

**City University of Hong Kong
Course Syllabus**

**offered by Division of Building Science and Technology
with effect from Semester A 2018/19**

Part I Course Overview

Course Title:	Building Communication
Course Code:	BST12781
Course Duration:	1 semester
Credit Units:	3 credits
Level:	A1
Proposed Area: <i>(for GE courses only)</i>	<input type="checkbox"/> Arts and Humanities <input type="checkbox"/> Study of Societies, Social and Business Organisations <input type="checkbox"/> Science and Technology
Medium of Instruction:	English
Medium of Assessment:	English
Prerequisites: <i>(Course Code and Title)</i>	Nil
Precursors: <i>(Course Code and Title)</i>	Nil
Equivalent Courses: <i>(Course Code and Title)</i>	Nil
Exclusive Courses: <i>(Course Code and Title)</i>	Nil

Part II Course Details

1. Abstract

This course aims to introduce structure and function of the building and surveying practice to the students and develop students' ability to interpret construction drawings and building information from different parties.

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.	Discover the existence and organization of the individual members, and the process and procedures related to the property, building and construction industry.	35%	√	√	
2.	Understand the rationale, role and involvement of Government or Quasi-Government on property and building developments.	15%	√	√	
3.	Explore various types of drawings, plans and technical information and methods for building communication in the property, building and construction industry.	50%	√	√	
		100%			

* If weighting is assigned to CILOs, they should add up to 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	
Lecture (Average class size: No more than 100 students)	Lecture is an in-class activity. The activity involves oral presentation by the lecturers explaining the communication types, principles, ways and techniques related to the building and construction industry. The presentation will be supported by briefings, demonstrations, illustrations, guidance through lecture notes and/or videos, and on-line information. Guest lecture when appropriate may be arranged to enhance student learning on some subject area.	√	√	√	3 hours/week

4. Assessment Tasks/Activities (ATs)

(ATs are designed to assess how well the students achieve the CILOs.)

Assessment Tasks/Activities	CILO No.			Weighting*	Remarks
	1	2	3		
Continuous Assessment: <u>40%</u>					
In-class exercise	√	√		15%	
Assignment(s)			√	25%	
Examination: <u>60%</u> (duration: 2.5 hours)					
Examination	√	√	√	60%	
				100%	

* The weightings should add up to 100%.

Note: A student must obtain a minimum mark of 35 in both coursework and examination components and an overall mark of 40 to pass the course.

In-class exercise: This may consist of multiple choice questions and/or short questions.

Assignment(s): This is a group assignment with individual assessment where appropriate. Students are required to form a group to use manual drafting techniques and/or Auto-CAD techniques to prepare different types of technical drawings.

Examination: This is a close-book examination. This may consist of multiple choice questions and essay questions.

5. Assessment Rubrics

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

Assessment Task	Criterion	Excellent (A+, A, A-)	Good (B+, B, B-)	Fair (C+, C, C-)	Marginal (D)	Failure (F)
1. In-class exercise	Ability to building and surveying practice.	High	Significant	Moderate	Basic	Below marginal
2. Assignment(s)	Ability to apply manual and /or Auto-CAD drafting techniques and skills to prepare technical drawings.	High	Significant	Moderate	Basic	Below marginal
3. Examination	Ability to address the questions with comprehensive and in-depth knowledge of building and surveying practice.	High	Significant	Moderate	Basic	Below marginal

Details will be provided to students in class.

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.)

Structure of the Building and Surveying Industry

1. Understanding on the Property Market in Hong Kong, the Relationship with Building and Construction Industry
2. The Structure of the Building and Construction Industry; The Design Team; The Production Team; Other Concerned Parties; Contract for Building Work; The Process of a Typical Building Development Project
3. Organisation and Working Structure of a Typical Building Project; Contractors; Civil Engineering Contractors; General Building Contractors; Nominated and Domestic Sub-contractors; Role and Involvement of The Building and Surveying Professions; The Material Suppliers
4. Organisation and Role of Government Related to Building and Property Sectors; Government Control Mechanism on Building Development Projects, Including Control on Existing Buildings, M & E and Minor Works.
5. Role and Involvement of Surveying Profession on Management, Leasing and Maintenance on Property Assets.
6. An outline of the Standards, Legislation and Publications Affecting the Building Industry in Hong Kong.
7. Elementary Understanding on Tendering Procedures and Practices for Various Projects, Including M & E and Minor Works Projects
8. Elementary Understanding on Cost Studies on Various Stages of a Typical Building Project, M & E and Minor works.

Exploring Building Information and Producing Drawings for Communication

1. Types of Drawings, Plans and Survey Sheets, Their Purposes and Application
2. Elementary Understanding on Other Drawings and Plans Commonly Used in Typical Building Projects: Foundation Plans; Structural or Framing plans; Reflected Ceiling Plans; Electrical and Mechanical; As-fitted Consolidated E & M Drawings etc.
3. Retrieving Building and Property Records from the Government Website e.g. BRAVO, IRIS and Statutory Planning Portal etc
4. Architectural Drafting Tools; Projections; Lettering; Dimensioning; Line Techniques; Symbols; Schedules
5. Scale and Detail Relationship; Details of Window and Door
6. Working Drawings; Floor Plans; Roof Plan; Elevations and Sections; Stairways

CAD Drafting

1. Setup, display, software and application
2. Basic drafting features
3. Useful commands
4. Elementary understanding on the Building Information Modelling, its function and application

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. BSI (Latest Edition) British Standard BS1192 Part 1, Construction Drawing Practice.
2. Thompson, Arthur. (1993) An Introduction to Construction Drawing, London: E. Arnold.
3. Leach, James, A. (2010) AutoCAD 2010 Instructor, NY: McGraw Hill Higher Education.
4. Ostone, Nigel. (2013) RIBA job book, London : RIBA Publishing Ninth edition.
5. Turner, Dennis Frederick, (1983) Quantity Surveying : Practice and Administration, London : G. Godwin 3rd ed.

2.2 Additional Readings

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

1. Ball, J. E. *Architectural drafting fundamentals*, Reston, VA: Reston Publication.
2. Giesecke, Jefferis, A. and Madsen, D. A. *Architectural Drafting and Design (5th Ed)*, New York: Delmar.
3. Ramsey, C. G. and Sleeper, H.R. *Architectural Graphic Standards*, New York: John Wiley & Sons, Inc.
4. Weidhaas, E.R. *Architectural Drafting and Construction*, Boston: Allyn And Bacon, Inc.
5. McFarlane, Robert (2007) *Beginning AutoCAD 2007* / Bob McFarlane, 1st edition, Oxford; Burlington, MA: Newnes.
6. Jeferis, A., Jones, M. and Jefferis, T. (2007) *AutoCAD 2007 for architecture*, New York: Thomson / Delmar Learning.
7. Leonard Beaven (compiled by). (1988) *Architect's job book*, London: RIBA, 5th ed.
8. Chuck Eastman and Hoboken, N.J. (2011) *BIM handbook: a guide to building information modeling for owners, managers, designers, engineers, and contractors*, Wiley, 2nd ed.
9. Lai, Lawrence Wai-chung (2010). *Change in Use of Land [electronic resource]: a Practical Guide to Development in Hong Kong*, Hong Kong: Hong Kong University Press, HKU, 2nd ed.
10. Ivor H. Seeley (1997) *Quantity surveying practice*, Houndmills, Basingstoke, England: Macmillan, 2nd ed.