



**BANGLADESH TECHNICAL EDUCATION BOARD**  
**Agargaon, Dhaka-1207**

**4-YEAR DIPLOMA-IN-ENGINEERING PROGRAM**  
**SYLLABUS (PROBIDHAN-2016)**

**ARCHITECTURE & INTERIOR DESIGN**  
**TECHNOLOGY CODE: 687**  
**5th SEMESTER**

**SUBJECT NAME: Interior Working Drawing-1**

**SUBJECT CODE: 68752**

**AIMS**

- ☐ To be able to draw the working drawing of living room, dining room, bedroom.
- ☐ To be able to draw the working drawing of kitchen, toilet.
- ☐ To be able to draw the working drawing of a 2bedroom house.
- ☐ To be able to draw the working drawing of door and window.

**SHORT DESCRIPTION**

Close and open plan ; ceiling, lighting and furniture groups ; size and shape ; furniture clearance ;  
alcove, insulation; acoustical tile; cross ventilation; room offset; sound buffer; humidity control; general  
planning guides for food preparation; fixture of general bathroom; detail drawing of living room; ; detail  
drawing of dining room ; detail drawing of bedroom ; detail drawing of kitchen; detail drawing of toilet;  
detail drawing of Septic Tank & Water Reservoir; electrical drawing of 2-Bed room House; detail  
drawings of the door; detail drawings of the window.

**DETAIL DESCRIPTION**

Theory:

1. Understand the Living room.
  - 1.1. Define living area; and distinguishes between close and open plan of a living area (Living, Dining, Family etc.)/room.
  - 1.2. Discuss the function, location and decor of different room of living room.
  - 1.3. Discuss the ceiling, lighting and furniture groups of a living room.
  - 1.4. Mention the size and shape of the living room.
  - 1.5. Discuss the minimum requirements of living room.

1.6.Explain the planning considerations and furniture clearance of a living room.

2. Understand the dining room.

2.1.Define dining room.

2.2.Discuss the principle factors that are considered in planning the dining room.

2.3.Discuss the ceiling, lighting and furniture groups of a dining room.

2.4.Mention the size and shape of the dining room.

2.5.Explain the minimum width and depth needed for per person sitting.

2.6.Explain the passage behind chairs and furniture clearance of a dining room.

3. Understand the Bedroom.

3.1 Define difference types of bed room.

3.2 Discuss the function, location, number and decor of Bedroom.

3.3 Mention the standard size and shape of the bedroom.

3.4 Discuss the principal factors, which are considered in planning the Bedroom.

3.5 Discuss the ceiling, lighting and furniture groups of a bed room.

3.6 Explain the storage space & furniture clearance of a Bedroom.

3.7 Explain these architectural terms; alcove, insulation, acoustical tile, cross ventilation, delay switch, room offset, sound buffer, & humidity control.

4. Understand the kitchen.

4.1 Discuss kitchen function & location.

4.2 Discuss some following general planning guides for food preparation; arrangement, traffic lanes, storage, counters and working surface, servicing and replacement of appliances, materials, lighting, ventilation, safety, accessibility, and decoration.

4.3 Explain the basic shapes of kitchen room.

4.4 Discuss the basic work area of kitchen.

4.5 Explain the following architectural terms; working triangle, island, family kitchen, base cabinet, wall cabinet, counter top, service area etc.

5. Understand the bathroom/toilet.

5.1 Define bath/toilet and its function & location.

5.2 State the basic fixture of general bathroom.

5.3 Discuss the basic dimension of a toilet.

5.4 Discuss the four categories bath –

a. Three-fixture bath,

- b. Compartmented bath,
- c. Guest bath,
- d. Utility bath,

5.5 Discuss the doors & windows of the bath.

5.6 Define the architectural terms; water closet, lavatory, fixture, open bath, sunken

tub, shower stall, shower tray, square tub, rectangular tub, Jacuzzi bathtubs.

