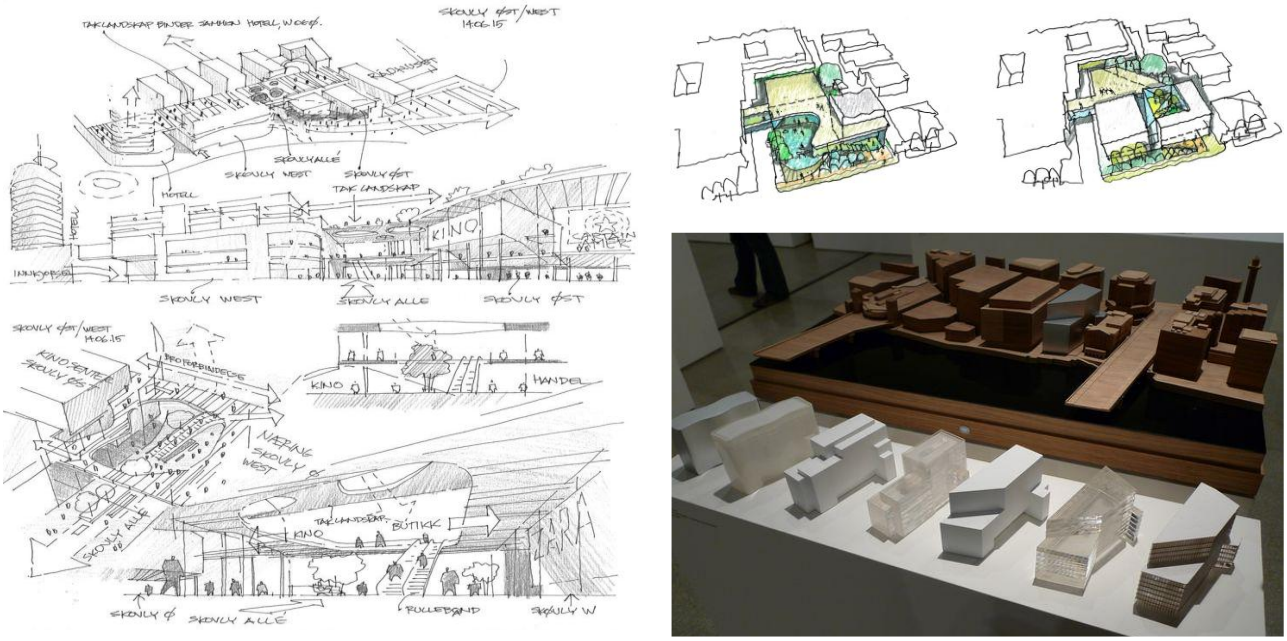
TAYLOR'S UNIVERSITY
Wisdom • Integrity • Excellence

**SCHOOL OF ARCHITECTURE, BUILDING AND DESIGN**
Center for Modern Architecture Studies in Southeast Asia (MASSA)

Bachelor of Science (Honours) in Architecture
**ARCHITECTURAL DESIGN PROJECT [PRJ60408]**

### Design Strategies and Exploration

| Assessment | Type | Learning outcomes | Due | Presentation | Weight |
|---|---|---|---|---|---|
| **Project 1b** | Individual | 2 & 3 | Week 8 | Pin-up | 20% |



Images (1): Sample design exploration thru sketches, diagrams & models (expected output for this phase)

## Project Overview

In this stage and upon clearly understanding the 3P: people, place and project, students will take the project to the next level. Under the tutor's guidance and studio direction, students are to progress by exploring the project proposal presented by the group in Project 1a, individually. Each student explores design ideas within the proposal into multiple angles and possibilities, looking carefully into the functionality, effectiveness, spatial quality, and form composition. Design exploration is to represent the designer's inquisitive nature and attitude through a series of schemes to analyze, test and challenge the ideas. A full exploration of the design is to be presented and represented in a series of sketches, study models, diagrams, conceptual/schematic 2D Drawings (floor plans, sections, and elevations) and conceptual 3D drawings (axonometric, perspective, and modelling).

At the end of this stage, students are to present both the full exploration and final scheme in a pin-up presentation with evidence of design explorations. During exploration, students are advised to look into the suggested readers and relevant buildings to gain a better grasp and understanding of the project on a programmatic and design level. Likewise, on structural concepts, and materiality.

*The process of design starts with exploration but ends with refinement. The best designers carefully move from one idea to the other, making sure they spend enough time exploring before locking themselves into a final design. –Jared Spool*

## Objectives of Project

- To explore brief which will inform and set the design parameters for the design.
- To develop a design strategy (to the level of explorative design phase) for your proposed project.
- To produce a design which is well explored and optimized to an appropriate resolution.

