

# Engineering Doctorate (Engineering Management) ENGDEM

## A 4-year Part-time Professional Doctorate Programme

### STUDENT HANDBOOK (2019-20)

| <u>CONTENT</u>   | <u>Page No.</u> |
|--|-----------------|
| 1. Programme Aims and Objectives   | 2               |
| 2. Programme Structure   | 2               |
| 3. Academic Regulations and Guidelines   | 4               |
| 4. Academic Honesty  | 4               |
| 5. Communications  | 4               |
| 6. Progress through Study  | 6               |
| 7. Fees and Charges  | 9               |
| 8. Academic Information, Student Records and Services                                | 11              |
| 9. Programme Specific Information  | 12              |
| 10. Academic Staff   | 12              |
| 11. Continuing Education Fund Application (CEF)                                      | 13              |
| Appendix I Model Programme Path for ENGDEM 2019 cohort<br>(Normal Duration: 4 Years) | 14              |
| Appendix II Course Descriptions (Required and Elective Courses)                      | 15              |

## 1. PROGRAMME AIMS AND OBJECTIVES

The programme aims to provide an integrated curriculum of theory, practice and research to develop professionals' innovative thinking and capabilities in the application of knowledge to solve strategic important problems in industry. Its objectives include:

- To develop graduates who can make original and practical research and development contributions to the engineering fields in which they are employed.
- To produce professionals who can meet the demands of and potentially influence the outcomes of rapidly changing technology-based businesses.
- To equip graduates with the advanced knowledge and capabilities needed for potential leaders in their chosen fields of practice.
- To provide an avenue for specialisation and upgrading of qualifications that has direct relevance to the engineering profession.
- To encourage links between research and the workplace.

## 2. PROGRAMME STRUCTURE (See Appendix I)

The programme consists of a taught and a research component:

**Taught component:** 3 required and 4 elective courses, 21 credit units

**Research component:** a thesis with normal duration of 3 years, 36 credit units

### **Total Duration of Study:**

Normal: 4 years

Maximum: 6 years

### **Taught Component**

As professional activity is usually multi-disciplinary and business/management-driven, the courses available to ENGDEM students should be comprehensive to cover a mixture of technology, innovation management and experience in order to provide industry with competent and knowledgeable managers in technology and innovation.

### **Required Courses (9 credits)**

| Course Code | Course Title                               | Wgt | Level | Units Worth |
|-------------|--|-----|-------|-------------|
| SEEM8024D   | Integrative Engineering Management         | 1   | D8    | 3           |
| SEEM8025D   | Research Methods in Engineering Management | 1   | D8    | 3           |
| SEEM8008D   | EngD Seminar                               | 1   | D8    | 3           |

### *Elective Courses (Minimum 12 credits)*

| Course Code | Course Title  | Wgt | Level | Units Worth |
|-------------|---|-----|-------|-------------|
| SEEM5006    | Operations Management   | 1   | P5    | 3           |
| SEEM5009    | Industrial Marketing Management for Engineers                             | 1   | P5    | 3           |
| SEEM6009    | Project Management  | 1   | P6    | 3           |
| SEEM6012    | Technological Innovation and Entrepreneurship                             | 1   | P6    | 3           |
| SEEM6014    | Asset and Maintenance Management  | 1   | P6    | 3           |
| SEEM6015    | Supply Chain Management   | 1   | P6    | 3           |
| SEEM6037    | Managing Strategic Quality  | 1   | P6    | 3           |
| SEEM6043    | Quality and Reliability Engineering                                       | 1   | P6    | 3           |
| SEEM6044    | China Engineering Enterprise Management                                   | 1   | P6    | 3           |
| SEEM6045    | Industrial Case Study   | 1   | P6    | 3           |
| SEEM6047    | Quality Improvement: Systems and Methodologies                            | 1   | P6    | 3           |
| SEEM6050    | Engineering Economic Analysis   | 1   | P6    | 3           |
| SEEM6053    | Business Process Improvement and Innovation                               | 1   | P6    | 3           |
| SEEM6101    | Estimation and Control of Random Dynamic Systems                          | 1   | P6    | 3           |
| SEEM6102    | Managerial Decision-making Systems with Artificial Intelligence           | 1   | P6    | 3           |
| SEEM6103    | Financial Engineering for Engineering Managers                            | 1   | P6    | 3           |
| SEEM6104    | Theoretical Underpinnings of Decision Making Under Uncertainty            | 1   | P6    | 3           |
| SEEM6105    | Risk and Decision Analysis  | 1   | P6    | 3           |
| SEEM8011    | Statistical Modelling and Design of Experiments                           | 1   | R8    | 3           |
| SEEM8012    | Data Mining and Statistical Modeling                                      | 1   | R8    | 3           |
| SEEM8102    | Forecasting and Control Using Regression, Time Series, and Dynamic Models | 1   | R8    | 3           |
| SEEM8103    | Advanced Design of Experiments and Taguchi Method                         | 1   | R8    | 3           |