PRACTICAL:

1. Construct detail drawing of living room.

1.1. Draw basic common furniture with clear dimension. (scale 1:10)

1.2. Draw the furniture layout plan of a living room with clear measurement. (Scale 1:25).

1.3. Draw 2 sectional elevation of a living room. (scale 1:25)

1.4. Draw reflected ceiling and lighting layout plan of a living room showing different types of material. (scale 1:25)

1.5. Draw floor finished layout plan of a living room. (scale 1:25)

2. Construct detail drawing of dining room.

2.1. Draw basic common furniture with clear dimension. (scale 1:10)

2.2. Draw the furniture layout plan of a dining room with clear measurement. (Scale 1:25).

2.3. Draw 2 sectional elevation of a dining room. (scale 1:25)

2.4. Draw ceiling and lighting layout plan of a dining room. (scale 1:25)

2.5. Draw floor finished layout plan of a dining room. (scale 1:25)

3. Construct detail drawing of bedroom.

3.1. Draw basic common furniture with clear dimension. (scale 1:10)

3.2. Draw the furniture layout plan of a bedroom with clear measurement. (Scale 1:25).

3.3. Draw 2 sectional elevation of a bed room. (scale 1:25)

3.4. Draw ceiling and lighting layout plan of a bed room. (scale 1:25)

4. Construct the detail drawing of a Kitchen.

4.1 Draw the minimum counter width dimensions in different cases for kitchen.

4.2 Draw the comfortable working heights for kitchen. (Scale 1:25).

4.3 Draw the minimum clearance between two horizontal counters. (Scale 1:25).

4.4 Draw the minimum width of passages for kitchen. (Scale 1:25).

4.5 Draw a plan and section with detail measurements and showing different fixture (scale 1:20)

(1/2"=1'-0").

4.6 Draw the base and wall cabinet detail showing all dimensions. (Scale 1:20)

(1/2"=1'-0").

5. Construct the detail drawing of a Toilet with CAD.

5.1 Draw a master bath plan scale showing fixtures (Cabinet Basin, Bathtub, W.C. etc.) with all dimensions.

5.2 Draw the detail section of the master bath scale showing maximum fixtures and all dimensions.

5.3 Draw the toilet/bath plan showing fixtures (Basin, Shower tray, Long Pan/Indian Pan etc.) with all dimensions.

5.4 Draw the detail section of the toilet showing maximum fixtures and all dimensions.

6. Construct the detail drawing of Septic Tank & Water Reservoir with CAD.

6.1. Draw the Plan of a 50 user's septic tank showing the dimensions.

6.2. Draw the section of the septic tank.

6.3. Draw the Plan of a 2500 gallon underground water reservoir showing the dimensions.

6.4. Draw the section of the water reservoir.

7. Construct the floor plan of a 2-Bed room House with CAD.

7.1 Draw the floor plan scale of a 2-bedroom house.

7.2 Show the inside and outside detail dimension in the drawn plan.

7.3 Draw Front and side elevation (minimum one) of the 2-bedroom house.

7.4 Draw section of a 2-bedroom house showing all dimension and material symbol.

8. Construct a set of electrical drawing of 2-Bed room House with CAD.

8.1. Draw the different electrical symbols used in electrical layout plan.

8.1. Draw the ground floor plan showing electrical fittings and fixtures with dimension.

8.1. Draw the typical floor plan showing electrical fittings and fixtures with dimension.

8.1. Make the electrical fittings and fixtures schedule for the building.

9. Prepare detail drawings of the door with CAD.

- 9.1 Draw the detail plan of the panel door used in the residential building with detail dimensions.
- 9.2 Draw the detail elevation.
- 9.3 Draw the vertical section of the door with detail dimensions.
- 9.4 Draw the necessary details (at least three) of the door.
- 9.5 Draw different fixing arrangement of the doors.
10. Prepare detail drawing of the wooden pivoted window with CAD.
- 10.1 Draw the detail plan of the window used in residential building with detail dimensions.
- 10.2 Draw the detail elevation.
- 10.3 Draw the vertical section of the window with detail dimensions.
- 10.4 Draw the necessary details of the wooden pivoted window in.
- 10.5 Draw different fixing arrangements of the wooden pivoted window.

#### REFERENCE BOOKS

1. Architecture Drafting and Design - Donald E. Hepler & Paul I. Wallach
2. Time Saver Standard Building Type - By Joseph De Chirra.
3. Time Saver Standard for Interior Design and Space Planning
4. Joseph De Chirra, Julius Panero & Martin Zelnik
4. IqvwK©s Wawqs-1 -  
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