

# SCHOOL OF ARCHITECTURE, BUILDING AND DESIGN

Centre for Modern Architecture Studies in Southeast Asia (MASSA)

Bachelor of Science (Honours) in Architecture

# **ARCHITECTURAL DESIGN PROJECT [PRJ60408]**

# Final Design Presentation & Report

Assessments	Туре	Learning Outcomes	Due	Submission/Presentation	Assess. Wt.
Project 1c	Individual	3-5	Wks. 12, 16 & 17	Pre-Final Presentation Final Design Presentation Final Design Report	70%



Image 1: Performing Arts and Cultural Facilities by CRAB Studio- Building section showing holistic design.

# **Project Overview**

Subsequent to Project 1b Schematic Design phase, students are required to further develop and finalize the scheme for the Urban Room project. A fully resolved and developed design scheme with the incorporation of environmental strategies and technological strategies and technical resolution. In this phase, students will be aided with additional input from a series of lectures focusing on poetics, tectonics, sustainability, building safety compliance, façade, and aesthetic and presentation techniques. Furthermore, aide on Environmental & Technology (E&T) and Structural Concepts (SC) are included to further enhance the passive cooling strategies and the effect of structure and materiality enhance the user experiential qualities of a building besides its aesthetic and structural purposes. As a final year student, the level of work expected should demonstrate critical thinking skills, structural sense, sensitivity to key issues of the environment, compliance with law & regulations, highly explorative and impactful. The students are expected to come up with a comprehensive and clear final design presentation and report aligning with the objectives and requirements of the project.

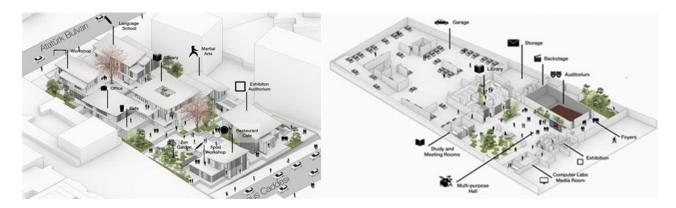
# **Objectives of Project**

To consolidate an understanding of the holistic nature of the architectural design process, to a
given degree of detail, with emphasis on design as an integrative process, drawing as
appropriate on previous subjects of the program.

# Learning Outcomes of this Project

- **MLO3** Generate a design with a good level of understanding of design codes, environmental, technological strategies tectonics and poetics. Emphasizing effectiveness, sustainability, buildability, and efficiency.
- **MLO4** Establish a good level of understanding on materiality and detailing as means to capture experiential, aesthetic, and innovative qualities of the design.
- **MLO5** Consolidate a comprehensive understanding of design into a holistic architectural presentation and summing up design as an integrative process.

# Tasks - Methodology



Images 2a & 2b: Urban Room design in pandemic and post pandemic

- 1. Based on your project 1b presentation, design scheme, consider and include expanded aspects of design development in tandem with the design of spaces, *e.g.,* regulatory requirements, fire safety, materials, structural concept, sustainability, feasibility, and other relevant considerations, wherever possible, integrating their development to produce a richer and multi-layered design.
- 2. Integrate environmental strategies into your design. May look into current sustainable trends in design.
- 3. An exploration of the tectonic and poetic qualities of the design through materiality and design elements such as light, texture, and others.
- 4. Develop a selected portion of your building for technological development and resolution for architectural details.
- 5. To present work in a most comprehensive, systematic, creative, and comprehendible manner in the form of creative and effective architectural visualization, modelling, and report.

# Guidelines and Deliverables for Pre-final Design (Final Interim) Review

Upon accomplishing project 1b, the student will proceed to finalize the scheme. Another 3-4 weeks are allotted for this stage. Each is to look and develop the scheme into a more resolved design before the final interim checking or the pre-final design review. In this phase, students are aided with a series of workshops focusing on improving their understanding of the Environmental and Technological strategies, structural concept, and overall building design and fire safety compliance. The students are expected to incorporate the workshop learnings into their design presentations. The drawings and design are to be reviewed by external or internal guests.