## Learning Outcomes of this Project

**MLO 2** Propose architectural design responses and strategies to further justify the position and programme through a series of analytical diagrams and models.

**MLO 3** Generate a design with a good level of understanding of design codes, environmental, technological strategies tectonics and poetics. Emphasizing effectivity, sustainability, buildability, and efficiency.

## Design Aim and Objectives

### Aim


The Project emphasizes on 'Sensing the City' by immersing to people's and place's needs and aspirations. To design an Urban Room/City Hub which will become the city's 'Third Place'. The project hopes to create design which aligns to UN's Sustainable Development Goals, SDG10 Which seeks to reduce inequalities in the society and inclusive for all. and SDG11 which emphasizes on how architecture can create changes by designing more sustainable cities and communities.

### Objectives

- An urban room or city hub functions as the people's third place, providing social, recreation, and cultural needs, and a place to breathe, enjoy, interact, view, unwind, learn, and connect other than shopping malls.
- A design, which will create a positive impact on the immediate neighbourhood, is more engaging and inviting, hence, encouraging people to look, pause, stay, engage, and celebrate.

- A design, which can be a platform to improve well-being in all aspects, a highly engaging, empowering, family-oriented and creates a sense of belongingness to the user.
- The design should be a highly engaging design, which is open to users from all social statuses, and ethnicity. An urban place acts as a 'neutral platform' or 'third place' where activities are focused and likewise relevant to the city inhabitant's needs, wants, and desires.
- A design that compliments and heightens the quality of the urban fabric through its architecture. The architecture may blend in or be a driver of change to make the place more vibrant and appealing magnifying the city's identity and hidden attributes.
- A design that is people-centred and activity-driven, where spaces both external and internal encourage a unique journey and experience for all. Making the regulars, tourists, transient users, and NGO as caretakers of the place.
- The design should that complies with the pertinent guidelines and regulations. Compliance with buildability, safety, and building requirements and standards.

## Design Guidelines

### Site Requirements

- The scheme must also provide for a proper drop-off zone for your user.
- Appropriate soft scape and hardscape should also be included.
- Entry/Exit points (ingress & egress) for pedestrian, vehicles, and services.

### Gross Floor Area

- The building must be no larger than 2,000 m2. Moreover, not lesser than 1,800m2.
- Fully open spaces, landscaping & parking space are not to be included in area calculation.

### No. of Floors

- Minimum of (3) levels and maximum (5) levels from the ground level line of the site.
- Basement parking does not count in floor area and level.

### Vehicular Parking Requirements

- Calculation to be based on Uniform Building By-Laws and Local requirements.
- Alternatively, at least (30) car parking slots, (2) handicap car parking, and (2) Service parking.
- Minimum 75% of required parking slots on the basement level and 25% on-site parking.

### Spatial Planning and Programming

- Refer to the standard spatial requirements and allocation for calculation and programming.
  Ex: target user/occupant x area required per occupant + area for circulation.

### Regulations and Policies

- Uniform Building By-laws (UBBL)
- Compliance with city planning or local guidelines and requirements.
- Guide to Fire Safety Protection in Malaysia (BOMBA)

- Universal Design and Accessibility in the Built Environment- Code of Practice (MS1184:2014)
- Energy efficiency and use of renewable energy for non-residential buildings (MS: 1525:2014)

## Proposed Spatial Requirements

As a guide to the specific use, the final building should consider the following components: depending on the specific programme(s).

**i. Internal spaces (1800-2000 m2)**

- **Programme-related spaces (40-50%)**

  Note: May vary depending on the function of the Urban Room/City Hub

  **City Canvas/Link** (ex: galleries, workshops, crafting room/makers space, Atelier/artist's studio, collaboration room, training room, carpentry, welding, others),

  **City Stage/Platform** (ex: theatre/performance halls, black/white box, meeting rooms, recording studios, dance halls, rehearsal room, others)

  **City Park/Lung** (ex: indoor park, community planting, recreation spaces, - ex: wall climbing, games room, fitness room, indoor court, community wellness, others)

  **City Lobby/City Living** (ex: assembly hall, meeting hall, lounge, reading area, city library, collaboration space/room, others.)

- **Living Component (5-10%)**
  - ex: Staff accommodation, hostel, temporary accommodation and alike.
- **Circulation Spaces (30%)**
  a. **Transition spaces-** lobby, corridor, service entrances, lift, staircases, foyer, alike.
  b. **Services/Utility Spaces**
  ex: M&E, plumbing, storages, waste disposal, laundry, green features such as rainwater tank, etc.
- **Ancillary Spaces (5-10%)**
  Are spaces that help support the main function of a building.
- **Others (2-5%)**
  spaces and amenities to replace those that are taken out from the site.

