University of Babylon   3rd class

College of engineering   course 2

Architecture engineering department   1st project

2023-2024

(Hostel design))

Hostel is one of basic university requirements . it may be of individual site , or be as one of university campus . For the essential issue of that building as(students accommodation) , will be one of 3rd stage students project, due to its private function and its various spaces. The student in the 2nd course in his / her learning must deal with buildings of multi story , and composite functions . the special character of the structure , the properties of the mass and form, and the relation with surrounding , will allow designer to know more about that project.

i.   **Goals and requirements:**

  - **Goals:**

In that project student must follow the steps below:

  A. **Project studying according to various levels of :environmental ,functional , structural) depending on suitable systems co-ordinate with the project) , economical , aesthetics ….**
  B. **The study of the project surroundings and its skyline.**
  C. **Depending the conceptions of sustainability , and how affect design process and decisions.**
  D. **Knowing various architectural movements and styles , by extending to their epistemological & architectural principles , to find the optimal design solution.**
  E. **Every student must know types of the project movement depending to its characters , according to various levels of the project and the required of the spatial program.**

  - **Requirements:**

That refers to the project function requirements , as below:
  1.   **The entrance and main reception hall.**
        A. **Entrance & information   36m2**
        B. **Main reception hall with the following :   360m2**

- **W.c for males and females**   **24m2**
  for each group.

2- Multipurpose hall , that contains of :   <u>**690m2**</u>

- **Main entrance + W.C**   **100m2**
- **The main hall for 250 persons**   **450m2**
- **Administration**   **20m2**
- **Control room**   **20m2**
- **Rest area**   **60m2**
- **Store**   **40m2**

3- library with the followings :   <u>**1265m2**</u>

- **Entrance & browning space**   **100m2**
- **Studying space for 250 persons**   **625m2**
- **Store**   **100m2**
- **Training department for 200persons**   **400m2**

4- main restaurant :

- **Main restaurant hall for 300 students**   **450m2**
- **W.C**   **20m2**
- **Kitchen**   **180m2**
- **Various stores**   **100m2**
- **Pantry**   **20m2**
- **Change room *2**   **16m2**
- **Bath   *2**   **12m2**

5- cafeteria :

- **Dining area + service counter**   **120m2**
- **Kitchen + stores**   **50m2**
- **W.C**   **12m2**

6- main administration with the followings:

- **Manager center+ bath**   **35m2**
- **Secretary**   **20m2**
- **Staff room *6**   **180m2**
- **W.C for each group**   **20m2**

     7- mechanical & electrical services

- **Machines room**   **120m2**
- **Secondary machines room**   **50m2**

- **Generator room**   **50m2**
- **Workshops & store**   **120m2**
- **Laundry**   **60m2**
- **Workshops**   **120m2**

8- accommodation facilities :

- **20 bed room (twin bed)with bath room**   **16m2**
- **100 bed room (3 beds each room)**   **20m2**
- **100 bed room (4 beds each room)**   **24m2**
- **W.C**   **50m2**
- **Bathes**   **50m2**
- **Service room each story**   **16m2**
- **AHU each story**   **12m2**

8- 0ut door spaces:

- **10car parks**   **250m2**
- **2 bus park**   **150m2**
- **Land escape & gardens**
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ii. **& project program & presentation stages.**
- **Project program:**

The project action program require the following stages:

1- **Primary studying & data collections: this stage will begin firstly before the design process . it includes dividing students with groups as mention :**
    - **Site group studying , which concerns with site studying and its surroundings , the relation with city , axes or routes movement , and other site impacts , like orientation , the ability of vistas selecting ,as integration with sustainability .**
    - **Literature review and same project samples group ; according to select many same projects depending on analysis and discussion .**
    - **Climate analysis group; which concerns with climate analysis and local environment and knowing the principles of sustainability according to climate adaptation .**
    - **Spatial analysis group ; which concerns with spatial and functional requirements according to the project program , the relations between the various spaces and the impact of movement .**
    - **Structural& services group ; which concerns with various structural systems and their suitability to the project , concluding various architectural details studying. The group also responsible about projects**

various services systems ; mechanical , electrical , sanitary , air conditioning and fire resistance system.

2- 1st prelim presentation , which includes primary concept for each students , according to , zoning for site and project spaces , movement routes , diagrams for the various spaces , with massive elevations , sections ,massive model and rapid sketches declaring the concept.

3- 2nd prelim presentation :all the requirements of 1st prelim presentation with more details and the structural system required .

4- Pre- final presentation : that presentation is advance and the requirements as below:
- Site plan   1/200
- Ground plan   1/100
- Basement   1/100
- other plan s   1/100
- elevations   1/100
- sections   1/100
- perspective
- model   1/200

5- the final presentation : that presentation require the followings :
- Site plan   1/200
- Ground plan   1/100
- Basement   1/100
- other plan s   1/100
- elevations   1/100
- sections   1/100
- perspective& interior
- model   1/200

- Presentation Stages :

There are many stages of presentation determine with dates & durations:

1- Primary studying & data collection   2 weeks
2- 1st prelim presentation   1 week
3- 2nd prelim presentation   1 week
4- Pre- final presentation   1 1/2 week
5- Final presentation   2 weeks

Notes :

All presentations stages depending manual drafts or computer software programs.

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