

**AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH (AIUB)**

Faculty of Engineering

BAE 2101: Computer Aided Design and Drafting

**1.0 Title**

Design a civil plan with electrical fitting & fixture according to BNBC using AutoCAD.

# 2.0 Objectives

In this experiment, students will design the **civil plan with necessary electrical fittings** in AutoCAD according to Bangladesh National Building Code.

# 3.0 Experiment to Solve

The experiment should be designed by the students following below mentioned requirements:

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | Draw a **Flat Layout** covering an area of **1000 SFT** (approximately) using AutoCAD Software. | [P1] | **20 points** |
| 2. | Draw the **Fittings** for the civil plan consist of necessary electrical fittings by applying BNBC. | [P4] [P5] | **20 points** |

# 4.0 Task Submission

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| --- | --- | --- | --- |
| **Course Name:** | COMPUTER AIDED DESIGN & DRAFTING | **Course Code:** | BAE 2101 |
| **Semester:** | Fall 2024-25 | **Section:** |  |
| **Faculty:** | Farzana Momtaz Mithila | **OEL/Project** | 1 |
| **Assessment:** | **Lab Performance (CO4), POI: P.e.1.C6** |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Unsatisfactory (1-5)** | **Below Average (6-10)** | **Good**  **(11-15)** | **Excellent (16-20)** | **Secured Marks** |
| Layout | The layout is either copied or very poor with major errors. | The layout is below average  or incomplete with major errors. | The layout is drawn partially as per  requirement with minor errors. | The layout is unique and  drawn as per  requirements with proper dimensions. |  |
| **Comments** |  |  |  | **Total Marks:** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | **Unsatisfactory (1-5)** | **Below Average (6-10)** | **Good**  **(11-15)** | **Excellent (16-20)** | **Secured Marks** |
| Electric Fittings | The fittings are incomplete or copied | The fittings are drawn or placed  inappropriately without  maintaining  BNBC | The fittings are drawn and placed  appropriately with partially complying to  BNBC | The fittings are placed  appropriately  and maintaining  BNBC |  |
| **Comments** |  |  |  | **Total Marks:** |  |

**Group Member:**

|  |  |
| --- | --- |
| **NAME** | **ID** |
| A.H.M TANVIR | 22-47034-1 |
| MOST. SAYMA KHATUN | 22-47035-1 |
| WASI -U-ISLAM | 22-47382-2 |
| SHAH RAHAT HOSSAIN | 22-47411-2 |

**INTRODUCTION:**

The design of Evercare Hospital includes all the essential facilities for modern medical services. It features a female ward and a male ward with separate treatment areas for female and male patients. There is a storeroom for storing necessary medical equipment and supplies. Separate toilets have been provided for patients as well as for doctors and nurses. To ensure convenience for healthcare staff, there is a dedicated nurses' room and a doctor’s room. An emergency room is included for urgent medical care, along with a fully equipped modern operation theater for surgeries. For assisting patients and visitors, there is a help desk and a reception room. Additionally, the hospital includes an ambulance parking area, an elevator, and a staircase to ensure smooth movement throughout the building.

**ATTACH SCREENSHOTS BELOW:**