



INTRODUCTION TO SIX ACADEMIC DIVISIONS

THE DEPARTMENT OF ARCHITECTURE, BUET

Construction and Technologies (CT)

Construction and Technologies division offers the opportunity to explore various construction techniques and materiality. Students entering into the discourse will evaluate and research on the potential of new application in construction methods. This Division offers an applied research and design of buildings and building component. Through focusing on structural, facade and climate design, students will learn how to contribute to buildings that are sustainable and environmentally intelligent. Exploring design strategies to minimize the gap between the expert groups in the construction industry through digital collaboration. The Division addresses the contemporary and advanced issues in field of the computational design and building information modelling, collaborative work and project management through 4D, 5D and 6D BIM, building energy modelling, construction strategy and material experimentation, virtual and augmented reality in the design process and construction.

Environment and Energy Division (EE)

Issues pertaining to environment and energy have drawn a heightened global attention in recent days, due to the facts and effects of global warming and climate change. Environmental issues are significantly considered in architecture, to ensure a quality living, performance and overall well-being of users of any space. Moreover, the use of energy is also of great concern, since a building may exert a significant negative footprint on the surrounding environment, by (mis)using a large share of global energy. The Environment and Energy Division, at the Department of Architecture, BUET, is working with a vision to retain the harmony of nature, by creating environment-friendly and energy efficient spaces. With its coursework and research, both in undergraduate and postgraduate levels, the division is providing awareness, motivation, knowledge and skills on environment and energy issues. At the postgraduate level, this Division offers the courses related Thermal Environment, Sonic Environment, Luminous Environment, Bioclimatic Design, Environmental Design in Tropical Cities, Ecosystem, Green Architecture and Sustainability and Daylighting.

History, Theory and Criticism (HTC)

History Theory and Criticism division focuses on the history of Architectural built forms and discourses in relation to the wider field of epistemology with emphasis on critical historiography and relevant analytic methodologies. It offers students' scopes to examine the diachronic and synchronic relationships between architecture and its social, political, economic, cultural and technological contexts. As an inherently interdisciplinary stream it encourages students to explore theoretical approaches outside the discipline of Architecture to explore both concrete and abstract resources from history in-order to establish its link with the contemporary issues. It also offers platform for holistic inquiry into the disciplinary debates and emerging local and global issues from an analytic point of view to understand the shifts of the architectural discourse itself.

Housing and Settlement (HS)

Human dwelling takes place in a housing-settlement continuum; housing is both a product and process for creating an environment for living, livelihoods and socialization. From our intimate private realm, dwelling encompasses an unfolding hierarchy towards public and natural realms. Housing and Settlement stream frames human production, consumption and management—planning and design— theorization, explication, and materialization for dwelling, often in relation to non-humans. Courses in this stream offer scopes, on the one hand, to examine discrete housing issues like problems, policies and production for people-centered yet market-driven approaches for enriching our everyday lived lives. It reveals the contesting nature of housing: tradition-modernity, formal-informal dichotomy, rural-urban linkages, accessibility-affordability, density-crowding, privacy-urbanity, homeowners-homelessness etc. At a settlement level, on the other hand, it pursues broader agenda like sustainability, resiliency, gender and development as much as at the housing level. It provides an understanding of the formation, growth and development of both housing and settlement amidst decreasing per capita land during rapid and unplanned urbanization in countries like Bangladesh. This stream thus becomes interdisciplinary, relational, and multi-scalar by referring to global, national and community contexts and concerns. Its holistic focus prepares socially-responsive, spatially-sensitive, and sustainability- and resiliency-aware critical researcher and practitioner.

Synergies (SYN)

The Synergies Division at the Department of Architecture engages with a diverse range of subject area in reference to architectural studies, combining but not limited to humanistic, technological, and social science perspectives to develop and explore the boundaries of architecture and enrich the architectural discourse. The courses under this division at the graduate level share interdisciplinary perspectives on the emerging field of architectural design research to enable design that is robust by appreciating the realities and dynamic complexities of its context. The division approach architectural research in all scales from an individual user to the city level from a number of different disciplinary and interdisciplinary perspectives – human behaviour, environmental psychology, sociology, geography, organizational studies, performance design, health and wellbeing, safety and security, planning, urban and cultural studies.

Urban Design and Landscape (UDL)

Urban Design and Landscape Division of the Department of Architecture deals with the designing of human activity spaces outside the buildings. Boundaries and Domains of Urban Design (UD) and Landscape Design (LSD) is blurred and depends more on emphasis put on the design. UD focuses more on physical built-environment, hard-scape, urban enclosed spaces and relationship between complexes of buildings. The scale ranges from neighbourhood to the whole city. LSD, on the other hand, focuses more on the biological environment, soft-scape, natural elements, ecosystems and its relationship with the built environment. The scale ranges from household to the whole region where human activity take place.

UD is concerned with the design of public realm and of the buildings, places, spaces and networks that make up our towns and cities, and the ways people use them. It is an approach that draws together many different sectors and professions, and it includes both the process of decision-making as well as the outcomes of design. LSD is concerned with the design of outdoor areas, landmarks, and structures to achieve environmental, social-behavioral, or aesthetic outcomes. It involves the systematic investigation of existing social, ecological, and soil conditions and processes in the landscape, and the design of interventions that will produce the sustainable human activity areas. At the undergraduate level, UD and LSD division offers introductory courses on complex urban and natural environment design issues of professional B. Arch Program. At postgraduate level, the division offers courses on more advanced and provocative level, which lead to specialized and research-based postgraduate degrees like M. Arch; M.S Arch (Urban Design); M.S Arch (Landscape Design) and PhD.

- Link to **Full Thesis** completed at the Department of Architecture

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