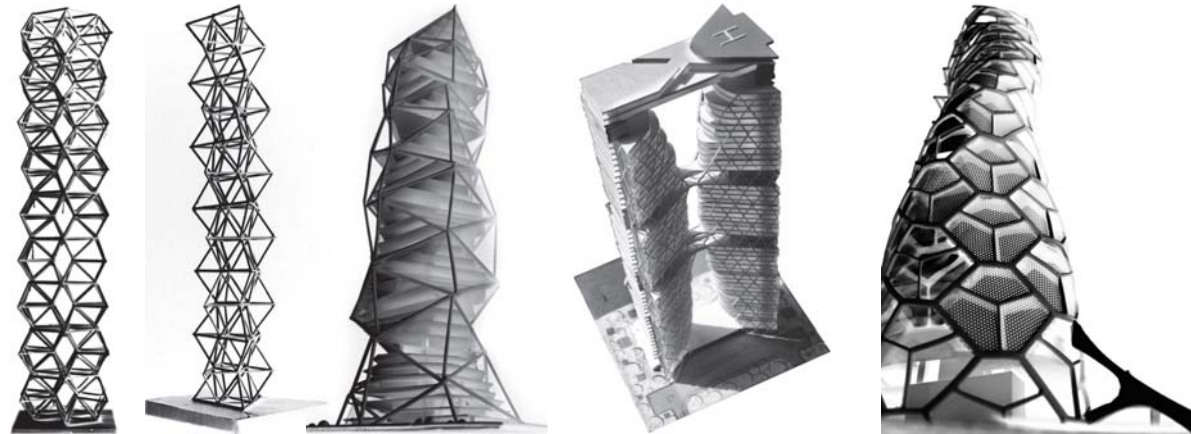


Core Sessional

Projects will involve comprehensive design exercise to understand the underlying complexity of building forms by exploring the characteristics of materials, structural systems, construction methods, building services and environmental requirements in relation to the formal expression of architectural design. Emphasis will be placed on creative response to site and surroundings.

Construction drawing with understanding of Construction process and technique, Production and management, and Modular coordination for elements of buildings (like wall, floor, roof, door, window, stair, elevators and escalators) and spaces (like kitchen and toilets). Generation of details through understanding of codes, by-laws and other regulations. Production of drawings and details considering issues such as materials and aesthetics, construction and technology, maintenance and service life, economy and environment.



**ARCH 304
Design Studio VI**
8.00 Credits. 12 Hrs/Wk
(Pre req ARCH 302)

**ARCH 314
Working Drawing**
3.00 Credits. 6 Hrs/Wk

**ARCH 335
Architecture of Bengal**
2.00 Credits. 2 Hrs/Wk

**ARCH 345
Fundamentals of Urban Design**
2.00 Credits. 2 Hrs/Wk

**CE 271
Plumbing**
2.00 Credits. 2 Hrs/Wk

**ME 363(N)
Mechanical Equipment**
2.00 Credits. 2 Hrs/Wk

Core Theory

Study of society, culture and architecture of Bengal through the ages: Mauryan, Pala, Sena, Sultanate, Mughal and colonial Periods. Typology of colonial buildings. Language custom, art and literature, and their relevance to architecture and planning.

Introduction to the discipline of 'Urban Design', its definition, aims, objectives and scope. Origin of Urban Space and Heritage of Urban Design in Ancient, Medieval and Renaissance period and development of Urban Design during Modern period. Elements of Urban Design: Urban Space, Urban Mass, Urban Activities and Circulation. Principles of Urban Design: Unity, Order, Scale, Proportion, Balance etc.; Regulation and Control; Urban aesthetics.

Introduction to Plumbing, Water Requirements, Water Sources; Sater supply and distribution in Buildings; Sewage and Sewer system. Building Sewer and Drainage System, Sewage Disposal; Plumbing of Multistoried Buildings; Rural Sanitation Programmes in Bangladesh; Fire Fighting.

Review of basic concepts and definitions. Application of air-conditioning. Psychometric. Cooling load calculation, air-conditioning systems, air handling and distribution, design of ducts. Air-conditioning equipments. Fire hazards, fire fighting methods. Vertical transportation: types of elevators, determination of size and quantity of elevators. Incoming and outgoing traffic handling. Escalators and moving ramps.

