City University of Hong Kong
Course Syllabus

offered by Department of Architecture and Civil Engineering
with effect from Semester A 2023/24

Part I Course Overview

Course Title:	Dissertation – Digital Construction Management
Course Code:	CA6538
Course Duration:	3 Semesters (Some courses offered in Summer Term may start a few weeks earlier than the normal University schedule. Please check the teaching schedules with CLs before registering for the courses.)
Credit Units:	9
Level:	P6
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: *(Course Code and Title)*	Nil
Precursors: *(Course Code and Title)*	Nil
Equivalent Courses: *(Course Code and Title)*	Nil
Exclusive Courses: *(Course Code and Title)*	Nil

Part II Course Details

1. Abstract

The aim of the dissertation is to give the opportunity to students to demonstrate their ability to carry out an independent piece of research and development work, and to develop expertise and an aptitude towards discovery in a chosen subject area related to the course through the application of theory and techniques provided by the course. This will take the form of a substantial study in a subject area related to construction project management / real estate project management, largely through the exercise of independent inquiry.

2. Course Intended Learning Outcomes (CILOs)

(CILOs state what the student is expected to be able to do at the end of the course according to a given standard of performance.)

No.	CILOs	Weighting (if applicable)	Discovery-enriched curriculum related learning outcomes (please tick where appropriate)		
			A1	*A2*	*A3*
1.	demonstrate the ability to exercise judgement, independent thought, initiative, intellectual achievement, understanding of the chosen subject matter, as well as an aptitude towards discovery;		✓	✓	✓
2.	manage a substantial piece of individual research and development work in digital construction management;		✓	✓	✓
3.	practise an area of academic discipline of the course to substantial depth;		✓	✓	✓
4.	search, select and critically evaluate literature and material relevant to the area of digital construction management;		✓	✓	✓
5.	apply some of the theory and techniques developed during the course to the area of digital construction management;		✓	✓	✓
6.	communicate effectively in writing a programme of work and, orally defend the dissertation in a logical, precise and coherent manner.		✓	✓	✓
		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. Teaching and Learning Activities (TLAs)
(TLAs designed to facilitate students' achievement of the CILOs.)

TLA	Brief Description	CILO No.						Hours / week (if applicable)
		1	2	3	4	5	6	
Meetings and discussions	Weekly meeting between students and their respective supervisors	✓	✓	✓	✓	✓	✓	
Oral presentation	Interim oral presentation in the first semester and final oral presentation in the second semester	✓	✓	✓	✓	✓	✓	
Report and thesis writing	Submission of interim report in the first semester and a complete thesis in the second semester	✓	✓	✓	✓	✓	✓	

Semester Hours:	3 hours per week
Lecture/Tutorial/Laboratory Mix:	Lecture (0); Tutorial (1); Laboratory (2)

4. Assessment Tasks/Activities
(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks / Activities	CILO No.						Weighting	Remarks
	1	2	3	4	5	6		
Continuous Assessment: 100%								
Interim report and presentation	✓	✓	✓	✓	✓	✓	40%	
Thesis and final oral presentation	✓	✓	✓	✓	✓	✓	60%	
Examination: 0%								
							100%	

5. Assessment Rubrics

(Grading of student achievements is based on student performance in assessment tasks/activities with the following rubrics.)

Applicable to students admitted in Semester A 2022/23 and thereafter

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B)	Marginal (B-, C+, C)	Failure (F)
Interim report and presentation	1.1 ABILITY to EXPLAIN the methodology and procedure with ACCURACY in using the modelling techniques in the area of digital construction management. 1.2 CAPACITY for SELF-DIRECTED LEARNING to understand the principles of a stream specific research topic. 1.3 ABILITY to APPLY the scientific techniques in solving theoretical and application problems of a stream specific research topic. 1.4 ABILITY to COMMUNICATE and PRESENT scientific information effectively and confidently.	High	Significant	Basic	Not even reaching marginal levels
Thesis and final oral presentation	2.1 ABILITY to EXPLAIN the methodology and procedure with ACCURACY in using the modelling techniques. 2.2 CAPACITY for SELF-DIRECTED LEARNING to understand the principles of a specific research topic. 2.3 ABILITY to APPLY the scientific techniques in solving theoretical and application problems of a specific research topic. 2.4 ABILITY to COMMUNICATE and PRESENT scientific information effectively and confidently.	High	Significant	Basic	Not even reaching marginal levels

Applicable to students admitted before Semester A 2022/23

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
Interim report and presentation	1.1 ABILITY to EXPLAIN the methodology and procedure with ACCURACY in using the modelling techniques in the area of digital construction management. 1.2 CAPACITY for SELF-DIRECTED LEARNING to understand the principles of a stream specific research topic. 1.3 ABILITY to APPLY the scientific techniques in solving theoretical and application problems of a stream specific research topic. 1.4 ABILITY to COMMUNICATE and PRESENT scientific information effectively and confidently.	High	Significant	Moderate	Basic	Not even reaching marginal levels
Thesis and final oral presentation	2.1 ABILITY to EXPLAIN the methodology and procedure with ACCURACY in using the modelling techniques. 2.2 CAPACITY for SELF-DIRECTED LEARNING to understand the principles of a specific research topic. 2.3 ABILITY to APPLY the scientific techniques in solving theoretical and application problems of a specific research topic. 2.4 ABILITY to COMMUNICATE and PRESENT scientific information effectively and confidently.	High	Significant	Moderate	Basic	Not even reaching marginal levels

Part III Other Information (more details can be provided separately in the teaching plan)

1. Keyword Syllabus
(An indication of the key topics of the course.)

There is no fixed formal syllabus. Students will be required to undertake individually supervised research and a dissertation. A departmental publication is provided giving details of requirements, timing, and considerations necessary for the successful completion, on time, of the course.

In addition to the research skills gained earlier in the course, one formal 3 hour teaching session will be arranged in week 1 of the Summer Term in order to review the necessary research skills and to ensure that all students are thoroughly familiar with the requirements of the Dissertation.

2. Reading List

2.1 Compulsory Readings
(Compulsory readings can include books, book chapters, or journal/magazine articles. There are also collections of e-books, e-journals available from the CityU Library.)

1.	Nil

2.2 Additional Readings
(Additional references for students to learn to expand their knowledge about the subject.)

1.	Anderson, J and Millicent, P. (2001), "Assignment and Thesis writing", 4th Edition, Wiley, Brisbane, Australia.
2.	Fellows, R. and Liu, A.M.M. (1997), "Research Methods for Construction", 1st Edition, Blackwell Science Ltd., London, U.K.
3.	Mauch, J.E. and Birch, J. W. (1998) "Guide to the Successful Thesis and Dissertation: A Handbook for Students and Faculty", 4th Edition, Publisher: M. Dekker, New York.
4.	Naoum, S.G.(1998), "Dissertation research and writing for construction students", Butterwort-Heinemann, Oxford, U.K.
5.	Preece Roy (1994), "Starting Research: An Introduction to Academic Research and Dissertation Writing", Printer Publishers, London.
6.	Swernam, Derek (2000), "Writing your dissertation: how to plan, prepare and present successful work", How to Books Oxford Publishers, U.K.