**ii. Outdoor spaces (varies & not included in 1800-2000 m2 calculation)**

- **Public Realm/Outdoor space**
  (ex: Plaza, amphitheatre, outdoor recreation, open exhibition, retail/bazaar, outdoor performance areas).
- **Drop off, vehicular, pedestrian and service entry and exit points.**
- **Softscape, hardscape and water features.**

**iii. Basement level (varies & not included in 1800-2000 m2 calculation)**

- Parking area
- Lift lobby/hall
- Service/Utility rooms (sewer, exhaust room, fan room, M&E, sump pit room, pump room, others)
- Offices (security, first aide, alike)

## Task(s)- Methodology

As part of full exploration, the student shall explore the following areas:

i. **Exploration on architectural design position, intent, and strategies**
Progressing from Project 1a, where the group identified the programme and main intention for the project is to further explore design ideas. In this stage, the student will be to research and learn from relevant precedents.

ii. **Exploration on site and spatial organization planning strategies.**
Good spatial programming or calculation of area requirements is key to make sure that it is within the 1800-2000 m2 required floor area. Students are to explore the most efficient and effective planning that is most appropriate to the site and aligns with the concept. Student must fully explore spatial experience and quality aligning with the set concept and narrative.

iii. **Exploration on form and massing design strategies.**
Students are to explore the form of the building. A student may consider identifying building core, back of the house, fire safety requirements to have better flexibility in designing the main spaces and areas of the building.

iv. **Exploration on theme and concept thru materiality, and structural concepts.**
Understanding the theme allows students to explore design better. As early, as week 4, each is required to explore the possible materials, systems, and structural concepts to explore. Ex: exploring bamboo, timber, or brick as a material, rainwater harvesting for building systems, tensile structure, or space frame for the structural system.

**During each stage, the design should consider the following.**

1. The concept should grapple with real conditions on-site and attempt to respond through architectural design interventions to the design aims and objectives of the project.
2. Full exploration is important & never a 'Eureka' thinking as one single initial idea cannot resolve every aspect of design. Being inquisitive is the key to good design exploration.
3. Students are expected to consider pertinent building and design guidelines. From by-laws, fire safety, health & specific general guidelines stipulated in this project brief.
4. Full exploration of ideas and design through programme, spaces, form, and materials.

## Deliverables & Expected outcomes

### Exploration on design position, Strategies, concept & ideas

- A 200 to 300-word narrative/ conceptual write-up
- A series of analytical diagram showing strategies from macro to micro approach
- Review & study of precedent studies

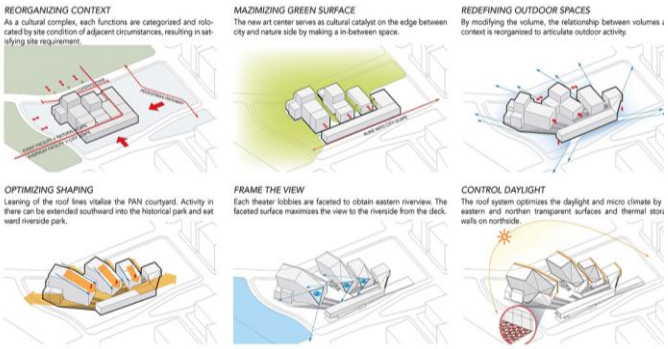
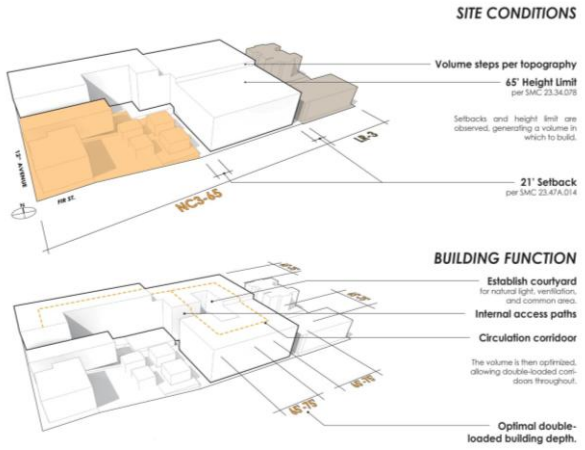
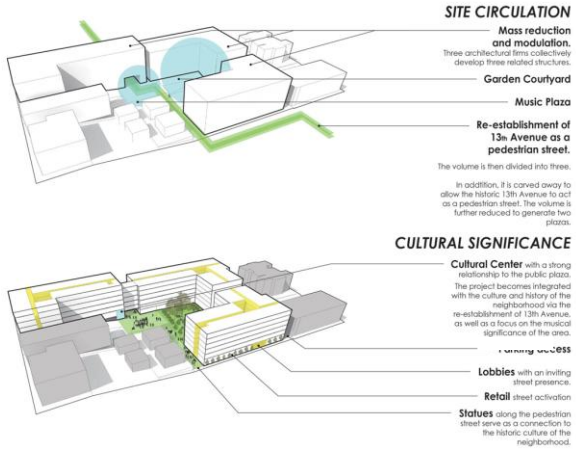