Subject to the approval by Programme Leader based on the relevance to the EngD research work, postgraduate courses offered by other Departments and College/Schools may be permitted and considered as Elective courses case by case.

Because of the relatively small class sizes, not all electives will be available in each semester.

### **Research Component**

| Course Code | Course Title    | Wgt | Level | Units Worth |
|-------------|-----------------|-----|-------|-------------|
| SEEM8104D   | Doctoral Thesis | -   | D8    | 36          |

Each student will be required to produce a doctoral thesis that will demonstrate his or her ability to make a tangible contribution to learning and to professional practice, and to appreciate and understand the relationship of his/her own investigations to a wider field of knowledge.

The thesis could be:

1. a specific company-based project; or
2. an industry-based project

It can also take the form of a cohesive collection of a number of small projects from either a single company or a few companies that are integrated to solve problems with greater impact to the company(ies) or the whole industrial sector. The candidate's contribution should aim to improve specific areas of professional practice and demonstrate how his/her findings lead to improvements in industry.

### 3. ACADEMIC REGULATIONS AND GUIDELINES

Students should observe all University regulations and guidelines at all times. In particular, students should note the following, which are available in the Chow Yei Ching School of Graduate Studies' website: [www.cityu.edu.hk/sgs/student/pd/regulation](http://www.cityu.edu.hk/sgs/student/pd/regulation)

- Code of Practice for Research
- Code of Student Conduct and Disciplinary Procedure
- Guidelines for Thesis Examination for Research Degree and Professional Doctorate Programmes
- Guidelines on Ethical Review of Research Involving Human or Animal Subjects
- Policy on Intellectual Property

### 4. ACADEMIC HONESTY

Academic honesty is central to the conduct of academic work. Students are responsible for knowing and understanding the Rules on Academic Honesty. To enhance students' understanding on academic honesty, all students are required to complete a tutorial on academic honesty and make a declaration on their understanding of this core academic principle online on or before **30 November 2019** in order to access their course grades. For details, please refer to ARRO website: [www.cityu.edu.hk/provost/academic\\_honesty/](http://www.cityu.edu.hk/provost/academic_honesty/)

### 5. COMMUNICATIONS

The following channels of communication are available:

#### (a) Students and the Department

- (i) Students who are having academic difficulties with a course should speak directly to the lecturer of that course.
- (ii) Students who wish to discuss the overall organization of the programme or to discuss issues on a particular part of the programme should speak to the Programme Leader/Deputy Programme Leader.
- (iii) A formal consultative process between students and staff exists in the Department in the form of a Joint Staff and Student Consultative Committee. One student from each year will sit on the Committee.
- (iv) One student from each year of the Programme will be elected to sit on the Programme Committee.

## Staff Representatives on the ENGDEM Programme Committee

### Programme Leader

Dr. Alan Chan            3442 8439        meachan@cityu.edu.hk

### Deputy Programme Leader

Dr. H. Y. Sun            3442 9587        mehsun@cityu.edu.hk

### Thesis Coordinator

Dr. H. Y. Sun            3442 9587        mehsun@cityu.edu.hk

### General Enquiry

Ms. Agnes Lee           3442 9535        meagnesl@cityu.edu.hk

Ms. Joana Li             3442 2171        joana.li@cityu.edu.hk

## (b) Students and the Chow Yei Ching School of Graduate Studies

Students can contact the School through the following means:

Tel.:     3442 4732

E-mail:  sg@cityu.edu.hk

Fax:     3442 0332

## (c) Electronic ID and E-mail Account

To facilitate access to the IT facilities and services of the University, a single unified Electronic ID (EID) has been assigned to each student for study at CityU. A CityU student's free e-mail account is in the following format: "EID-c@my.cityu.edu.hk". As e-mail is a more personal and convenient means of communication, the University uses it as a formal channel to disseminate notices and announcements to students. Students are advised to check their e-mail box regularly.