# 1) 2D Drawings

Site Plan 1:400

Floor Plan (All levels) 1:200/1:250

- (1) Section 1:200/1:250
- (2) Elevations 1:200/1:250

### 2) 3D Drawings

- (1) Exterior 3D
- (1) Axonometric View
- (1) Interior Perspective

# 3) Technical Drawings

- (1) Green Strategies (Sectional Perspective)
- (1) Architectural Detailing
- (1) Material exploration (study model)

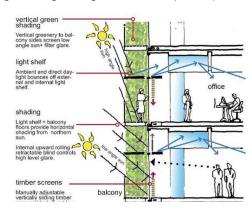
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Images 3a, 3b, 3c: Image (top and middle) Section & elevation drawings showing relating to the context. (bottom)

### **Deliverables:**

### Printed on 8-12 A2 or 4-6 A1 Sheets.

- 1. Project title, Narrative, diagrams and summary of explorations.
- 2. Site Plan 1:400
- 3. Floor Plans, Section, and elevation 1:200/1:250
- 4. 3D (interior-exterior perspective, axonometric, alike)\* To use appropriate scale.
- 5. Study models \* To use appropriate scale.
- 6. Technical Drawings 1:20/1:30



Images 4: Green Strategies

Submission/Presentation DUE | Monday, 7 July 2025 (Week 12)

# Guidelines and Deliverables for Final Design Presentation-Review

### FINAL DESIGN PRESENTATION

- Total of (10-12) A1 or (5-6) A0 Panels
- Panel/Boards must be creative & organized.

### 1.1 ANALYSIS, STRATEGIES & EXPLORATION

(1) A0 Panel or (2) A1 Panels

### 1.11 Programme and Analysis

Summary of Project 1a presentation

- a. Pre-design studies and analysis
- b. project background and site information.

# 1.12 Design Concept, Strategy and Exploration

Summary of Project 1b

- a. 300-word Design Narrative
- b. series of diagrams and sketches
- c. precedents & design references

### 1.2 FINAL DESIGN/DRAWINGS

(3-4) A0 or (6-8) A1 Panels

### 1.21 2D Drawings/Orthogonal

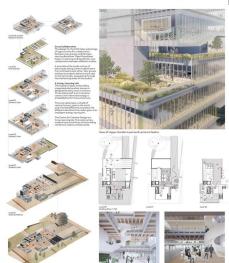
- a. Site Plan 1:400
- b. Floor Plans 1:100/1:150/1:200 (basement level to roof level)
- c. (4) Elevations 1:100/1:150/1:200
- d. (2) Sections 1:100/1:150/1:200

### 1.22 3D Drawings (Exterior & Interior)

- Exterior View in relation to site (aerial view)
   How building sits in immediate context.
- Exterior view in relation to people (street view)
   How building relates to street, people & adjacent bldgs.
- c. Walk through of the spaces (outside-inside)Minimum of (5) views of the programme/public spaces.
- d. Exploded Axonometry.









Images 4a, 4b Sample of a well-organized and creative presentation panel/board. (Bottom) Sample of perspective drawings (how building sits on context) and street level.

### 1.3 TECHNICAL COMPONENT

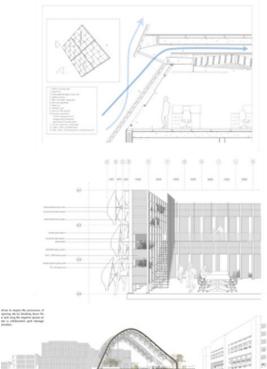
# (1) A0 OR (2) A1 Panel/Boards

**Architectural Detailing & Details.** Showing the most interesting design feature of the building.

- a. Detailed wall section/sectional perspective (foundation to roof)
   Details in (2D/3D) showing the most important. and interesting feature(s).
   (Blow-up details) 1:20, 1:10 or 1:5
- c. Sectional Perspective (1:100 or 1:75)
  Green Strategies & Structural Design

### Note:

- Reflects a full understanding of the theme.
   (Sustainability, poetics, and tectonics).
- To show a good understanding of materiality and architectural detailing.
- To show environmental & technology strategies (green roofing, rainwater harvesting, acoustical design, energy conservation features, building systems, and others).





## 1.4 PHYSICAL MODEL

- Scale 1:200
- To show portion of the immediate Context (road, street, building & etc.)



Images 5a-5d: Drawing that shows importance of tectonic (material and structural) exploration to create better aesthetic and spatial quality or experiences. Images 6a & 6b: Sample physical model effectively showing form, materiality, details, and context.

As a final year student, the work is expected to demonstrate critical thinking skills (studies and analysis), structural sense (buildability + tectonics), sensitivity (key issues & the environment), maturity (considering by-laws & compliance with regulations), creativity (tectonic thinking and poetics) and competence (a well-referenced spatial organization & planning). Students are required to come up with a comprehensive, well-organized, and clear final design presentation. The final presentation is in the form of a final design review, external reviewers from the industry and academe will review students' work.

