

## **Postgraduate Diploma (PGD) and Master of Science (MSc) Programs in Civil Infrastructural Engineering and Management**

### **Program Director:**

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The Postgraduate Diploma (PGD) and Master of Science (MSc) programs in Civil Infrastructural Engineering and Management offer advanced civil engineering and management courses beyond the undergraduate level for both part-time and full-time students. The courses are designed for those who wish to strengthen their civil engineering knowledge and prepare themselves for advanced engineering practices with management responsibilities. The target students are bachelor's degree holders who are interested in pursuing a career in the design and management of civil infrastructure systems.

The programs are designed with flexibility to adapt to students' specific needs and interests, while at the same time ensuring sufficient breadth. Few restrictions are imposed on students' course selections. Students have the freedom to define their own areas of concentrations by taking courses from a few selected technical areas, or cover a broad base by taking courses from various areas. This flexibility is valuable as students may have different needs at different stages of their careers.

### ***Program Learning Outcomes***

On successful completion of the program, graduates will be able to:

- Describe basic and advanced knowledge and skills in civil infrastructural engineering and management;
- Identify civil infrastructural engineering and management problems and propose feasible solutions;
- Plan and design civil infrastructural engineering components and systems; and
- Analyze major factors impacting civil infrastructural systems and provide strategies for managing these.

### ***Admission Requirements***

Applicants must possess a bachelor's degree in Civil Engineering or a related engineering field with second-class honors or higher, or an equivalent qualification from a recognized university or tertiary institution. Applicants with degrees in non-civil engineering areas may be required to complete remedial civil engineering courses prior to starting their study.

### ***Program Duration***

MSc program:

- 1 - 1.5 years for full-time mode; or
- 2 - 2.5 years for part-time mode.

PGD program:

- 1 - 1.5 years for part-time mode.

### ***Program Fees***

The program fee for the PGD program is HK\$62,500. The program fee for the MSc program is HK\$125,000 for full-time mode, and HK\$120,000 for part-time mode. New students admitted with credit transfer and graduates of the PGD program subsequently admitted to the MSc program are also required to pay the full program fee.

The program fee covers three terms of study for the part-time PGD program, four terms for the full-time MSc program, and six terms for the part-time MSc program. Students who stay in the program beyond the normative study period covered by the program fee, or take additional courses or need to retake any courses are required to pay additional fee. Students should refer to the program webpage for details.

### ***Curriculum***

Students are required to take a minimum of 30 credits of approved credits, including 6 credits of CIEM 6980 MSc Project, for the award of the MSc degree. A minimum of 15 approved credits is required for the award of the PGD. Students shall take courses offered by the programs and each course normally carries 3 credits.

The courses offered are arranged in seven sub-areas:

- |  |   |
|--|---|
| a) Infrastructural System Engineering and Management | CIEM 5100, CIEM 5130, CIEM 5140, CIEM 5150, CIEM 5160, CIEM 5810                                  |
| b) Material Engineering                              | CIEM 5240, CIEM 5250, CIEM 5330, CIEM 5350  |
| c) Structural Engineering                            | CIEM 5310, CIEM 5320, CIEM 5330, CIEM 5340, CIEM 5350, CIEM 5361, CIEM 5370, CIEM 5380, CIEM 5390 |
| d) Environmental Engineering                         | CIEM 5410, CIEM 5460, CIEM 5480   |
| e) Water Resources Engineering                       | CIEM 5390, CIEM 5510, CIEM 5520   |
| f) Transportation Engineering                        | CIEM 5620, CIEM 5630  |
| g) Geotechnical Engineering                          | CIEM 5710, CIEM 5720, CIEM 5730, CIEM 5750, CIEM 5770, CIEM 5790                                  |

CIEM 6980 may cover one or two of the above sub-areas.

Subject to the approval of the Program Director, students may take CIEM 6000 Topics in Civil Infrastructural Engineering and Management which covers one or two areas of the above sub-areas.

To ensure breadth of the curriculum, students enrolled in the PGD program must take courses from at least two sub-areas, whereas students enrolled in the MSc program must take courses from at least three sub-areas. Students are recommended to select Infrastructural System Engineering and Management as one of the sub-areas.

Subject to the approval of the Program Director, PGD students may take a maximum of 6 credits of non-CIEM courses. The courses may be JEVE or IBTM courses from the MSc program in Environmental Engineering and Management, and MSc program in Intelligent Building Technology and Management. MSc students may take a maximum of 6 credits of JEVE courses from the MSc program in Environmental Engineering and Management, and a maximum of 6 credits of IBTM courses from the MSc program in Intelligent Building Technology and Management as partial fulfillment of the program requirements.

Subject to the approval of the Program Director and course instructor, PGD students may take a maximum of 3 credits of CIVL courses at 4000-level, and MSc students may take a maximum of 6 credits of CIVL courses at 4000-level as partial fulfillment of the program requirements.

Part-time PGD and MSc students may take a maximum of 9 credits in each term.

#### Concentrations

Students are given an option to complete a concentration in a selected sub-area. To opt for a concentration, PGD students are required to complete at least 9 credits in a selected sub-area, whereas MSc students are required to complete at least 12 credits in a selected sub-area.

#### ***Credit Transfer***

Credit transfer may be granted to students in recognition of studies completed successfully elsewhere. Credits previously used to satisfy the requirements of other academic qualifications may not be transferred. Application for credit transfer must be submitted to the Program Office during the first month or first term of study after admission for PGD and MSc students respectively. Upon the approval of the Program Director, a maximum of 9 transfer credits may be granted for the MSc program whereas a maximum of 6 transfer credits may be allowed for the PGD program, subject to University regulations governing credit transfer for postgraduate programs.

#### ***Program Transfer***

Students of the MSc program may subsequently apply to transfer to the PGD program, subject to the approval of the Program Director, and vice versa.

***Graduation Requirements***

To graduate from either program, a student must complete the program with a graduation grade average (GGA) of 2.850 or above as required of all postgraduate students at the University. Students failing to meet the GGA requirement are required to repeat or take additional course(s) even if they attain passing grades for all courses.