## (d) CityU e-Portal

The CityU e-Portal provides students with a personalised Web interface to the University's communications and electronic resources. Students can log onto the e-Portal from the CityU homepage ([www.cityu.edu.hk](http://www.cityu.edu.hk)) using their Electronic ID, where students can obtain information about the academic calendar, registration details, fee payment account balance, class timetables, examination information, coursework results, etc.

(e) Up-to-date Students' Contact Information

To facilitate communication between the University and its students, it is important for students to keep SGS informed of any changes to their contact information (e.g. telephone number, correspondence address, emergency contact information, etc.). Notification of such changes can be made by following the procedures given below:

- Go to <http://www.cityu.edu.hk> from any terminal on campus or off campus, then point to “**Quick Links**” at the top and click “**AIMS**”.
- Log onto AIMS.
- Click on “Personal Information”, then “Personal Data for Communication”

Students who need to update their personal data (e.g. name) should send in writing the updated data, together with any supporting documents (e.g. HKID card, etc.), to SGS for processing.

6. PROGRESS THROUGH STUDY

(a) Medium of Instruction/Assessment

The normal medium of instruction and assessment at the University is English. The work (e.g. annual progress reports, thesis, etc.) submitted by students should also be in English unless otherwise stated.

(b) Study Duration

The normal and maximum study durations for the ENGDEM programme are four and six years respectively. Students should complete their studies within the maximum study period. Students who encounter any difficulties in their studies should talk to their supervisor as early as possible so that it will not hamper their completion by the specified maximum period.

(c) Simultaneous Registration

Students are not allowed to register simultaneously in another programme of study in the University or in any other institution without the prior permission of SGS. This also applies to students who are on leave.

(d) Course Registration and Class Attendance

Students will be invited for course selection in the preceding semester (e.g. students will be invited for Semester B 2017-18 course selection in Semester A 2017-18). Students can view their class schedule through the Web about two weeks before the relevant semester starts by following the procedures given below:

- i) Go to <http://www.cityu.edu.hk> from any terminal on campus or off campus, then point to “**Quick Links**” at the top and click “**AIMS**”.
- ii) Log onto AIMS.
- iii) Click "Course Registration" menu.
- iv) Click "Weekly Schedule", choose the appropriate term and press "Submit".
- v) You will find your class schedule in matrix form.
- vi) Press the "View Detail Schedule" button at the bottom of your matrix timetable to display details of your class schedule.

Students should check if the course registration is correct. Those who wish to add/drop courses should submit an application to SGS using an SGS52 Form (<https://www.sgs.cityu.edu.hk/student/form/PD>) by the add/drop deadline (normally the first day of the second week of a semester). Late course add/drop requests will not be processed.

For class attendance during typhoons or rainstorms, please visit the Web page on “Adverse Weather Arrangements” ([www.cityu.edu.hk/fmo/awa/index.htm](http://www.cityu.edu.hk/fmo/awa/index.htm)).

(e) Credit Transfer

Students who possess postgraduate or other qualifications of relevance to the EngD degree may apply for credit transfer. Normally, credit transfer will only be granted for previously completed units of study that can be demonstrated as contributing to the student’s total programme of study in the ENGDEM programme. The maximum number of credits that can be transferred is as follows:

*For students with a master’s degree from a different field:*

6 credit units of coursework

*For students with a master’s degree from relevant fields:*

12 credit units of coursework

According to the Regulations Governing Professional Doctorate Programmes (7.1), credit transfer is limited to 50% of taught course requirement in terms of credit units. With reference to the above regulation, students are still required to take at least 10.5 credit units of coursework.

Students who wish to apply for credit transfer should submit an application to SGS using an SGS54 Form (<https://www.sgs.cityu.edu.hk/student/form/PD>) before the deadline set by the University. Please note that separate application forms are necessary for academic qualifications attained in different institutions. For instance, if a student wishes to transfer credits previously obtained in two institutions, he or she should complete two forms. A fee of \$140 will be charged for each application form submitted.

