service operations management is used as a framework for analysing soft and hard service provision. This framework is used to explore maintenance and systems elements and their management.

3. **Facility Management Law**
   This module is concerned with the practical issues related to the management of statutes, in employment, health and safety, environmental, and contract law.

4. **Environment Management and Sustainability**
   This module is concerned with the management of energy and other sustainability issues within the purview of the facility manager. This includes issues such as climate change compliance, carbon footprinting, and environmental management accreditation schemes.

5. **Management Concepts for Facilities**
   Organisational behaviour will be explored in this module. Contemporary concepts in management, techniques and approaches for managing quality, risk, and strategy are also covered.

6. **Space and Workplace Management**
   This module outlines the key issues related to managing the spatial resource of organisations. This includes operational issues such as the development of space standards, relocation management, and space planning.
1. Social Dimensions of Sustainability
   This module explores how architectural and engineering decisions can deliver a more sustainable built form. It aims to enhance the understanding of the complex relationships between built environment, individuals, communities and society.

2. Efficient Building Services Systems
   The module deals with energy & carbon emission implications of the selection, operation and control of heating & cooling systems in buildings.

3. Sustainable Facility Management Operations
   The module equips Facility Managers with the knowledge and skills to identify and implement sustainable improvement measures and technology in existing buildings.

MSc Research Report
Students are required to submit a 10,000 word report on a subject agreed with the Programme Director. The topic typically is selected from live problems that need to be addressed by the company sponsoring the student. Both student and company should benefit from the investigation and its conclusions.
DELIVERY

The programme will be delivered through blended learning, a combination of face-to-face and distance-learning modes. Five modules will be taught in four-day block, face-to-face sessions at the BCA Academy by UCL staff. Typical timing will be all day Wednesday through Friday and a half-day on Saturday. Three modules will be taught predominantly through distance-learning delivery, with students meeting every two weeks in the early evening, at the BCA Academy.

Face-to-face teaching options will include:
- seminal lectures
- small group discussions
- workshops with hands-on exercises
- practical site visits to leading facilities in Singapore
- networking lunch

Distance-learning options will include:
- live video-link sessions with the London cohort;
- interactive sessions including live quizzes;
- individual tutorials delivered online via email and Skype (telephone and videophone);
- shared discussion/chat site for all students in London and Singapore;
- FMExchange sessions (optional) to be recorded in London

PROVISIONAL DATES FOR 2012 / 2013:

<table>
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<tr>
<th>Course</th>
<th>Date</th>
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<tr>
<td>Induction</td>
<td>19 Sep 2012</td>
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<tr>
<td>Introduction to Facility Management (FEK)</td>
<td>Block taught, 19 to 22 Sep 2012</td>
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<tr>
<td>Management Concepts for Facilities (FEL)</td>
<td>Early evening sessions, fortnightly, 10 Oct – 5 Dec 2012</td>
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<tr>
<td>Environment Management and Sustainability (FEM)</td>
<td>Block taught, 2 to 5 Jan 2013</td>
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<tr>
<td>Space and Workplace Management (FEO)</td>
<td>Block taught, 6 to 9 Feb 2013</td>
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<tr>
<td>Examination (for FEM &amp; FEO only)</td>
<td>May 2013 (To be advised)</td>
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<tr>
<td>Efficient Building Services Systems (EE6)*</td>
<td>Early evening sessions, fortnightly, 2 Oct to 18 Dec 2013</td>
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<tr>
<td>Sustainable Facility Management Operations (FES)*</td>
<td>Block taught, 6 to 9 Nov 2013</td>
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<tr>
<td>Social Dimensions of Sustainability (EE9)*</td>
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<tr>
<td>Service Operations Management (FEN)</td>
<td>Block taught, 8 to 11 Jan 2014</td>
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<tr>
<td>Facility Management Law (FEP)</td>
<td>Early evening sessions, fortnightly, 15 Jan to 12 Mar 2014</td>
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<tr>
<td>Research Report</td>
<td>Mid Sep 2014 (To be advised)</td>
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* Students are required to select 2 out of these 3 electives.

A graduation ceremony will be held annually.
ENTRY REQUIREMENTS

The normal academic qualifications for entry are a second-class Bachelor’s degree of a UK university or an international qualification of an equivalent standard.

