

Department of Architecture
3rd Year (2021-2022)
2nd Semester- Spring Semester
Architectural Design
Amended version

Project Title: Mixed-Use (High Rise Residential with shopping center in Erbil)

It's proposed to create Residential building with Shopping center.

The idea is to design a Residential Complex that includes different kinds of Flats. The building must include a number of flats with (1, 2, 3, 4 bedrooms, and studio).

Important notes and general design requirements:

- Loading and service vehicle for the shops, vehicle must have access from secondary service roads.
- Garbage's is an important issue in the design and should be considered.
- Fire escape should be taken into consideration.
- Privacy issues should be considered for residential part.
- Entrance must be segregated between residential and commercial for safety & privacy issues.

Type of flats in the vertical buildings:

100 ~ 130 flats will be designed for (approximately 500- 600 person)

A: Studio type flats, area (35-40) m² For 1 person

Including: living area and dinning, Kitchen + store, Bath and sleeping area

B: (1+1 type) Flats with 1 bedroom for (2) persons.

Including: Living room and dining, Kitchen + store, Bath, 1 bedroom,

C: (2+1 Type) Flats with 2 bedrooms for (3-4) persons.

Including: Living room and dining, Kitchen + store, Bath, 2 bedroom,

D: (3+1 type) Flats with 3 bedrooms for (5-6) persons.

Including: Living room and dining, Kitchen + store, Bath, 1 Master bedroom with Bath, 2 normal bedroom, bathroom,

E: (4+1 type) Flats with 4 bedrooms for (7-8) persons.

Including: Living room and dining, Kitchen + store, Bath, 1Master bedroom with Bath, 3 normal bedroom with a share bath, bathroom,

Flat Percentages:

The following percentages can be used:

- Studio type 15%
- 1+1 type 30%

- 2+1 type 30%
- 3+1 type 15%
- 4+1 type 10%

Area of spaces for Flats with (1, 2, 3 and 4 bedrooms):-

- 1- Master bedroom (16-18m²).
- 2- Bedroom for 1 bed (9m²).
- 3- Bedroom for 2 beds (13m²).
- 4- Bathroom (4.5m²).
- 5- W.C + lavabo (2m²).
- 6- Living rooms + dining area: (20, 25, 32, 40) m².
- 7- Kitchens (9, 10, 12, 14) m².

Important notes:

Residential part:

1. In your vertical building design, you must put the (**gallery residential tower**) building in the top of the shopping center.
2. For this year, students are recommended to use **gallery tower & curve** in order to get benefit from greenery views of the Sami Abdulrahman park.
& all *living rooms* of (1+1 type & 3+1 flat types) should have views on the Sami Abdulrahman Park.
3. The podium of the building must be designed for shopping. *The podium can be two (2) floors, or it can be 3 floors.*
4. Natural lighting and ventilation are required for all residential spaces. (Only the bath can be ventilated using ducts) with exhaust fan.
5. It is better to not locate a bedroom beside the main corridors to the apartments.
6. You are required to use concrete structure.

Shopping part:

Main components for shopping Centre:

- Different types of shops (*small shops, medium size shops, big shops, & few extra big shops*)
- Hypermarket
- Café(s)
- Restaurants (mainly in upper floors, also a small restaurant can be placed on ground floor too)
- Food court for fast-foods with services (indoors). Also, you should have an outdoor sitting area with the view on the Sami Abdulrahman Park.
- necessary vertical circulations (lifts, escalators,...etc) for shopping center floors.
- Administration
- other entertainment activities & necessary services for shopping center...etc

1. Three type of circulation is noticeable: a-Costumers, b-Staff, c- Material access. Note: The entrance for costumers should not be crossed by staff and material access

2. Arrangement of furniture in the shops should be according to the commerce standards and in different ways.
3. Any shop with area greater than 300 meters has to have two entrances.
4. The ratio of area between show, Storage and working area depends on the type of materials and type of the work. Example: Flower shop (showing area %80 + Service and storage %20), Maintenance (Electronic) (showing area %20 + Service and repair %70 + storage %10), Clothing material (showing area %70 + Service and storage %30), Tailor (showing area %30 + Service and storage %70)

Note: All students are required to study standards of commerce and residential high-rise buildings.