Transfer credits will not be counted in the calculation of a student's GPA, except where special arrangements have been made.

Students should not take the courses for which transfer credits have been granted. As the University will normally pre-register students into selected courses, students should ensure that they are not registered into such courses at the start of a semester.

(f) Examination and Announcement of Coursework Results

For general information on assessment and examinations, please access the "Course Examinations" Website (<https://www.sgs.cityu.edu.hk/student/pd/exam/>).

Student can view their personal examination timetable and course grades via AIMS by following the procedures below:

|    | Want to?  | Where?  |
|----|---|---|
| 1. | Check course grades   | <a href="#">AIMS</a> > Student Record > My Academic Record > Grade Detail   |
| 2. | Check academic standing   | <a href="#">AIMS</a> > Student Record > My Academic Record > Academic Standing Report   |
| 3. | Find the name of Academic Advisor assigned by the academic unit | <a href="#">AIMS</a> > Student Record > My Study Details (for Professional Doctorate Programmes) > Qualifying Panel                                       |
| 4. | Report illness or other circumstances affecting assessment      | <a href="#">AIMS</a> > Student Record > My Applications (for Undergraduate and Taught Postgraduate Programmes) > Mitigation Request Related to Assessment |



7. FEES AND CHARGES

(a) Tuition Fee and programme related fees:

A student who enrolls in the University incurs a financial obligation to the University. Starting from Semester A, 2006-07, students studying programmes will charge tuition fees according to the number of credit units taken are normally required to pay a minimum tuition fee of two credit units before the start of Semesters A and B. The balance of the tuition fee chargeable for the semester will be collected after the close of the course add/drop period.

Students can check the current and future tuition fees of your study programme in your Account Summary in AIMS under **Student Record > My Finance**.

| Type of Fee   | Amount                                    | Remarks   |
|---|---|---|
| <b>Taught course fee*</b><br><br><b>maximum 21 credit units (admitted from 2018-19 onwards)</b> | HK\$7,430 per credit                      | Non-refundable; to be paid on a semester basis  |
| <b>Fee for research component</b>   | HK\$7,430 per credit for 36 credit units  | Non-refundable; to be paid in six instalments (6 credits per installment) and on a semester basis upon commencement of the thesis; Early thesis completion will not result in a reduction of the fees |
| <b>Continuation fee for research component</b>  | Equivalent to 6 credit units per semester | Non-refundable; to be paid only if students cannot complete their theses in 6 semesters   |
| <b>Examination fee</b>  | HK\$1,500                                 | Non-refundable  |
| <b>Re-examination fee</b>   | HK\$1,500                                 | Non-refundable; applied to students who are required to undertake a second oral examination   |

(b) Other Fees and Charges:

Please note that fees are subject to revision from time to time without prior notification.

| <b>Type of Fee</b>   | <b>Amount</b>  | <b>Remarks</b>  |
|--|--|---|
| <b>Application fee for credit transfer</b>                                 | HK\$140 per application  | Non-refundable  |
| <b>Continuation fee during leave of absence</b>                            | HK\$1,500 per semester   | Applies to students under leave of absence; during the leave period, students can continue to use the University's facilities during the leave period |
| <b>Late charge</b>   | 2% of the outstanding fee per billing cycle  | Applies to student who fail to settle the fees by the set deadline  |
| <b>CityU Postgraduate Association (CUPA) membership fee</b>                | HK\$150 (for part-time students)   | One-off payment covering a student's entire period of candidature; to be deducted from the acceptance fee paid, if applicable                         |
| <b>Graduation fee</b>  | HK\$400  | Payable on enrolment; to be deducted from the acceptance fee paid if applicable; refundable to students on study withdrawal or study termination      |
| <b>Reinstatement fee</b>   | HK\$400  | Non-refundable; for reinstatement of students status after termination of studies due to non-payment of fees  |
| <b>Application fee for transcript/<br/>testimonial/certified true copy</b> | HK\$30 per copy (online application)<br><br>HK\$50 per copy (paper form application) | Non-refundable  |
| <b>Replacement of student ID card</b>                                      | HK\$100  | Non-refundable  |

\* When credit transfer is granted, students do not need to attend the exempted courses and pay the relevant course fees.

