

Master of Science in Civil and Architectural Engineering

(Civil Engineering / Building Services Cost Management)

Year 2012 Intake



Introduction

With the increasing popularity of civil engineering and the growing concern over cost management in building services in the 21st century, the Department of Civil and Architectural Engineering is offering this unique combine mode self-financing programme to professionals in the construction industry. The programme consists of 2 streams, namely, **Civil Engineering** and **Building Services Cost Management**. The 2 streams lead to the same City University academic award — Master of Science in Civil & Architectural Engineering (MSCAE).

The Department of Civil and Architectural Engineering (CA)

To keep pace with Hong Kong’s changing economy and building projects’ demands, the CA Department shoulders the responsibility for training engineering experts, managers and future leaders of the construction industry. It has an outstanding team of academic staff who bring a multi-disciplinary approach to teaching. The staff include civil engineers, architects, builders, building services engineers, building surveyors, environmental scientists, material engineers, quantity surveyors and structural engineers. In addition to teaching, the Department also supports research activities and publications alongside providing consultancy services to the industry.

Programme Aims and Objectives

1. to upgrade existing civil and building services engineers and other construction related professionals with the knowledge of advanced civil and building services engineering knowledge, cost control and management;
2. to provide a route of further study to graduates of construction related disciplines;
3. to provide multi-disciplinary approach for civil, building services and construction professionals;
4. to carry out research works in various related disciplines.

Programme Intended Learning Outcomes (PILOs):

Upon successful completion of this Programme, students should be able to:

For Civil Engineering Stream:

1. build up a strong and solid knowledge base in civil engineering for application in the industry;
2. practise knowledge in civil engineering in construction areas by filling all requirement in technology, management, environment and efficiency;
3. carry out research works on civil engineering;
4. create innovative ideas to improve the efficiency of the construction related works;
5. appraise the latest technologies in civil engineering.

For Building Services Cost Management Stream:

1. build up a strong and solid knowledge base in costing, cost control, architectural engineering and building services engineering for application in the industry;
2. integrate knowledge and skills in costing, cost control, architectural engineering and building services engineering in different areas of building and construction by fulfilling all requirements in cost planning and management, energy efficiency and machine performance;
3. carry out research works on cost management in building services installation and maintenance;
4. carry out economical and financial analyses on building services systems;
5. appraise, analyse and evaluate the concerns of both engineers, architects and surveyors.

Programme Structure

The programme consists of 31 credit units with a core of 6 required courses (16 credit units) and 5 elective courses (15 credit units). Students are expected to complete the programme within 1 year (for full time students) or 2 years (for part time students).

| Civil Engineering | Building Services Cost Management |
|--|--|
| Required Courses (16 credit units) | |
| Advanced Mechanics | Building Services Systems and Maintenance |
| Structural Dynamics and Application | Financial Management in Construction |
| Modelling and Computational Techniques for Built Environment | Contract Strategy and Administration |
| Professional Research Methods | Professional Research Methods |
| Advanced Geotechnical Engineering | Contract and Dispute Management |
| Advanced Structural Engineering | Economics for the Built Environment |
| Elective Courses (15 credit units) | |
| Dissertation | Dissertation |
| Theory of Plates and Shells | Built/Natural Environmental Harmony |
| Built/Natural Environmental Harmony | Modelling and Computational Techniques for Built Environment |
| Wind Engineering | Advanced HVAC Engineering |
| Advanced Fire and Plumbing Engineering | Advanced Fire and Plumbing Engineering |
| Advanced Soil Mechanics | Advanced Structural Engineering |
| Earthquake and Offshore Engineering | Strategic Operation and Maintenance |
| Green Building, Architecture and People | Decision Analysis |
| Economics for the Built Environment | Green Building, Architecture and People |

Entrance Requirement

Applicants must satisfy the following University’s general entrance requirements as set out below.

Applicant for admission to the University’s Postgraduate Certificate, Postgraduate Diploma or Taught Master’s Degree programmes must:

- hold a bachelor’s degree of one of the universities in Hong Kong or of an overseas institution recognized for this purpose by the University; or
- hold such other qualifications as deemed acceptable by the University as equivalent to the above.

and

satisfy **one** of the following criteria to be eligible for admission:

- (i) possess first degrees with honours accredited by Hong Kong Institution of Engineers (HKIE); or
- (ii) possess first degrees with honours accredited by Hong Kong Institute of Surveyors (HKIS); or
- (iii) possess first degrees with honours accredited by Hong Kong Institute of Architects (HKIA); or
- (iv) possess first degrees with honours accredited by Hong Kong Institute of Housing (HKIH); or
- (v) corporate membership of HKIE, HKIS, HKIA, HKIH or equivalent; or
- (vi) possess first degrees in a construction-related discipline from a UGC funded tertiary education institution; or
- (vii) possess first degrees in a construction-related discipline from a non-local institution recognised for this purpose by the University; or
- (viii) have obtained an equivalent qualification or provide programme acceptable evidence of academic and professional attainments; or
- (ix) applicants without the specified academic qualifications may still be considered for admission on a case-by-case basis if they are able to present exceptionally good alternative qualifications and possess substantial technical and management experiences.

Remarks: Students admitted via route (ix) should constitute only a small percentage of the intake and such cases would require approval by the College on a case-by-case basis.



English Proficiency Requirements

Applicants whose entrance qualification is obtained from an institution where the medium of instruction is NOT English should also fulfil the following minimum English proficiency requirement:

- a TOEFL score of 550 (paper-based test) or 213 (computer-based test) or 79 (internet-based test); or
- an overall band score of 6.0 in International English Language Testing System (IELTS); or
- Score 450 in the new College English Test (CET-6) of Minland China or a pass in the old CET-6 test; or
- other equivalent qualifications

Commencement

September 2012

Fees

Application Fee* : HK\$300 for online application

Tuition Fee : HK\$3,010 per credit unit (subject to yearly review)

Graduation Fee : HK\$400

CityU Postgraduate Association (CUPA)

Membership Fee : HK\$300 (for full time study mode)

HK\$150 (for part time study mode)

- Successful applicants will be expected to pay the acceptance fee for the Semester A, the graduation fee and the CUPA membership fee within 2 weeks of notice of admission.
- Extra fees will be charged outside normal study period (1 year for full time students / 2 years for part-time students)

* Non-refundable, to be paid at the time of application.

Enquiries

Chow Yei Ching School of Graduate Studies

Tel : 3442 5588

Fax : 3442 0332

Online enquiry form : www.cityu.edu.hk/sgs/enquiry

Application

Application for the programme can be submitted online. For details, please visit the University's website at www.cityu.edu.hk/sgs/

Deadline for Application : 31/3/2012

Shortlisted candidates may be required to attend an interview. All successful applicants will be informed in due course.

Programme

Dr S M Lo (Programme leader)

Tel : 3442 7683

Email : bcsml@cityu.edu.hk

Dr Jonathan Q S Li (for Civil Engineering stream)

Tel : 3442 4677

Email : bcqsl@cityu.edu.hk

Dr Eric W M Lee (for Building Services Cost Management stream)

Tel : 3442 2307

Email : ericlee@cityu.edu.hk



香港城市大學
City University
of Hong Kong

Department of
Civil and Architectural Engineering

Master of Science in Civil and Architectural Engineering

(Civil Engineering / Building Services Cost Management)

Programme Code: P60
Year 2012 Intake