A second acceptable qualification is membership in a UK professional institution. A third acceptable qualification is a degree of lower than second class honours standard with some knowledge, demonstrable competence, and a skill set related to facility management practice.

Applicants without a first degree or full professional membership, who have substantial work experience in facility management, may be admitted after passing a special qualifying examination.

As the programme is designed to enhance the knowledge base of practitioners in facility management, it is necessary for candidates to have some knowledge, demonstrable competence, and a skill set related to facility management practice, in addition to the above requirements.

The University’s minimum English language requirements must be met. Evidence may be requested if needed.

Applicants who, within three years prior to starting the Programme, have undertaken a course which was taught in English at a tertiary institution extending over twelve months (one calendar year) are deemed to have met this requirement.

FEES

The programme fee for the two year programme is SGD 33,400 (before GST) before subsidy. The programme fee may be paid in 4 instalments. In addition, a one-time non-refundable application fee of SGD 50 (before GST) will have to be paid at the point of application.

SUBSIDY

Subsidy is available for Singapore Citizens and Singapore Permanent Residents who are in the facilities management industry. The subsidy details are as follows:

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<th>FUNDING LEVEL</th>
<th>FEE PAYABLE (includes GST)</th>
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<tbody>
<tr>
<td>Singapore Citizens</td>
<td>75%</td>
<td>SGD 8,934.50</td>
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<tr>
<td>Singapore Permanent Residents</td>
<td>60%</td>
<td>SGD 14,295.20</td>
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Candidates who are keen to apply for the subsidy must submit the following documents to BCA Academy by 25 May 2012:

i. Application Form for MSc (FEM) Course Fee Subsidy

ii. Certification letter from company stating candidate’s designation and date joining the company

The application form for course fee subsidy is downloadable from: http://www.bcaa.edu.sg/MScFEM.aspx

Subsidy places offered are subject to availability
Participants who satisfy the assessing requirements of the respective modules and their dissertations will be awarded the degree of Master of Science in Facility and Environmental Management. Such award, including the transcripts, will be the same as those conferred for studies on campus at UCL. A Postgraduate Diploma will be awarded to students who successfully pass only the taught modules. A Postgraduate Certificate will be awarded to students who successfully pass half the taught modules.

Graduates awarded with the MSc in Facility and Environment Management degree are eligible to apply for Certified Green Mark Facilities Manager (GMFM) if these requirements are satisfied:
- Provide evidence of involvement in sustainable practices related to Operation & Maintenance and/or GM(EB) projects for at least ONE project
- Fulfil other criteria for GMFM registration as stipulated in: http://www.bca.gov.sg/GreenMark/gm_manager.html

The London programme is approved by the Royal Institution of Chartered Surveyors (RICS). Following successful re-accreditation of the programme in 2010 with the British Institute of Facilities Management (BIFM), graduates of the programme with suitable facilities management experience will be eligible to apply for the new Certified grade of membership (CBIFM). The programme is also affiliated with the Chartered Institute of Building Services Engineers (CIBSE). Application is also being made for International Facility Management Association (IFMA), accreditation.

In order to accommodate the collaborative requirements of BCA and UCL, applications will first be sent to BCA, then forwarded to UCL for selection. Please note that the electronic version of the application form cannot be submitted for this programme. Students will be notified of the success of their application by mid July 2012.

To apply, please fill up the application form which is available at www.bcaa.edu.sg/MScFEM.aspx. Then, mail the completed application form, together with copies of academic transcripts and degree, two reference letters, curriculum vitae, colour photo and application fee to:

BCA Academy, 200 Braddell Road, Singapore 579700.
Attention: Mr Wong Fook Yong

Application closes on 25 May 2012.
The Programme commences on 19 September 2012.

All information in this booklet is correct at the time of printing. Please log on to our website at www.bcaa.edu.sg/MScFEM.aspx for updated information.
STUDENTS ALREADY IN THE SINGAPORE PROGRAMME HAVE COMMENTED THAT THE BEST PART OF THE PROGRAMME IS:

“being able to study in UCL without leaving my job, home and have an internationally recognised Master degree upon graduation”

“group discussions, sharing knowledge among team members. I like the idea of video recording the lectures and keeping on the web, it allows the student to refresh and review whenever he or she wants”

“the chance to interact with other professionals of the same trade to share knowledge”

“to explore beyond what I do every day and try to apply it in the workplace”