If you have financial difficulties and are unable to settle the tuition by the deadline, you should submit an application for deferment of tuition payment to the Chow Yei Ching School of Graduate Studies at least five working days before the payment deadline.

The Finance Office will issue reminder(s) to students who have outstanding fees in their student account. A late charge (equivalent to 2% of the outstanding fee) will be added to the account for every reminder issued. Students who still have not settled their accounts after being given two reminders by the Finance Office will have their study terminated by the University and all of their course registrations will be cancelled. Once study has been terminated, the student is not allowed to use any University facilities and is not permitted to attend any examination.

## 8. ACADEMIC INFORMATION, STUDENT RECORDS AND SERVICES

Please refer to the following link for the general information of the Professional Doctorate Programme in the website of SGS.

[www.cityu.edu.hk/sgs/student/pd](http://www.cityu.edu.hk/sgs/student/pd)

### Academic Information

- ▶ [Academic Calendar](#)
- ▶ [Regulations and Guidelines](#)
- ▶ [Course Registration](#)
- ▶ [Course Assessment](#)
- ▶ [Course Examinations](#)
- ▶ [Thesis Assessment and Examination](#)
- ▶ [Annual Progress Report](#)
- ▶ [DegreeWorks](#)
- ▶ [Award Certificate and Congregation](#)

### Tuition Fees

#### Programme Specific Information

- ▶ [Engineering Doctorate \(Engineering Management\)](#)
- ▶ [Doctor of Business Administration \(DBA\)](#)
- ▶ [Doctor of Juridical Science \(JSD\)](#)

### Download Forms

### Student Records and Services

- ▶ [Update of Contact Information and Personal Data](#)
- ▶ [Academic Transcript/Testimonial/Certified True Copy](#)

9. PROGRAMME SPECIFIC INFORMATION

Please refer to the following link for the specific information of the Engineering Doctorate (Engineering Management) in the website of SGS.

[www.cityu.edu.hk/sgs/student/pd/seem](http://www.cityu.edu.hk/sgs/student/pd/seem)

### Engineering Doctorate (Engineering Management)

---

- ▶ Programme Features
- ▶ Fees
- ▶ Medium of Instruction / Assessment
- ▶ Courses, Course Registration and Class Attendance
- ▶ Credit Transfer
- ▶ Examination and Announcement of Coursework Results
- ▶ Supervision
- ▶ Submission of Annual Progress Reports
- ▶ Thesis Submission and Assessment
- ▶ Student Records and Services
- ▶ Communication Channels

10. ACADEMIC STAFF

Please refer to the following link for the academic staff of the SEEM Dept.

[www.cityu.edu.hk/seem/staff-acad.htm](http://www.cityu.edu.hk/seem/staff-acad.htm)

11. CONTINUING EDUCATION FUND APPLICATION (CEF)

The Application and Reimbursement Procedures for Continuing Education Fund Application (CEF)

- i) Please read carefully the guidelines and regulations under the government website [www.sfaa.gov.hk/cef/](http://www.sfaa.gov.hk/cef/) or call 3142 2277 and website [www.cityu.edu.hk/seem/std-cef.htm](http://www.cityu.edu.hk/seem/std-cef.htm)
- ii) Send the application form to the General Office to get it certified by placing our official stamp. The applicants must complete the application form, submit the required documents and return them to the CEF office before the commencement of the semester.