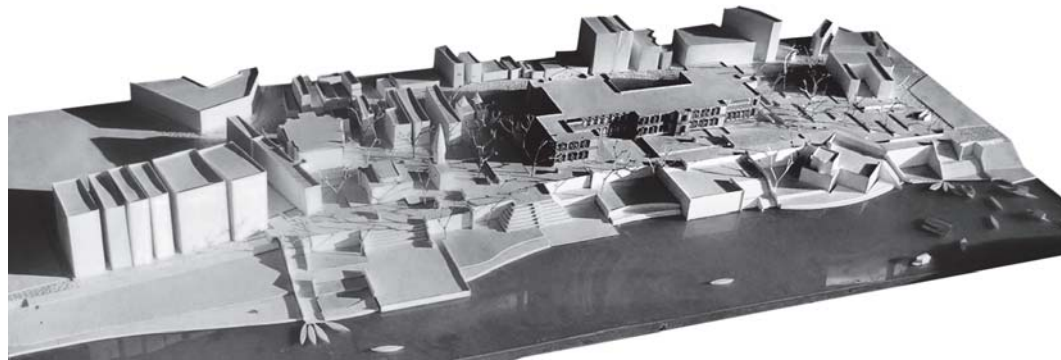
Core Sessional

Urban design with perception of urban context and the emergent forces that shape a city; Emphasis on urban activities, movement, and environmental aspects to ensure sustainability of built environment, livability in cities and quality of life; Designing the urban spaces in response to human needs and scale; and articulation of architecture into the urban realm through design of building complexes and urban projects.

Optional Sessional

Introduction to the computer based tools and techniques to assess and critically evaluate a design regarding its climatic environmental factors. The focus of this exercise is to analyze the thermal, visual and acoustical performances of a built form, site planning analysis, evaluation of energy efficiency etc.

[Content to be developed.]



**ARCH 402
Design Studio VII**
8.00 Credits. 12 Hrs/Wk
(Pre req ARCH 304)

**ARCH 422
Environmental Simulation**
1.50 Credits. 3 Hrs/Wk

**ARCH 424
Construction and Materials**
1.50 Credits. 3 Hrs/Wk

**ARCH 441
Housing**
2.00 Credits. 2 Hrs/Wk

**ARCH 461
Survey and Research Methods**
2.00 Credits. 2 Hrs/Wk

**CE 467
Structure-IV:
Elements of Building and Large
Span Structure**
2.00 Credits. 2 Hrs/Wk

**PLAN 411
Basic Planning**
2.00 Credits. 2 Hrs/Wk



Core Theory

Human settlements and housing in developing countries. The meaning and premises of housing; dwelling in human settlements; cultural construction and modernity's mediation of housing. Urbanization, migration and globalization as defining contexts of housing. Shelter deficit and homelessness as explanation of housing problem. Generic components and roles and responsibilities of housing process. Overview of housing policies in developing countries; housing and sustainable urban development. Formal and informal provision of housing in developing countries; planning and design of sites and service schemes and settlement upgrading. Rural and urban housing in Bangladesh.

Design and planning of Research - purpose and goal, proposal, problem statement, variables, universe, sample, case study etc. Types of research - Social and Scientific. Research methodologies - Qualitative and Quantitative; Inductive and Deductive; selection of method. Study of literature; Survey Techniques; Design of questionnaire, Pretest, Pilot survey. Collection and filing of data. Data processing. Computer as tool of research; Research report and presentation.

Approximate Analysis of multistoried buildings for Gravity and Lateral Loads; Simple Analysis of Truss sections; Analysis and Preliminary Design of steel Beams and Columns; Introduction to Pre-stressed Concrete; Introduction to various Structural Forms and System; Types of Foundations; Concept of Bearing Capacity and Settlement.

Fundamental understanding of planning: Definition, Scope and purpose, elements of planning, plan vs. planning, stages of planning, types of planning. Development planning: Locational and spatial aspects of development, dimensions and levels of planning, integration of spatial and sectoral approaches, purpose and objectives of spatial planning. Evolution of cities: City planning during different period, industrial revolution and city planning. Land use planning process.