

# **University of Nairobi**

## **Bachelor of Architectural Studies**

### **Bachelor of Architecture**

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#### **Studio YR 4**

**COURSE: BAR 413/414 – ARCHITECTURAL DESIGN**  
**ACADEMIC YEAR 2014/2015 - 2<sup>ND</sup> SEMESTER**

**PROJECT 7: A TOURIST TERMINAL/INFORMATION CENTRE – MAMBRUI:**  
**Duration: 5 week.**

#### **Introduction:**

Kenya is well known worldwide as a tourist destination. Kenyans are hospitable and the services they offer are efficient and varied. In addition, Mambui Town has established itself as a truly tourist centre that could be used for displaying our cultural art, drama, music and natural endowment. In view of this, the Malindi County Council in partnership with the Ministry of Tourism wants to develop a tourist terminal/information centre at Mambui Town. This will act as a hub for tourists in this part of the coastal region. In addition, the centre attempts to embody the aspirations and pride of the Swahili People to both the overseas and local tourists.

#### **Objectives:**

The objective of this project is to demonstrate understanding of how to design environmentally friendly buildings in warm humid climate where design development effectively takes care of thermal control and cooling effects.

In designing this project, the guiding parameters should be conservation of urban space and its heritage. The students should demonstrate all the lessons learnt in terms of use of local materials, environmental control and conservation of both buildings and urban fabric. All these contextual aspects should be integrated in the design of the centre. The other objectives of this programme are to acquaint students with:

1. The environmental conditions of the coastal region and appropriate design solutions;
2. The physical, socio-cultural and economic dimensions of the coastal people; and
3. Architectural qualities of a historic urban settlement.

**The project:****The brief:**

Architectural design development of a mixed development of this nature is a challenging task, especially responding to the diversity of the requirements on one hand and design solution (s) on the other. The purpose of this project is therefore to analyze the requirements, site conditions and constraints, local authority requirements and based upon these, to achieve a suitable design of the centre. The designer should demonstrate understanding of urban mixed development, site planning and the design scale appropriate to the setting and purpose of public/private spaces, movement patterns, form and the image the development portrays. It should also respond to the context and cultural heritage of the Swahili People living in Mambui.

Design built form should also keenly respond to the warm humid climate of the coastal region. As design for tourist terminal and information centre is being carried out, care should be taken not to destroy the existing historical and urban qualities that create the strong identity of the Mambui Swahili Architecture. The design solution should also demonstrate clear understanding of transit and information design within urban setting, site planning, appropriate design scale to the local setting and use of private and public spaces, movement pattern and form.

**Site location:**

The site of the project will be located at Mambui Town sea front and its exact place will be determined during the visit to Mambui Town.

**Requirements/Accommodation Schedule:**

## 1. Transit lounge/concourse (capacity 100 – 150 pax):

Main lobby or short-term waiting area leading to exhibition, shopping, hotel, audio visual display rooms, amphitheatre, transport facilities and incorporating the following booking offices:

- Airline 8 nos x 16m<sup>2</sup> each
- Tour operators 4 nos x 16m<sup>2</sup>
- Hotels 4 nos x 16m<sup>2</sup>
- Boat hire 4 nos x 16 m<sup>2</sup>
- Heliport office 1 nos x 16 m<sup>2</sup>

In addition the following should also be incorporated into transit lounge/concourse:

- Banks 3 nos (2 cashiers each)
- Post office 1 nos (telephone/telex/fax facility)

- News stand                      1 nos
- Café/snacks/bar                1 nos
- Fruit vendor kiosks            2 nos
- Florist                            1 nos
- Vaccination clinic              1 nos
- Toilets/rest rooms              Male and Female
- Curio kiosks                    5 nos

2. Exhibition concourse (approx. 200m<sup>2</sup>):

Model, photographs, replicas, maps live specimens of costumers, cultural artifacts, museum pieces, wildlife, marine life, currency, music, heritage, trade, architecture, geography etc. of Kenya and its peoples on permanent displays with festivals such as of food, music, curving etc. at least every fortnight.

3. Shopping arcade (each shop 25 – 40m<sup>2</sup>):

- Boutiques
- Photographic
- Jewelry
- Hair saloons
- Sports/safari goods
- Craft/leather goods
- Music shop.

4. Audio-visual display rooms (2nos, seating 50 pax each):

Music concerts, film/video displays of aspects of Kenyan culture, traditions, heritage, conservation etc. Possibility of combining the 2 units to increase total capacity to 100.

5. Amphitheatre (max capacity 200 – 250 pax):

This should enable light and sound shows, traditional dancers and the attitude towards the adjoining park should be apparent in the design. A stage and changing facilities should be available.

6. Transport facilities:

- Heliport
- Boat waiting/pick-up (max 8 boat)
- A jet

7. Hotel accommodation:

16 double self-contained rooms

1 restaurant/bar with kitchen and service yard (max 100 pax)

8. Administrative:

- 3 nos executive offices (each 15 m2)
- 1 general accounts office (30 m2)
- Security staff rest-room/changing/control (25 m2)
- Toilets close proximity to amphitheatre, A-V rooms and exhibition concourse.

**Site Analysis:**

This will be undertaken as Group work. The class will be divided into 3 groups A, B&C, and D according to the class list and the analysis carried out in the following order: Infrastructure, Climatic analysis, Site neighbourhood and existing site conditions. The groups will examine the following:

**A. Infrastructure:**

Street / building outdoor lighting, sewer lines, power and telephone lines, boundary walls, grilles and fences, storm water drainage channels, roads and paved walkways (including materials used) etc.

