YEAR 4 BACHELOR OF ARCHITECTURAL STUDIES COURSE OUTLINE

**SEMESTER 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>Hours</th>
<th>Examination</th>
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</thead>
<tbody>
<tr>
<td>BAR 401</td>
<td>Architectural Research Methods</td>
<td>45</td>
<td>1 x 2hr Paper</td>
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<tr>
<td>BAR 403</td>
<td>Building Costs</td>
<td>45</td>
<td>1 x 2hr Paper</td>
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<tr>
<td>BAR 405</td>
<td>Principles of Management</td>
<td>45</td>
<td>1 x 2hr Paper</td>
</tr>
<tr>
<td>BAR 413</td>
<td>Architectural Design 7 (Thematic)</td>
<td>180</td>
<td>By coursework</td>
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One elective unit to be chosen from the stream already chosen

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<tr>
<td>BAR 421</td>
<td>Conservation 3</td>
<td>45</td>
<td>1 x 2hr Paper</td>
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<tr>
<td>BAR 423</td>
<td>Interior Architecture 3</td>
<td>45</td>
<td>1 x 2hr Paper</td>
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<tr>
<td>BAR 425</td>
<td>Landscape Architecture 3</td>
<td>45</td>
<td>1 x 2hr Paper</td>
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**SEMESTER 2**

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<tr>
<td>BAR 414</td>
<td>Design Project</td>
<td>360</td>
<td>By Coursework</td>
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**COURSE DESCRIPTION**

BAR 401 ARCHITECTURAL RESEARCH METHODS 45 Hrs
Methodological approach to research - problem identification, writing out the proposal, data collection methods - Literature review, field study, sampling observation, interviews, questionnaires, data analysis - use of elementary statistical methods and interpretation of data. The case study method. findings and conclusions. Presentation of project papers and research papers.

BAR 403 BUILDING COSTS 45 Hrs
Concepts of cost control, cost implications of design Variables (shape, size, height, complexity), Functional requirements and cost implications of construction methods. Approximate estimating methods (unit method, cube method, superficial floor are method, storey enclosure unit method, approximate quantities, elemental costs analyses, comparative estimating), cost planning theories and techniques, cost analysis indices and cost indices, practical application of cost control techniques. Use of spreadsheets in cost simulation of buildings.

BAR 405 PRINCIPLES OF MANAGEMENT 45 Hrs
The management process: decision making theory, time management, communication process and practice. Function of management planning; organizing, directing, coordinating and controlling. Data classification; coding, sorting, retrieval, analysis, coordination etc. The work study and measurement; work flow, work measurement time measurement techniques, operations and methods (O&M) etc. Moral and social responsibility of management.

BAR 413 ARCHITECTURAL DESIGN 7 180 Hrs

**THEME 1: Conservation design**
Research and brief formulation in conservation projects. Data, historicity and authenticity. Issues of Restoration, Refurbishment, Revitalisation etc. Materials and detailing. Codes and Regulations governing conservation projects. Case studies and field work.

**THEME 2: Interior Architecture**
Research and brief formulation in an interior design project. Data in the context of remodelling, refurbishment, renovation, maintenance etc. Issues of meaning and image, comfort, functionality, materiality, aesthetics and detailing. Codes and regulations governing interior design projects.

**THEME 3: Landscape Architecture**
Research and brief formulation in a landscape design project. Landform, landscape data, site analysis and site planning. Issues of landscape modelling and environmental sustainability. Functionality, aesthetics, planting design and detailing. Presentation techniques for landscape
design information. Codes and regulations governing landscape design projects.

*One elective unit to be taken from the stream of earlier electives*

**BAR 421 ARCHITECTURAL CONSERVATION 3**  
45 Hrs

**BAR 423 INTERIOR ARCHITECTURE 3**  
45 Hrs
One elective to be selected from the following or any other the department may offer from time to time. Artificial lighting. Exploration of light as a design element in interior architecture: uses and control of light, lighting fixtures, and lighting installation for desired effect. Emphasis placed on experimentation with light in relation to other elements. Basics of lamp design and general knowledge of the various properties of light.

**BAR 425 LANDSCAPE ARCHITECTURE 3**  
45 Hrs
One topic to be selected from the following or any other the department may offer from time to time.  

**Planting Design**
Planting design strategies, functional uses and design qualities of plants; morphological characteristics, plant classification and nomenclature for plant identification; main ecological principles for understanding dynamic qualities of plant material; world biomes as models for planting design, modified plant communities; history of planting design; principles of planting design; management and plant walks in botanical gardens.  

**Urban landscape.**  
Hard and soft options. The pedestrian in the city. Lighting and Urban visual environment. Street furniture: fountains, monuments etc. Elements of Nairobi Landscape. Characteristics of land form and the effects of grading on drainage, soils and location of landscape architectural elements; pavings, low retaining walls; quantification skills. Design and construction drawings for public and private landscape structures, landscape utilities, and irrigation system layouts; specifications, takeoffs and estimating.  

**Furniture Design**
Understanding the basic principles of furniture design, general knowledge of dimensioning and drawing of furniture, furniture materials and ergonomics. Developing an idea for a finished product. Studying structures and applying joint techniques. Workshop drawings, presentation drawing, scale model and a prototype model 1:1 of a piece of furniture.  

**Building Systems**
Study of building materials, structural elements, environmental controls, mechanical systems and other components of interior architecture. Emphasis placed on historical precedents and contemporary applications. Knowledge of technical factors connected with the planning of buildings and the effects of structural solutions on the interior. Different regulations and documents. Study of variables in climate, mechanical, electrical, plumbing, detection, and conveyance systems and their effects upon interior spaces. Laboratory investigation of design with environmental control components and systems.

**BAR 414 DESIGN PROJECT**  
360 Hrs
A candidate will identify a small to medium sized project within one of the themes identified in the first semester of the forth year. It should be of appropriate complexity to test advanced integration of social-cultural, pragmatic, technological, urban and environmental aspects. A project paper must be written being a discourse of the entire process of the Design Project and must be developed and presented simultaneously with the project as its theoretical component.