Pin-up Date | Wednesday, 6 Aug 2025 (Week 16)

Presentation and Review Date | Thursday, 7 Aug 2025 (Week 16)

# Guidelines and Deliverables for Final Design Report

Each student is required to submit a final design report as full documentation of the 15-week design 'journey' in the final studio. The documentation will cover the rigorous design processes, from preliminary studies, exploration, and to the final design. The report must show evidence of how the student incorporated and applied the knowledge learned from previous studios and non-design studio modules, likewise from present learnings from the module's lecture series, tutorials, and workshops into their design. A weekly reflective journal signed by the respective tutors is to be attached in the last part of the report, as evidence of progress and self-reflection.

### **Design Report (A3 landscape format)**

- a. Designer's Profile and Philosophy (Curriculum Vitae)
- b. Project Background

Title of your project & brief background Project/design parameters

- c. Site Investigation & Contextual Studies

  Macro site analysis/Urban Studies
- d. Design Strategy & Exploration

Micro site analysis

Precedent studies

Design Narrative

Site Planning Strategies

Spatial Programming & Organization

Form studies (concept and massing strategies)

e. Technical Components

Green Strategies & Features

Material and Resources

Acoustical Consideration

Innovations (rainwater harvesting, solar panels, etc.)

Architectural Detailing /Details

BOMBA (Fire Safety Plans)

Building Systems (diagrams)

f. Final Design Portfolio

(Plans, elevations, sections, 3D, axonometry, and panel layout)

- g. Reflective Journal Summary of learnings (weekly/overall)
- h. References in APA style

Submission Due Tuesday, 12 Aug 2025 (Week 17)



Images 6: parts required for final report.

### **Deliverables:**

# Pin-up for Final Design review (Week 16)

- 1. Works are to be printed or drawn or mounted on (10-12) A1 or (5-6) A0 boards.
- 2. Design progress (preliminary drawings) to be compiled into an A4 or A3 Design Journal
- 3. Final Physical Model scale 1:200 (to show a portion of the adjacent road & context)
- 4. Optional: 2-3 minutes 3D walk through video \*may bring tablet/laptop during review.

# ADP report + Soft copy of work + e-portfolio (Week 17)

- 1. Submit A3 ADP Report in PDF format.
- 2. Submit copy of all boards and report in PDF/JPEG/PNG format (for moderation/filing purposes)

Submission link: ADP Project Submission 2025 - Google Drive

# Timeline and Schedule

Week 8	Session 1I Briefing 03 Proj 1c guidelines
Week 9	Optimization of Design Scheme
	Session 1I Lecture 04 Designing to Express (Design, Structure, and Materials)
	Activity 04 Technical Workshop
	Lecture 05 Sustainable Design & living & Tutorial and feedback from Proj 1b
Week 10	Incorporating technical components in design
	Session 11 Lecture 06 Designing Sustainable & Green Buildings
	Activity 05 Design Charette VERITAS Architects
	Session 2I Tutorial Sessions on incorporating green strategies
Week 11	Incorporating technical components in design
	Session 1 & 2I Tutorial Session on optimizing design and Final Interim presentation
Week 12	Pre-final Design Review
	Session 1I Session 2I Pre-final Design Review (10%)
	Session 2I Tutorial Session/Finalizing Design
Week 13	Finalizing Design and Drawings
	Session 1I Lecture 07 Effective Visual Storytelling
	Session 21 Tutorial Session finalizing design
Week 14	Finalizing Drawings and Presentation
	Briefing 04: Final Design review briefing & finalizing design & printing of works
Week 15	Finalizing Presentation
Week 16	Final Design Presentation and Review
	Session 1  Submission/Pin-up of Proj 1c: Final submission
	Session 2  Final Presentation and Review (50%)
Week 17	ADP Report and TGC Portfolio Submission

# **Suggested References**

- 1. Bauer, M., Mosle, P. and Schwarz, M., Green Building: Guidebook for Sustainable Architecture; 2010, Springer
- 2. Neufert, E., Architect's Data, 4th Edition, 2012, Wiley Blackwell
- 3. Allen, E. and Rand, P., Architectural Detailing: Function, Constructability-Aesthetics 3rd Edition, 2016, Wiley & Sons
- 4. Charleson, A., Structure in Architecture: A Sourcebook for Architects and Structural Engineers 2nd Edition, 2014, Routledge
- 5. Frampton, K., Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture, 1995, Graham Foundation for Advance Studies in Fine Arts
- 6. Hurol, Y., The Tectonics of Structural Systems: An Architectural Approach, 2016, Routledge
- 7. Yee, R, Architectural Drawing: A Visual Compendium (4th Ed.), 2003, Wiley
- 8. Lewis, P., Tsurumaki, M. and Lewis, D., Manual of Section