**B & C. Site Neighbourhood and Existing Site conditions:**

1) **Spatial elements:** Existing structures, Character of neighbouring building facades: heights, Street geometry & Dimensions [Height/width], Orientation, etc.

2) **Architectural:** Surface finishes including type, texture and colour, Construction materials, sun-shading elements, canopies, landscaping features (both soft and hard, materials used and type of vegetation), window and door sizes and proportions/façade proportions, themes and characters of landscaped spaces, landscaping elements and their organising principles, qualities of landscaped spaces in terms of public/intimate scales, sizes etc.

3) **Contextual/Functional issues:** Human activities in the neighbouring buildings including outdoor and indoor spaces in the area of study. This will also include activities along the coastal line, human clothing levels and how people use outdoor spaces during day and night times, and attitudes of users to space etc.

**D. Climatic Analysis, Historical and Geographical Issues:**

### **1. Environmental:**

Data collection, analysis and recommendations:

- i. At the Site namely: Air temperature, Relative humidity, Sound/Noise levels.
- ii. From the nearest Meteorological station: Analysis to include Mahoney tables, Psychometric and Bioclimatic Chart.

### **2. Historical and Geographical issues:**

This should include the history of the general neighbourhood and its relationship with various activities in Mambrui Town.

### **Case Studies:**

Each student is required to carry out two case studies on tourist terminal/information centres and which should include at least one local case study.

### **Project Paper:**

Each student will be required to write a Project Paper on the entire process of the design Project which must be developed and presented simultaneously with the Project as its theoretical component.

### **Requirements for final presentation:**

1. Site analysis
2. Site plan (1:500) showing neighbourhood development including infrastructural services
3. All layout plans including a roof plan (1:100/1:200)
4. Three elevations (1:100)
5. Two sections with at least one through a staircase (1:100)
6. At least one external perspective and one internal perspective
7. Details showing response to thermal control
8. A detailed model (1:200)

### **Time Program:**

#### **WEEK 1:**

9.03.2015	<b>Presentation of Project 6 &amp; Site Analysis of Project 7:</b>
10.03.2015	Area coverage computation, Sketch/Conceptual design
11.03.2015	Sketch/Conceptual design
12.03.2015	Conceptual design/ <b>Desk crit</b>
13.03.2015	Conceptual design
14.03.2015	WEEK-END

15.03.2015 WEEK-END

## **WEEK 2:**

16.03.2015 **1<sup>st</sup> Interim Crit: (Presentation of Conceptual Design and Grading)**

17.03.2015 Design development (1:200) preliminary plans, sections and elevation of the development.

18.03.2015 Desk Crit: Design development (1:200), Finalisation of architectural constants of site neighbourhood/local culture and context/Report writing.

19.03.2015 Desk Crit: Elevation/sectional design, Environmental design, Structural design, Vertical circulation and Services.

20.03.2015 Desk Crit: Elevation/sectional design, Environmental design, Structural design, Vertical circulation and Services/Report writing.

21.03.2015 WEEK-END

22.03.2015 WEEK-END

## **WEEK 3:**

23.03.2015 **2<sup>nd</sup> Interim Crit (and Grading) 1:200 drawings completed with 1:500 model**

Requirements – Site Analysis, Fully resolved layout plans, Sections/s, Elevations at 1:200 and massing/study model (Model -2)

24.03.2015 Desk Crit: Elevation/sectional design, Environmental design, Structural design, Vertical circulation and Services.

25.03.2015 Desk Crit: Elevation/sectional design, Environmental design, Structural design, Vertical circulation and Services/Report writing.

26.03.2015 Desk Crit: Further development of design to reflect local culture and context, principles of sustainable construction (1:200/1:100), Final model/Report writing.

27.03.2015 Desk Crit: Further development of design to reflect local culture and context, principles of sustainable construction (1:200/1:100), Final model/Report writing.

28.03.2015 WEEK-END

29.03.2015 WEEK-END

**WEEK 4:**

30.03.2015 **3<sup>rd</sup> Interim Crit (and Grading) 1:100 drawings completed with 1:200 3<sup>rd</sup> model**

Requirements – Fully resolved layout plans, 2No. Sections (one through the main staircase) 3No. Elevations at 1:100 and study model at 1:200 (Model -3). Design to show clear interpretation of architectural constants (borrowed from site neighbourhood/local culture and context), environmental design in a warm humid climate, well thought structural design, vertical circulation and services.

31.03.2015 Development of Detailed Design/Construction details including sections of the facades, fenestrations, staircases and roof among others (1:50 & 1:20)

1.04.2015 Development of Detailed Design/Construction details (1:20)

2.04.2015 Development of Detailed Design/Construction details (1:20)

3.04.2015 Preparation of Final drawings and Model/Report writing.

**GOOD FRIDAY**

4.04.2015 WEEK-END

5.04.2015 WEEK-END

**WEEK 5:**

6.04.2015 **EASTER MONDAY**

7.04.2015 Preparation of Final drawings and Model/Report writing.

8.04.2015 Development of Detailed Design /Construction details (1:20)

9.04.2015 Construction details/ Final Model / Final drawings **/Desk Crit**

10.04.2015 Final drawings, Model and Project Report

11.04.2015 WEEK-END

12.04.2015 WEEK-END

**WEEK 6:**

13.04.2015 **Final Presentation, Pin-up and Grading of Project 7**

*(All drawings to be pinned up before 2:00PM).*