

**Core Sessional**

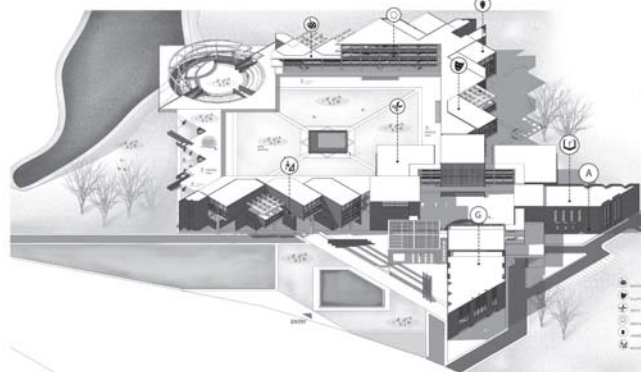
**ARCH 504:** Identification of viable projects of significance as thesis projects. Preparation of complete design solution based on investigation and analysis of the physical and contextual aspects of the problem, and on the understanding of design considerations of material, structure and form. Stress is given on the objective analysis of the related factors and in transforming them into a tangible architectural solution of professionally acceptable quality.

**ARCH 506:** Design exercises of realistic complexities emphasizing professional level of achievement. Formulation of architectural programmes for given projects. Preparation of design solution and development through the various phases.

Preliminary analysis of multistoried building for gravity and lateral loads incorporating basic seismic resistant structural elements; preliminary proportioning of the structural elements of the building based on structural concepts developed in theory courses; laboratory testing; compression test of concrete cylinders, tension test of mild steel specimen, slender column test.

**ARCH 504/ 506  
Design Studio X/ XI**  
10.00 Credits. 15 Hrs/Wk  
(Pre req ARCH 502)

**CE 500  
Preliminary Structural  
Design Sessional**  
1.50 Credits. 3 Hrs/Wk



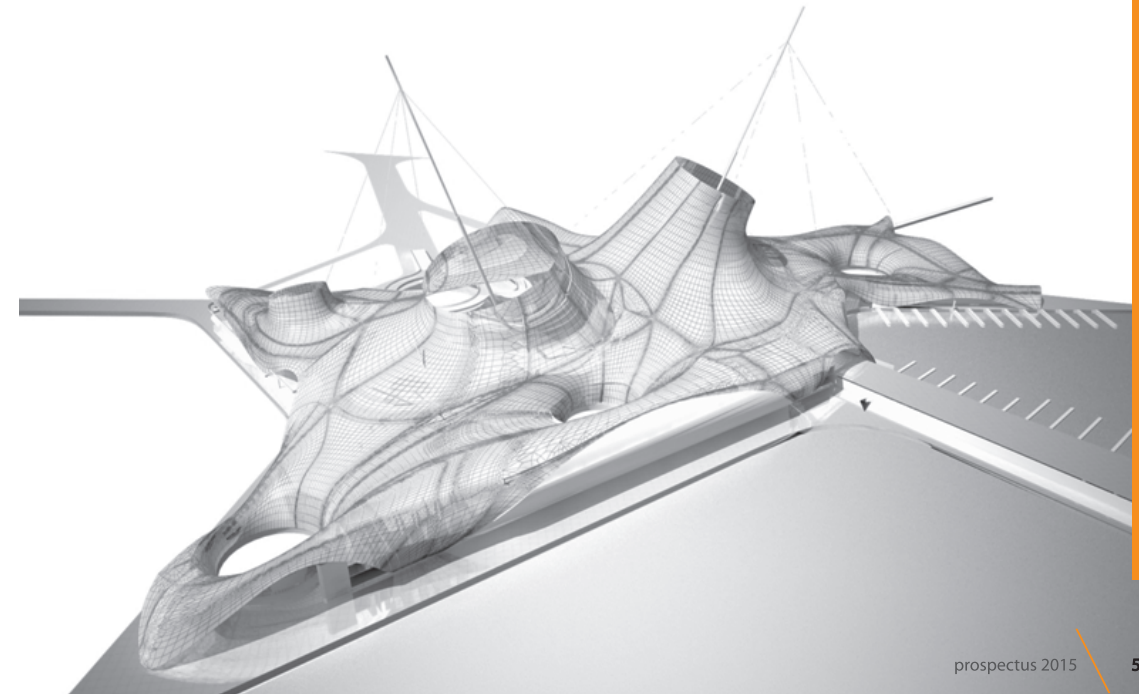
**HUM 511  
Principles of Management**  
2.00 Credits. 2 Hrs/Wk

**Core Theory**

Management: its meaning, scope and objectives. Functions and nature of management. Planning: objectives and types of plans, limits of planning, logistics and strategy. Organizing: grouping of activities, delegation of authority and decentralization. Organization structure-line, staff and functional organization, committee, span of supervision. Direction: motivation and co-ordination. Controlling: steps in control, requirements. Analytical tools and techniques in production management.