# **Assessment Sheets**

Note: There will be three (3) Assessments for Project 1c. (Pre-final, Final and Report)

# 1.0 Pre-Final Design Presentation (10%)

Marking Criteria	FAIL	POOR	SATISFACTORY	GOOD	VERYGOOD	EXCELLENT		
The project is to be assessed based on the ff:	0-39	40-49	50-64	65-74	75-79	80-100		
1.0 Design Resolution (20%) Completeness and well resolved spatial planning and overall design. A workable and established scheme.								
2.0 Poetics & Tectonics Quality (20%) Evidence of how structure defines and form quality of the space. Exploration of light, material, and texture to capture expression.								
3.0 Building Performance (20%) Incorporation of passive cooling strategies, daylighting, and other green design strategies.								
<b>4.0 Structural Concept and Buildability (20%)</b> Incorporation of structural components and systems required for the design.								
5.0 Overall Presentation (20%) Clarity of scheme through an effective graphical and visual presentation. (Drawings, models, and diagrams).								
Assessment Weight: 10%		Total (Over-all)/100						

# 2.0 Final Design Presentation - Assessment Scheme (50%)

Marking Criteria	FAIL	POOR	SATISFACTORY	GOOD	VERY GOOD	EXCELLENT
The project is to be assessed based on the ff:	0-39	40-49	50-64	65-74	75-79	80-100
1.0 Design Narrative (5%) Clarity and richness of architectural position, idea, and concept.						
2.0 Design Studies (5%) Use of relevant precedent studies and research in the generation of programme & design strategies. Arch'l design standards, design codes, project brief & precedents.						
3.0 Design effectiveness (25%) 3.1 Clarity & appropriateness of design as the translation of design brief, narrative & concept (10%) 3.2 Effective & efficient planning, translating the functional req'ts that best interpret the programme, environmental & contextual responses. (15%)						
<ul> <li>4.0 Design flair-rigor (25%)</li> <li>4.1 Exploration of theme (5%)</li> <li>4.2 Exploration of the experiential qualities of space- (10%)</li> <li>4.3 Aesthetic and tectonic thinking form design + materiality (10%)</li> </ul>						
5.0 Design resolution & technical competencies (10%) Resolution of the design. The scheme presented incorporates the necessary technical aspects of design such as codes, buildability, services & workability.						
6.0 Building Performance and Innovations (10%) 6.1 Building performance: thermal comfort, acoustic and lighting (5%) 6.2 Innovations Green Strategies (5%)						
7.0 Overall presentation & communication (15%) 7.1 Quality of Panel/Board 7.2 Quality of slide/keynote presentation						
8.0 Verbal presentation & communication (5%) 8.1 Ability to present design. 8.2 respond to questions.						
Assessment Weight: 50%	Total (Over-all)/100%					

# 3.0 Final Design Report - Assessment Scheme (10%)

Marking Criteria	FAIL	POOR	SATISFACTORY	GOOD	VERY GOOD	EXCELLENT	
The project is to be assessed based on the ff:	0-39	40-49	50-64	65-74	75-79	80-100	
1.0 Profile & Philosophy (10%)							
2.0 Project Background (5%)							
3.0 Site/Urban Analysis (10%)							
4.0 Design Exploration (20%)							
5.0 Technical components (25%)							
6.0 Portfolio (10%)							
7.0 Reflective Journal (15%)							
8.0 References (5%)							
Assessment Weight: 10%	Total (Over-all)/100%						

### Note:

- 1. Compile your report periodically (after each milestone) for easier documentation.
- 2. Refer to the Assessment Sheets for the Marking Rubrics.

Prepared by:

Ar. Prince Favis Isip

Date: 16/04/2025

Module Coordinator/Stream Coordinator

(Design & Design Studies)

Approved by:

Mr. Mohd Adib Ramli

Date: 18/04/2025

Programme Director

Bachelor of Science (Hons.) in Architecture

### Remarks:

- 1. Project Brief is to be distributed to the students in the first week of the semester.
- 2. Any changes to the Project Brief shall be communicated (in writing) to the Programme Director and the approved revised version must be communicated to the student.