

CA4539: ARCHITECTURAL DESIGN: FINAL YEAR DESIGN RESEARCH PROJECT PART 1

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Architectural Design: Final Year Design Research Project Part 1

Subject Code

CA - Civil and Architectural Engineering

Course Number

4539

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

CA3341A/B Architectural Design – Context (Topic 1/2); or CA3350A/B Architectural Design – Context (Topic 1/2)

Equivalent Courses

CA4529 Architectural Design: Final Year Design Research Project Part 1

Exclusive Courses

Nil

Part II Course Details

Abstract

The Final Year Design Research Project (FYDRP) enables integrated application of theory, knowledge and skills gained so far. It is a year-long 'capstone' project, comprising Parts 1 and 2, completed in Semesters 4A and 4B respectively. This is to supplement the Final Year Project for Architectural Stream students. Students will develop the Final Year Design Research Project informed by the inquiry results of Final Year Project.

The project will incorporate substantial elements of both research and design, developed around a topic of personal interest and in consultation with their dedicated project supervisor. Students will also be supported by a team of supervisors. They will also be expected to work independently, and to demonstrate that they have initiative, project management skills, intellectual maturity as well as a deep understanding of their chosen topic and design.

This course 'Architectural Design: Final Year Design and Research Project Part 1' will provide foundational training in methods and techniques for design research, and support for developing an appropriate project scope and structure, as well as in executing a stage of the architectural proposition itself.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	to produce either an annotated bibliography, or a critical literature review, including drawing on relevant theories, and relevant desktop research.			x	
2	to conduct context analysis of the design site(s).			x	
3	to develop an understanding of a selected topic of study in association with their design site(s).			x	
4	to propose a relevant research question(s) based on their understanding of research topic and design site.		x	x	
5	to develop a methodology to address the research question(s), including to select and deploy appropriate methods and techniques for design research.			x	
6	to synthesise the different strands and themes of research and design, to formulate and execute proposed actions that takes the project to a relevant stage of completion.				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 Research Tutorials	These are facilitated by a design research supervisor, either group and individual, in a studio / small group context.	1, 2, 3, 4, 5, 6	varies
2	Project / Design Reviews	Students present their work in progress, supervisor and other reviewers together, discuss students' work and provide feedback for improvement.	1, 2, 3, 4, 5, 6	varies
3	Lectures and Seminars	These may be conducted when common knowledge is to be shared with the whole cohort. They may provide basis of discussion in Tutorials.	1, 2, 3, 4, 5, 6	varies

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Presentation (Design and Research)	1, 2, 3, 4	25		Yes
2	Interim Review(s) (Design and Research)	2, 3, 5	35		Yes
3	Final Review and Submission of Self-standing design and / or research work	5, 6	40		Yes

Continuous Assessment (%)

100

Examination (%)

0

Minimum Continuous Assessment Passing Requirement (%)

40

Minimum Examination Passing Requirement (%)

0

Assessment Rubrics (AR)**Assessment Task**

1. Presentation (Design and Research)

Criterion

Thoroughness of coverage, well-synthesised, oriented towards the research question.

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. Interim Review(s) (Design and Research)

Criterion

Thoroughness of coverage, depth of understanding of why this topic and site, coherence in relation to literature review.

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. Final Review and Submission of Self-standing design and / or research work

Criterion

Judgment in the execution of research or design, rigour in drawing conclusions, quality of communication of results or design outcomes.

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 research. Design research. Research for design. Research by design. Research about design. Literature review. Research methodology and design. Data collection and analysis. Interpretation of findings. Implications and recommendations. Communication of results as design.

Reading List**Compulsory Readings**

Title	
1	Groat, L.N. and Wang, D., (2013). Architectural research methods. John Wiley & Sons.
2	Borden, I. and Ruedi, K. (2006). The Dissertation: An architecture student's handbook. Boston: Architectural Press.

Additional Readings

Title	
1	Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed). Thousand Oaks: Sage.
2	Denzin, N. K. and Lincoln, Y. S. (Eds.) (2003). Collecting and interpreting qualitative materials (2nd ed). Thousand Oaks: Sage.
3	Emmison, M. (2000). Researching the visual: Images, objects, contexts and interactions in social and cultural inquiry. London: Sage.
4	Leach, N. (Ed.) (2002). The Hieroglyphics of space: reading and experiencing the modern metropolis. London: Routledge.
5	Neuman, W. L. (2006). Social research methods: Qualitative and quantitative approaches (6th ed). Boston: Allyn and Bacon.
6	Prosser, J. (Ed.) (1998). Image-based research: a sourcebook for qualitative researchers. Bristol: Falmer Press.
7	Punch, K. F. (2006). Developing effective research proposals (2nd ed). London: Sage.
8	Rose, G. (2007). Visual methodologies: An introduction to the interpretation of visual materials (2nd ed). Thousand Oaks: Sage.
9	Sommer, R. and Sommer, B. (2002). A practical guide to behavioral research: Tools and techniques (5th ed). New York: Oxford University Press.
10	Weber, J. A. (2000). Architecture everywhere: Investigating the built environment of your community. Tucson: Zephyr Press.
11	Yin, R. K. (2009). Case study research: Design and methods (4th ed). Thousand Oaks: Sage