

# CA3340B: ARCHITECTURAL DESIGN: INTEGRATION (TOPIC 2)

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## Effective Term

Semester A 2024/25

## Part I Course Overview

### Course Title

Architectural Design: Integration (Topic 2)

### Subject Code

CA - Civil and Architectural Engineering

### Course Number

3340B

### Academic Unit

Architecture and Civil Engineering (CA)

### College/School

College of Engineering (EG)

### Course Duration

One Semester

### Credit Units

9

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

Nil

### Precursors

Nil

### Equivalent Courses

CA3340A Architectural Design: Integration (Topic 1)

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

This course provides students with the awareness and understanding of, and the ability to apply and integrate, various theories, knowledge and skills relating to the design and development of an architectural project informed by functionality and programming. Through a specific topic selected by the studio tutor, students will explore various themes relating to the development of a spatial configuration based on predetermined design intentions.

#### Course Intended Learning Outcomes (CILOs)

| CILOs |                                                                                                                              | Weighting (if app.) | DEC-A1 | DEC-A2 | DEC-A3 |
|-------|------------------------------------------------------------------------------------------------------------------------------|---------------------|--------|--------|--------|
| 1     | Identify and explore multiple theories and aspects of architecture design.                                                   |                     | x      | x      |        |
| 2     | Review and apply information from various sources to facilitate the preparation of an integrated design proposal.            |                     | x      | x      |        |
| 3     | Describe and apply practical design solutions considering the functionality and programming of a building project.           |                     | x      | x      |        |
| 4     | Formulate a design proposal to integrate multiple theories, knowledge and skills and create an articulated building project. |                     |        |        | x      |
| 5     | Design architectural design proposals to satisfy the programming and functionality requirements.                             |                     |        |        | x      |

#### 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 real-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.

#### Learning and Teaching Activities (LTAs)

| LTAs |                 | Brief Description                                                                                                                                                                                                                                                                                                                                          | CILO No.      | Hours/week (if applicable) |
|------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------|
| 1    | Design Project  | Students will engage in the Design Project to produce an integrated proposal for a building design of a specific topic in response to a set of constraints and requirements. Teaching and learning are conducted through regular studio classes in which students will develop their individual design proposals under the facilitation of a studio tutor. | 1, 2, 3, 4, 5 |                            |
| 2    | Lecture/Seminar | Students will engage in Lecture or Seminar to attain knowledge about the studio topic to facilitate the acquisition of theoretical tools for design development.                                                                                                                                                                                           | 1, 2, 5       |                            |

**Assessment Tasks / Activities (ATs)**

| ATs |                    | CILO No. | Weighting (%) | Remarks (e.g. Parameter for GenAI use) |
|-----|--------------------|----------|---------------|----------------------------------------|
| 1   | Assignments        | 1, 2, 3  | 50            |                                        |
| 2   | Final Presentation | 3, 4, 5  | 50            |                                        |

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Assessment Rubrics (AR)****Assessment Task**

Assignments

**Criterion**

- 1.1 Ability to identify multiple theories and aspects of architecture design;
- 1.2 Thorough review and skilful application of various information to facilitate the preparation of building design;
- 1.3 Tactful application of design solutions to address the functionality and programming issues of the building project;

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal level

### Assessment Task

Final Presentation

#### Criterion

2.1 Tactful application of design solutions to address the functionality and programming issues of the building project;  
 2.2 Formulate an innovative and articulated design proposal to integrate multiple theories, knowledge and skills;  
 2.3 Develop and communicate a comprehensive architectural design proposals to satisfy the programming and functionality requirements.

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal level

## Part III Other Information

### Keyword Syllabus

Formulation of the design brief; programme development and integration; Functionality and spatial articulation; integration of programmatic and functional concerns; accessibility and other systems; human diversity and needs; scenario-based building design.

### Reading List

#### Compulsory Readings

| Title |     |
|-------|-----|
| 1     | Nil |

#### Additional Readings

| Title |                                                                                                                  |
|-------|------------------------------------------------------------------------------------------------------------------|
| 1     | Cherry, C. (1999). Programming for design: From theory to practice. New York: John Wiley & Sons                  |
| 2     | Christ, E. (Ed.) (2010). Hong Kong typology: An architectural research on Hong Kong building types. Zurich: GTA. |
| 3     | Pena, W. and Parshall, S. (2001). Problem seeking: An architectural programming primer (4th ed). New York: Wiley |

|   |                                                                                                                                              |
|---|----------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | Clark, R. S. (2009). Integrated Architectural Design. In Structures Congress 2009 (pp. 1-4).                                                 |
| 5 | Moe, K. (2008). Integrated design in contemporary architecture (1st ed.). New York, N.Y.: Princeton Architectural Press.                     |
| 6 | Clark, R.H. and Pause, M. (2005). Precedents in architecture: analytic diagrams, formative ideas, and partis (3rd ed). Hoboken, N.J.: Wiley. |
| 7 | Christ, E. (Ed.) (2010). Hong Kong typology: An architectural research on Hong Kong building types. Zurich: GTA.                             |