Image 2: Design Strategy MVRDV led alliance.



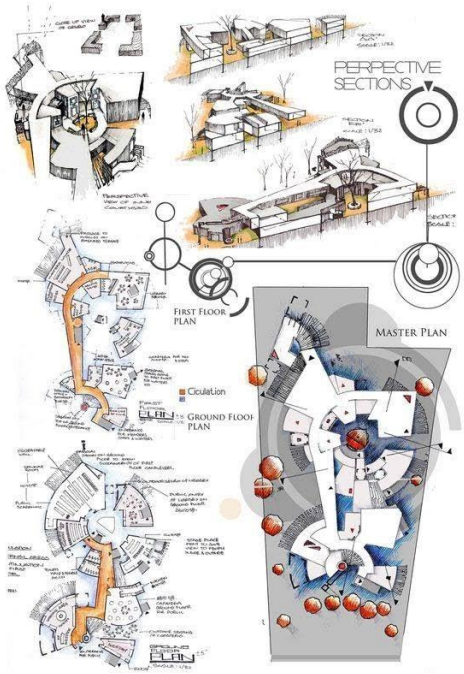




Images (2): Form massing strategy and urban mapping
(https://blog.buildllc.com/2015/01/the-importance-of-urban-mapping-a- site-study-at-first-central-station/)

### Exploration on site and spatial organization- User experience/experiential qualities.

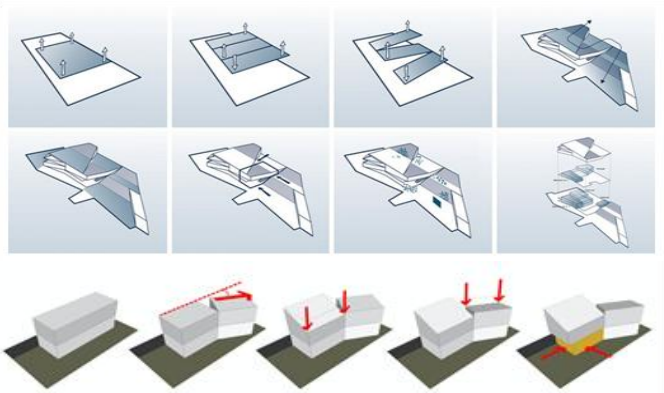
- Spatial programming/calculations
- Diagrams (bubble, matrix, alike)
- Site plan & Floor plans (Basement, ground, and upper levels)

Images (3): Presentation of scheme (free hand drawn to scale plans and building form massing)



**Exploration on Form & Massing Design**

- Series of diagrams/study models
- Series of sketches
- 3D showing how it related to site
  (Building viewed for different vantage points)



Images (4): Sample of building form articulation
https://www.designboom.com/architecture/3xn-cultural-center-plassen/

**Exploration on Theme and Concept- thru materiality, and structural concepts.**

- Series of diagrams
- Series of study models
- Series of sketches
- References images

Images (5): Material as an expression
https://trimbleconsulting.com/fondation-louis-vuitton

**Note:**

1. Drawings + Study models
   a. Floor plans, section, and elevation to use scale 1:200/1:250.
   b. 3D drawings such as interior-exterior perspective, axonometric (to use appropriate scale).
   c. Study models (to use the most appropriate scale).
2. Optimization of design to an acceptable resolution (planning and form).
3. Organize exploration into a complete, creative, and coordinated presentation.

**Suggested format:**

Conceptual drawings encourage the student to explore an idea or range of ideas, development, approach, and design intent much better. The drawings will be loose but drawn to scale, may do freehand or drafted (hand-drawn or digital). Use butter paper or other types to show schemes and conceptual studies of the site and spaces, form studies, and approach (elevation, section, axonometric view, and perspective view and study models). Digital modelling printed on paper and physical study models can help students to explore design further. A series of study models to show progression and rationalization of design ideas. Refer to David Adjaye and/or Bjarke Ingels diagrams for reference.

