## City University of Hong Kong Course Syllabus

# offered by Department of Systems Engineering with effect from Semester A

## Part I Course Overview

| Course Title:                                       | Research Seminar  |
|---|---|
| Course Code:  | SYE8002M  |
| Course Duration:                                    | Throughout the year of the candidate's MPhil/PhD studies  |
| Credit Units:                                       | 2   |
| Level:  | R8  |
| Medium of Instruction:                              | English   |
| Medium of<br>Assessment:                            | English   |
| Prerequisites: (Course Code and Title)              | Nil   |
| Precursors: (Course Code and Title)                 | Nil   |
| <b>Equivalent Courses</b> : (Course Code and Title) | SEEM8002M Research Seminar (offered until 2021/22) ADSE8002M Research Seminar (offered until 2023/24) |
| Exclusive Courses: (Course Code and Title)          | Nil   |

1

#### Part II Course Details

#### 1. Abstract

The Research Seminars will be used as a forum for the research students to:

- broaden their knowledge and expertise;
- exchange learning experiences or research findings with their peers;
- cultivate critical thinking and stimulate generation of new ideas;
- develop their ability and skill in technical communications; and
- help promote their research culture.

#### 2. Course Intended Learning Outcomes (CILOs)

| No. | CILOs  | Weighting (if applicable) | curricu | ery-enr<br>lum rel | ated |
|-----|--|---------------------------|---------|--------------------|------|
|     |  | 11 /                      | AI      | A2                 | A3   |
| 1.  | <b>Define</b> the nature, aim, scope and significance of a | 20%                       | ✓       | ✓                  |      |
|     | research topic clearly in explicit terms and develop it    |                           |         |                    |      |
|     | in adequate academic depth and vigour.                     |                           |         |                    |      |
| 2.  | <b>Review</b> the body of knowledge from literature to lay | 20%                       | ✓       | ✓                  |      |
|     | the necessary theoretical foundation relevant to the       |                           |         |                    |      |
|     | topic or theme of the thesis.                              |                           |         |                    |      |
| 3.  | Apply such theory or knowledge to formulate and            | 20%                       | ✓       | ✓                  |      |
|     | implement the research methodology for the thesis.         |                           |         |                    |      |
| 4.  | Participate in the regular Seminars in the course of       | 40%                       | ✓       |                    |      |
|     | their candidature.   |                           |         |                    |      |
|     | Communicate the thesis research process, results and       |                           |         |                    |      |
|     | experience scholarly and logically, using written, oral    |                           |         |                    |      |
|     | and visual media.  |                           |         |                    |      |
|     |  | 100%                      |         |                    |      |

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to self-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

#### 3. Learning and Teaching Activities (LTAs)

| LTA | Brief Description                          | CII | LO N | lo. |   | Hours/week  | (if |
|-----|--|-----|------|-----|---|-------------|-----|
|     | _  | 1   | 2    | 3   | 4 | applicable) |     |
|     | Each student shall define, under the       | J   |      |     |   |             |     |
|     | supervision of the supervisor, the nature, |     |      |     |   |             |     |
|     | aim, scope and importance of a project.    |     |      |     |   |             |     |
|     | Each student shall research and review     |     | J    |     |   |             |     |
|     | the appropriate body of knowledge and      |     |      |     |   |             |     |
|     | background information needed to           |     |      |     |   |             |     |
|     | achieve the defined thesis objective(s).   |     |      |     |   |             |     |
|     | Each student shall appraise and select the | J   | J    | J   |   |             |     |
|     | knowledge, theory or practice learned      |     |      |     |   |             |     |
|     | from literature and develop the            |     |      |     |   |             |     |
|     | appropriate thesis research methodology.   |     |      |     |   |             |     |
|     | Implement the research methodology to      |     |      |     |   |             |     |
|     | the chosen problem or project.             |     |      |     |   |             |     |
|     | Analyze the results obtained, draw         |     |      |     |   |             |     |
|     | conclusion and critically appraise the     |     |      |     |   |             |     |
|     | work done.                                 |     |      |     |   |             |     |

Students are required to attend the regular Seminars in the course of their candidature. The candidates are expected to learn and gain from these seminars during which they are encouraged to have scholarly discourse about methodology design, research technique and instrument, analysis strategies, and research progress or findings with their peers. These seminars are progress checkpoints as well as forums for sharing of research experience among the students.

Research seminars and talks by guest speakers/visitors, will also be arranged throughout the program. In addition, students are encouraged to attend other seminars organized on a regular basis by different academic units of CityU. This will provide students with opportunities for first-hand discussions and interaction with experienced professionals and academics on wide ranging contemporary issues and topics.

#### 4. Assessment Tasks/Activities (ATs)

| Assessment Tasks/Activities  | CILO No. |                   | Weighting | Remarks |      |  |  |
|------------------------------|----------|-------------------|-----------|---------|------|--|--|
|                              | 1        | 2                 | 3         | 4       |      |  |  |
| Continuous Assessment: 100 % |          |                   |           |         |      |  |  |
| Coursework                   | ✓        | ✓                 | ✓         | ✓       | 100% |  |  |
| Examination:% (duration:     | ,        | if a <sub>j</sub> | pplica    | able)   |      |  |  |

100%

#### 5. Assessment Rubrics

Applicable to students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter

| Assessment Task | Criterion            | Excellent (A+, A, A-) | Good<br>(B+, B, B-) | Fair (C+, C, C-) | Marginal (D) | Failure (F)                       |
|-----------------|----------------------|-----------------------|---------------------|------------------|--------------|-----------------------------------|
| 1. Coursework   | Active participation | High                  | Significant         | Moderate         | Basic        | Not even reaching marginal levels |

A registered student has to meet the minimum requirements of attendance, presentation and report for completion of the course.

\*Note: This course will be offered outside Hong Kong. However, seminar attendance and presentation conducted on CityU campus will be counted towards the fulfilment of this course.

## Applicable to students admitted from Semester A 2022/23 to Summer Term 2024

| Assessment Task | Criterion            | Excellent (A+, A, A-) | Good<br>(B+, B) | Marginal (B-, C+, C) | Failure<br>(F) |
|-----------------|----------------------|-----------------------|-----------------|----------------------|----------------|
| 1. Coursework   | Active participation | Excellent             | Good            | Marginal             | Failure        |

A registered student has to meet the minimum requirements of attendance, presentation and report for completion of the course.

\*Note: This course will be offered outside Hong Kong. However, seminar attendance and presentation conducted on CityU campus will be counted towards the fulfilment of this course.

## Part III Other Information

## 1. Keyword Syllabus

Thesis, literature search and review, research methodology, research progress, workshop and seminar participation and presentation.

## 2. Reading List

## 2.1 Compulsory Readings

NIL

## 2.2 Additional Readings

NIL