Semester A, commences on September 2, 2019

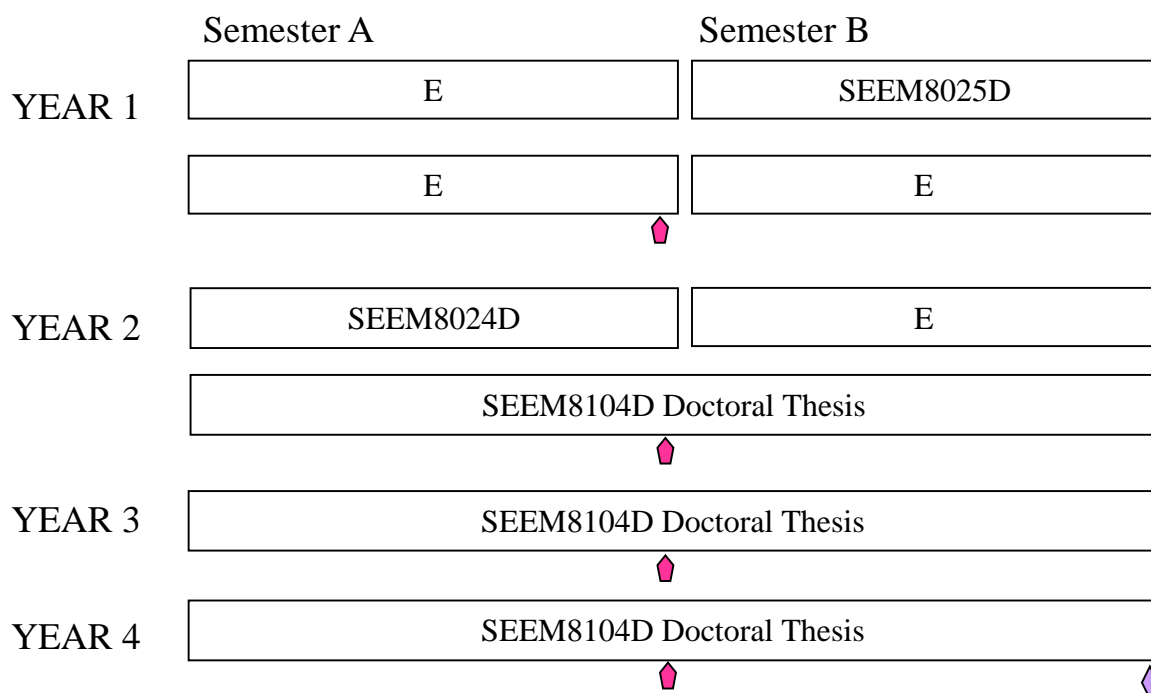
Semester B, commences on January 13, 2020

Summer Term, commences on June 8, 2020

- iii) Please note the references to be quoted on your documents to CEF:  
Name of Institution/Course Provider : City University of Hong Kong  
CEF Institution Code : 005  
CEF Course Title : Supply Chain Management (**sample**)  
CEF Course Code : 25Z03874-6 (**sample**)
- iv) For seeking CEF reimbursement, students **must not** hold any other publicly-funded financial assistance for the same programme or course/ modules/ units of study.
- v) If you enroll in more than one course, you are only required to submit your application in respect of the first commencing course. Please fill in the details of the first commencing course in the Application Form only.

## Model Programme Path For ENGDEM 2019 cohort

(Normal Duration : 4 Years)



E : Elective (Required 12 cus - 3 cus per course)

◆ : EngD Seminar (SEEM8008D) scheduled annually at the end of Semester A. EngD students will be informed of other relevant Research Seminars organized by SEEM/CityU.

◆ : Oral Examination

## COURSE DESCRIPTIONS

The course syllabus may be updated from time to time, please visit the University website [www.cityu.edu.hk/catalogue/pg/201920/programme/ENGDEM.htm](http://www.cityu.edu.hk/catalogue/pg/201920/programme/ENGDEM.htm) for more information.

### SAMPLE

#### SEEM8024D - Integrative Engineering Management

|                               |  |
|-------------------------------|--|
| <b>Offering Academic Unit</b> | Department of Systems Engineering and Engineering Management |
| <b>Credit Units</b>           | 3  |
| <b>Course Duration</b>        | One Semester   |
| <b>Equivalent Course(s)</b>   | <a href="#">MEEM8024D</a>                                    |
| <b>Course Offering Term*:</b> | Semester A 2019/20   |

\* The offering term is subject to change without prior notice

#### Course Aims

This course provides theoretical background and knowledge for students to acquire and develop the set of strategic organizational and managerial skills and innovative capabilities in solving strategic and operational engineering/ technology management problems.

#### Assessment (Indicative only, please check the detailed course information)

Continuous Assessment: 100%

#### Detailed Course Information

[SEEM8024D.pdf](#)

#### Useful Links

[Department of Systems Engineering and Engineering Management](#)