

# CA3185A: ARCHITECTURAL DESIGN 5: PROGRAMMING AND TYPOLOGY (TOPIC 1)

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## Effective Term

Semester A 2022/23

## Part I Course Overview

### Course Title

Architectural Design 5: Programming and Typology (Topic 1)

### Subject Code

CA - Civil and Architectural Engineering

### Course Number

3185A

### Academic Unit

Architecture and Civil Engineering (CA)

### College/School

College of Engineering (EG)

### Course Duration

One Semester

### Credit Units

6

### Level

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

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

CA3184A Architectural Design 4: Emergent Space Form (Topic 1); or CA3184B Architectural Design 4: Emergent Space Form (Topic 2); or CA3184 Architectural Design 4: Emergent Space Form; or SE3647 Architectural Design 4: Emergent Space Form

### Precursors

Nil

### Equivalent Courses

CA3185 Architectural Design 5: Programming and Typology; SE3648 Architectural Design 5: Programming and Typology; CA3185B Architectural Design 5: Programming and Typology (Topic 2)

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

This course provides students with the awareness and understanding of, and the ability to apply, various theories, knowledge and skills relating to the design and development of an architectural project informed by programming and building typology. 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 DEC-A1 DEC-A2 DEC-A3 app.)		
1	Recognise the diverse needs, values, behavioural norms, and social and spatial patterns that characterise different building typologies and the implications of this diversity for architectural design.		x	
2	Relate the concept of building typology to the formulation of design strategies in architectural design.		x	
3	Incorporate physical and social characteristics of the site in the integrated development of the programme and design of a project.			x
4	Assemble a comprehensive architectural programme, design an architectural project informed by the programme, and assess the completed project with respect to the programme design criteria.			x
5	Communicate the design process and solution using graphic and verbal presentations.		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.

**Teaching and Learning Activities (TLAs)**

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Design Project	Design Project engages students in the production of 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 8 hrs/ week

**Assessment Tasks / Activities (ATs)**

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Assignments	1, 2	30
2	Interim Presentation (Design development sketches and models)	3	20
3	Final Presentation (Synthesis of analysis and development into a design solution)	3, 4, 5	50

**Continuous Assessment (%)**

100

**Examination (%)**

0

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

1. Assignments

**Criterion**

1.1 Demonstrate ability to conduct comparative analysis of design precedents in recognition of the diverse needs, values, behavioural norms, and social and spatial patterns that characterise different building typologies and the implications of this diversity for architectural design.

1.2 Generation of a programming strategy that incorporates the physical and social characteristics of the site in the integrated development of the functions and design of a 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

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**Assessment Task**

2. Interim Presentation (Design development sketches and models)

**Criterion**

2.1 Formulation of design strategies in architectural design and evaluate their effectiveness in relation to the concept of building typology.

**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

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**Assessment Task**

3. Final Presentation (Synthesis of analysis and development into a design solution)

**Criterion**

3.1 Creation of design options of an architectural project informed by the programme, and assessment of the completed project with respect to the programme design criteria.

3.2 Compile a set of presentation panels that explains clearly the synthesis and design process of the creative solution using text, graphics and other presentation techniques.

**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; criteria for evaluation of a programme; building typology and architectural design; typological studies as design tool; integration of programmatic and typological concerns; universal design and accessibility; human diversity and needs; site analysis and scenario design.

**Reading List****Compulsory Readings**

	<b>Title</b>
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	Clark, R.H. and Pause, M. (2005). Precedents in architecture: analytic diagrams, formative ideas, and partis (3rd ed). Hoboken, N.J.: Wiley.
4	Kumlin, R. (1995). Architectural programming: creative techniques for design professionals. New York: McGraw-Hill.
5	Laseau, P. (2001). Graphic thinking for architects & designers (3rd ed). New York: J. Wiley.
6	Pena, W. and Parshall, S. (2001). Problem seeking: An architectural programming primer (4th ed). New York: Wiley.
7	Pevsner, N. (1976). A history of building types. London: Thames and Hudson.
8	Tutt P. and Adler D. (Ed.) (1988) New metric handbook. London: Butterworth Architecture.

**Additional Readings**

	<b>Title</b>
1	Nil