

# CA4534: FINAL YEAR PROJECT

## New Syllabus Proposal

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### Effective Term

Semester A 2023/24

## Part I Course Overview

### Course Title

Final Year Project

### Subject Code

CA - Civil and Architectural Engineering

### Course Number

4534

### 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

Nil

### Equivalent Courses

Nil

### Exclusive Courses

Nil

## Part II Course Details

### Abstract

The course gives students the opportunity to demonstrate both their academic quality and their ability to carry out a substantial piece of independent research or development work, and in the process to allow them to illustrate their expertise in a chosen subject area in the field of architectural studies and design.

### Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if DEC-A1 DEC-A2 DEC-A3 app.)
1	Formulate and organise a substantial individual research or development work in the field.
2	Review the theoretical background and relevant literature on the subject area in a critical manner.
3	Design and apply rigorous research methodology to pursue an investigation on the subject area to substantial depth.
4	Demonstrate initiative and intellectual achievement, understanding of the chosen subject matter, and the application of theoretical principles in practical situations.
5	Develop and demonstrate the ability to manage and present the findings and outcomes in a precise and coherent manner.

#### 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	Meetings and discussions	Weekly meeting between students and their respective supervisors	1, 2, 4, 5
2	Oral presentation	Interim oral presentation in the first semester and final oral presentation in the second semester	1, 2, 3, 4, 5
3	Report and thesis writing	Submission of interim report in the first semester and a complete thesis / report in the second semester	1, 2, 3, 4, 5

### Additional Information for TLAs

For Architecture Stream, the TLAs are to be conducted in conjunction with the Final Year Design Research Project.

### Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Interim report and presentation	1, 2, 3, 4, 5	40	
2	Thesis/ Final report and final oral presentation	1, 2, 3, 4, 5	60	

### Continuous Assessment (%)

100

### Examination (%)

0

### Assessment Rubrics (AR)

#### Assessment Task

Interim report and presentation

#### Criterion

1.1 ABILITY to EXPLAIN the methodology and procedure with ACCURACY in using the modelling techniques.

1.2 CAPACITY for SELF-DIRECTED LEARNING to understand the principles of a specific research topic.

1.3 ABILITY to APPLY the scientific techniques in solving theoretical and application problems of a specific research topic.

1.4 ABILITY to COMMUNICATE and PRESENT scientific information effectively and confidently.

#### Excellent (A+, A, A-)

High

#### Good (B+, B, B-)

Significant

#### Fair (C+, C, C-)

Moderate

#### Marginal (D)

Basic

#### Failure (F)

Not even reaching marginal levels

#### Assessment Task

Thesis/ Final report and final oral presentation

#### Criterion

2.1 ABILITY to EXPLAIN the methodology and procedure with ACCURACY in using the modelling techniques.

2.2 CAPACITY for SELF-DIRECTED LEARNING to understand the principles of a specific research topic.

2.3 ABILITY to APPLY the scientific techniques in solving theoretical and application problems of a specific research topic.

2.4 ABILITY to COMMUNICATE and PRESENT scientific information effectively and confidently.

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

High

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

Significant

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

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not even reaching marginal levels

## Part III Other Information

### Keyword Syllabus

Research related to the stream of study. Literature review. Model development. Research methodology and design. Data collection and analysis. Interpretation of findings. Results monitoring and assessment. Implications and recommendations. Communication of results.

### Reading List

#### Compulsory Readings

Title	
1	Nil

#### Additional Readings

Title	
1	Borden, I. and Ruedi, K. (2006). The Dissertation: An architecture student's handbook. Boston: Architectural Press.
2	Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed). Thousand Oaks: Sage.
3	Denzin, N. K. and Lincoln, Y. S. (Eds.) (2003). Collecting and interpreting qualitative materials (2nd ed). Thousand Oaks: Sage.
4	Emmison, M. (2000). Researching the visual: Images, objects, contexts and interactions in social and cultural inquiry. London: Sage.
5	Leach, N. (Ed.) (2002). The Hieroglyphics of space: reading and experiencing the modern metropolis. London: Routledge.
6	Neuman, W. L. (2006). Social research methods: Qualitative and quantitative approaches (6th ed). Boston: Allyn and Bacon.
7	Prosser, J. (Ed.) (1998). Image-based research: a sourcebook for qualitative researchers. Bristol: Falmer Press.
8	Punch, K. F. (2006). Developing effective research proposals (2nd ed). London: Sage.
9	Rose, G. (2007). Visual methodologies: An introduction to the interpretation of visual materials (2nd ed). Thousand Oaks: Sage.

10	Sommer, R. and Sommer, B. (2002). A practical guide to behavioral research: Tools and techniques (5th ed). New York: Oxford University Press.
11	Weber, J. A. (2000). Architecture everywhere: Investigating the built environment of your community. Tucson: Zephyr Press.
12	Yin, R. K. (2009). Case study research: Design and methods (4th ed). Thousand Oaks: Sage.