**ARCH 565  
Professional Practice**  
2.00 Credits. 2 Hrs/Wk

The role of the architect in the building industry and process; duties, responsibilities and obligations of the architect; general conditions of contract; owner-architect relationship; architectural services; the architect and the public; legal responsibilities of the architect; the architect's office; administration of construction; the architect and his consultants; official correspondence; professional organizations: local and international.



**OPTIONAL THEORY**

Following 12 Optional Theory courses will be offered under Block A for the students of L - 1 T - I, L - 1 T - II, L - 2 T - I, L - 2 T - II, L - 3 T - I. Each student will be allowed to take 5 courses (1 course per term) from Block A .

Introduction, historical overview, classifications and scopes. Human physiology, posture biomechanics and psychology. Anthropometry; principals, process and application in design. Human relationship with activity, space and form. Human performance under environmental factors. Design for performance, comfort, health, safety and aesthetics. Cognitive ergonomics; principles and process of information design. Ergonomic design principles for different types of activity, space, building and interface elements.

Study of the relationships between architecture and the climatic characteristics of tropical regions. Investigation of the problem and understanding the mechanism of air and moisture movement, surface condensation, rain penetration. Means of wetness control and passive cooling in buildings. Comparison of alternative solutions and understanding the secondary implications of environmental control decisions.

Definitions, types, preparation, manufacture, properties, uses, and applications of stone, metal, reconstructed wood, plastic and rubber. Modular co-ordination. Prefabrication Techniques of building components. Construction techniques of special forms: dome, vault, shell, space frame and metal structure. Techniques of construction with indigenous materials.

Fire in history, Advancement of fire-fighting, Fire-related legislation and code, Fire pattern, Capacity and occupant load, Fire load, Fire resistance criteria, Compartmentation, Service core, Fireman's lift and Fire-fighting lift, Pressurisation system, Means of Escape, Assembly point, Refuge cell, Fire classification, Fire extinguishing agents and tools, Fire-fighting equipment, Alarm system, Sprinkler system, Emergency lighting, Fire Services and Civil Defence, Mega fires.

**BLOCK A****PROFESSIONAL COURSES (GROUP 1)**

**ARCH 601  
Ergonomics**  
02.00 Credits. 2 Hrs/Wk

**ARCH 603  
Design in the Tropics**  
2.00 Credits. 2 Hrs/Wk

**PROFESSIONAL COURSES (GROUP 2)**

**ARCH 605  
Building Technology**  
2.00 Credits. 2 Hrs/Wk

**ARCH 607  
Fire Safety Design**  
2.00 Credits. 2 Hrs/Wk

**BLOCK A****GED COURSES (GROUP 1)**

**HUM 701  
Principles of Economics**  
2 Credits. 2 Hrs/Wk

**ARCH 703  
Art Appreciation**  
2.00 Credits. 2 Hrs/Wk

**HUM 705  
English**  
2.00 Credits. 2 Hrs/Wk

**ARCH 707  
Music Appreciation**  
2.00 Credits. 2 Hrs/Wk

**OPTIONAL THEORY**

Introduction to Economics; economics and architecture; fundamental economic problems; branches of economics. Microeconomics: consumer behavior, theory of demand and supply and their elasticity; price determination; indifferent curve technique; factors of production; marginal analysis and optimization; market structure; theory of production; theory of costs; internal and external economies and diseconomies of scale of production. Macroeconomics: national income analysis; aggregate demand and aggregate supply; savings and investment; circular flow of income and expenditure; inflation; money; monetary policy, fiscal policy and trade policy with reference to Bangladesh; nature of an economic theory and the applicability of economic theories to the problems of developing countries; planning in Bangladesh.

Concept, development and evolution of art in different ages from cave painting to modern period with reference to important work of art and contributions of great masters. Art as imitation, expression and abstraction.

English phonetics: the places and manners of articulation of the English sounds. Vocabulary. English grammar: construction of sentences; some grammatical problems. Comprehension. Composition on current affairs. Precise writing. Report writing. Commercial correspondence and tender documents. Short stories by classic writers.

Musical forms. Ingredients of music- sound and time. Indian and western music- melody and harmony. Foundation of subcontinental music-ragasystem: Dhrupad, Kheyal, Tappa and Thumri. Styles and presentation of vocal and instrumental music. The modern period of Bengali music- the five great composers: Rabindranath, Nazrul, Atul Prasad, D. L. Roy and Rajani Kanta. Introduction to western classical music and works of some European masters- Bach, Beethoven, Handel, Mozart, Tchaikovsky.