## Timeline and Schedule

Week 5 **Exploration- ideas on intent, programme, and strategies.**
Briefing 02 I Project 1b guidelines
Lecture 02 I Designing Impactful Public Spaces: 'Third Place'
Activity 02 I Tutorial session on generating narrative, ideas. programme and concept.

Week 6 **Exploration- Form design (materiality and structural concepts).**
Session 1 I Lecture 03 Designing Impactful Public Spaces 'Third Place'
Session 2 I Tutorial session on exploring form, materials and spaces.

Week 7 **Exploration on presenting ideas. Submission and presentation**
Session 1 I *Public Holidays Agong's Birthday (Replacement Tutorials)*
Session 2 I Tutorial Session on exploring design and interim presentation preparation.

Week 8 **Session 1 I Submission/ Presentation of Project 1b**
**Design Strategy & Exploration (20%)**

## Submission Date

**Submission Due Date** I **Monday, 9 June 2025 (Week 8)**

**Deliverables:**

1. Drawings are to be printed or drawn on (10-12) A3/ (5-6) A2 sheets/boards.
2. A4 or A3 Design Journal. Sketches to be compiled into (loose or may use temporary binding)
3. Study models (same as site model)
4. Print of images used as design references and precedents.
5. To submit soft copy or photo of work in PDF format (for moderation/compilation purposes)
   **ADP Project Submission 2025 - Google Drive**

**Note:**

- Students keep weekly progress diligently and in an organized manner. The drawing or model exploration is proof of the ideation process. Progress will be an integral part of the ADP final report.

## Suggested References

### Planning and Design


1. Allison, P., (2006), David Adjaye: Making Public Buildings. London: Thames & Hudson
2. Baker, G., (1989), Design Strategies in Architecture (2nd Ed.), New York: Van Nostrand Reinhold
3. Allen, E., (2017), The Architect's Studio Comparison: Rules of Thumbs for Preliminary Design (6th Ed.)
4. Springer Di Mari, A. and Yoo, N., (2012), Operative Design: A Catalog of Spatial Verbs, BIS Publishers
5. Neufert, E., (2012), Architect's Data, 4th Edition, Wiley Blackwell
6. Sim, D. (2019). Soft City, Building Density for Everyday Life, Island Press
7. Gillen, N., (2021) RETHINK Design Guide: Architecture for a post-pandemic world, RIBA Publishing.


### Poetics, Sustainability, and Tectonics


1. Bauer, M., Mosle, P. and Schwarz, M., (2010), Green Building: Guidebook for Sustainable Architecture
2. Charleson, A., (2014), Structure in Architecture: A Sourcebook for Architects and Structural Engineers' 2nd Edition, Routledge
3. Frampton, K., (1995), Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture, Graham Foundation
4. Antoniades, A.C., (1990), Poetics in Architecture: Theory of Design, Van Nostrand Reinhold


### Additional References:

ADP Additional References - Google Drive

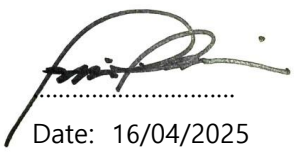
## Assessment Criteria

| Marking criteria | FAIL | POOR | SATISFACTORY | GOOD | VERY GOOD | EXCELLENT |
|---|---|---|---|---|---|---|
| The project is to be assessed based on the following: | 0-39 | 40-49 | 50-64 | 65-74 | 75-79 | 80-100 |
| **Exploration of ideas on intent, programme, & strategies (20%).** Ability to explore the group's position and intentions and translate it to the most appropriate architectural design intervention and responses (15%) Ability to use relevant precedents & design references (5%) | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Exploring site & spaces through effective planning (15%)** Ability to explore the most efficient and effective planning strategies. | | | | | | |
| **Exploring form & Massing (15%)** Ability to explore the most appropriate form and mass strategies to 'blend in' or a catalyst to enhance the image of the place. | | | | | | |
| **Exploring theme, structural concept, and materiality (15%)** Ability to explore a suitable strategy on structure and material to adhere to the concept. | | | | | | |
| **Optimization & finalization (15%)** Ability to synthesize and refine the design to an acceptable level. | | | | | | |
| **Presentation of Design (15%)** Ability to use models, drawings, diagrams, and sketches to effectively convey ideas/design. | | | | | | |
| **Verbal communication (5%)** Ability to present & respond to questions. Articulately. | | | | | | |
| **Assessment Weight: 20%** | **Total (Over-all) ___ /100%** | | | | | |

**Note:** Refer to the Project 1b Assessment Sheet 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. The 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 students.