CA29132: ARCHITECTURAL DESIGN - SPACE MAKING (TOPIC 3)

Effective Term
Semester A 2022/23

Part I Course Overview

Course Title
Architectural Design - Space Making (Topic 3)

Subject Code
CA - Civil and Architectural Engineering
Course Number
29132

Academic Unit
Architecture and Civil Engineering (CA)

College/School
College of Engineering (EG)

Course Duration
One Semester

Credit Units
6

Level
A1, A2 - Associate Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
CA19111 Integrated Studio - Small-Scale Buildings (Topic 1); or CA19121 Integrated Studio - Small-Scale Buildings (Topic 2); or CA19131 Integrated Studio - Small-Scale Buildings (Topic 3); or CA19101 Integrated Studio - Small-Scale Buildings; or BST11081 Integrated Studio - Small-Scale Buildings

Precursors
Nil

Equivalent Courses
CA29102 Integrated Studio - Medium-Scale Buildings; BST21082 Integrated Studio - Medium-Scale Buildings; CA29112 Integrated Studio - Medium-Scale Buildings (Topic 1); CA29122 Integrated Studio - Medium-Scale Buildings (Topic 2)

Exclusive Courses
Nil

Part II Course Details

Abstract

The aim of this course is to let students experience and get accustomed with space making processes, steps and impacts. The specific topic, selected by the studio tutor, will target at the design of a small building with focus in forming space for function and experience. Forming space problematic is understood in this course as a field of explorations in order to understand interactions between shape, function and design intentions. The content of the course will allow students to understand the potentials of design strategies and their impact into the built environment and people' s life.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Organise information from various sources to facilitate the solving of preparation of design proposals.		x		
2	Incorporate environmental and sustainable technologies into the design of a medium-scale building project.			x	
3	Integrate structural and facade systems with the spatial and functional aspects of a medium-scale project.			x	
4	Develop architectural design proposals to satisfy the environmental and technical requirements of a medium-scale project.				x
5	Formulate solutions for various problems relating to medium-scale building development.				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 / wk

Assessment Tasks / Activities (ATs)

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

Continuous Assessment (%)

100

Examination (%)

0

Additional Information for ATs

Students must attain a minimum mark of 30 in all assessment components AND an overall mark of 40 to pass the course.

Assessment Rubrics (AR)

Assessment Task

1. Interim Presentation (Design development sketches and models)

Criterion

1.1 Organise relevant information from required plus additional sources. Thorough attempt to classify the various types of information to facilitate the preparation of design proposals.
1.2 Clear and comprehensive explanation of the essential information of a problem solution and design proposal. Thorough attempt to explain and illustrate the various types of information through written, graphic and verbal means.

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 (Synthesis of analysis and development into a design solution)

Criterion
2.1 Demonstrate ability to develop design strategies incorporation of innovative environmental and sustainable technologies into the design of a medium-scale building project.
2.2 Thorough and skilful combination of the requirements of structural and facade systems with the spatial and functional aspects of a medium-scale project. Comprehensive synthesis of all aspects into a coherent form.
2.3 Production of innovative architectural design proposals for a medium-scale project. Thorough and skilful integration of all aspects of the design to satisfy the environmental and technical 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

Assessment Task
3. Portfolio (Documentation of overall design process and outcomes)

Criterion
3.1 Compile a comprehensive document that presents 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

- Architectural design: Medium-scale building development; institutional buildings; incorporation of environmental factors in design; basic architectural programming.
- Design integration: Environmental and sustainable strategies in design; integration of structural and facade systems.
- Communication: Intermediate graphic and oral presentation.

Reading List

Compulsory Readings

	Title
1	Foster, J.S. (2007). Structure and fabric Part 1 (7th ed). New York: Pearson/Prentice Hall.
2	Kumlin, R. (1995). Architectural programming: creative techniques for design professionals. New York: McGraw-Hill.
3	Laseau, P. (2001). Graphic thinking for architects & designers (3rd ed). New York: J. Wiley.
4	Neufert, N. (2000). Architects' data (3rd ed). Malden, MA: Blackwell Science.
5	Tutt, P. and Adler, D. (1988). New metric handbook (Rev. ed). London: Butterworth Architecture.

Additional Readings

	Title
1	Nil