

CA2344A: ARCHITECTURAL DESIGN – SITE AND ENVIRONMENT (TOPIC 1)

Effective Term

Semester A 2024/25

Part I Course Overview

Course Title

Architectural Design – Site and Environment (Topic 1)

Subject Code

CA - Civil and Architectural Engineering

Course Number

2344A

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

Nil

Precursors

CA2343A Architectural Design – Space Making (Topic 1); or CA2343B Architectural Design – Space Making (Topic 2)

Equivalent Courses

CA2344B Architectural Design – Site and Environment (Topic 2)

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to reinforce students' understanding relationship between the building and the site - indoor and outdoor environment. The subject of the design project detailed by the studio tutor consists on a cluster of small building(s) on a specific, characteristic and demanding site. The site is considered in this design studio as a challenge and starting point for all the architectural experimentations and strategies. The aim of the course is to understand the importance of the site for the design project development in order to propose an original architectural solution that is modern, functional but also fully adapted to the surroundings.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Review and organize information from various sources to facilitate the solving of preparation of design proposals.		x	x	
2	Discuss the relationship between the site and the building.		x	x	
3	Explain and apply site and context design and incorporate appropriate site and sustainable strategies into the design and development of a building project.		x	x	
4	Apply formulated design proposal in response to indoor-outdoor relationships, building and site responses, and contextual responses to the environment.				x
5	Design architectural design proposals to satisfy the site and environment responses.				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. Students will participate in regular studio classes in which students will develop their individual design proposals under the facilitation of a studio tutor.	1, 2, 3, 4, 5	6 hrs/ week

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Interim Presentation	1, 2, 3	30	
2	Final Presentation	3, 4, 5	50	
3	Assignments (Such as reports, portfolio and others)	1, 4, 5	20	

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)**Assessment Task**

1. Interim Presentation

Criterion

1.1 Thorough exploration of relation between the site and the building.

1.2 Demonstrate the ability to review and organize information from various sources to facilitate the solving of preparation of design proposals.

1.3 Thorough understandings of site and context design and skilful incorporate appropriate site and sustainable strategies into the design and development of a 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

2. Final Presentation

Criterion

2.1 Thorough understandings of site and context design and skilful incorporate appropriate site and sustainable strategies into the design and development of a building project.

2.2 Formulate an innovative design proposal in response to indoor-outdoor relationship, building and site responses, and contextual responses to the environment.

2.3 Develop and communicate a comprehensive architectural design proposal to satisfy the site and environment responses.

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

3. Assignments (such as reports, portfolio and others)

Criterion

3.1 Documentation of a thorough considerations in site and environment in the context of a building project, or the comprehensive design proposal to illustrate the integration of site, environment and building design.

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

Architectural design: Relationship between building and the site; indoor and outdoor environments; cluster of small building(s); sustainable strategies in design.

Design integration: Site and design proposal requirements – their transformation into design strategies; integrating environmental challenges into design intentions; sustainable solutions to propose original and unique design solutions.

Communication: Advanced graphic, presentation models and oral presentation.

Reading List**Compulsory Readings**

Title	
1	Cabe, 2006: Better Public Building, Ernest Bond Printing, London, England.
2	Clark, R.H. and Pause M. (1996). Precedents in architecture (2nd ed). New York: Van Nostrand Reinhold.
3	Davies, C. (2006). Key houses of the twentieth century: plans, sections and elevations. London: Laurence King.
4	McMorrough, J. (2013) The Architecture Reference & Specification Book: Everything Architects Need to Know Every Day. Rockport Publishers; Indispensable Guide edition
5	Laseau, P. (2001). Graphic thinking for architects & designers (3rd ed). New York: J. Wiley.
6	Unwin, S. (2003). Analysing architecture (2nd ed). New York: Routledge.
7	Ching, F. (1996). Architecture: form, space, & order (2nd ed). New York: Van Nostrand Reinhold.
8	Neufert, N. (2000). Architects' data (3rd ed). Malden, MA: Blackwell Science.
9	Tutt, P. and Adler, D. (1988). New metric handbook (Rev. ed). London: Butterworth Architecture.

Additional Readings

Title	
1	Nil