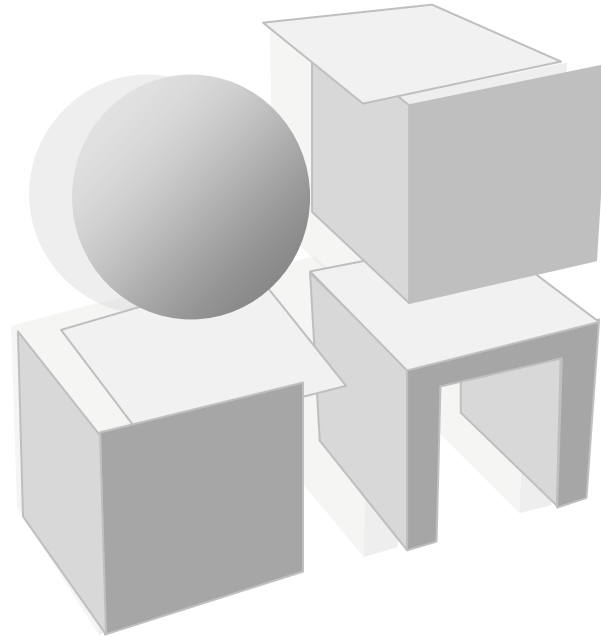

A S I A B

Accreditation Standard of the Institute of Architects, Bangladesh 2010



Definition of Terms (continued)

Design: (60 credit hours)

Design is defined as analysis, synthesis, judgment, and communication that architects use to understand, bring together, assess, and express the ideas that lead to a built project. Design is divided into five levels. These levels are:

- **Level I:** Individual learning experiences within a non-building spatial context; beginning user consciousness with a familiarity of spatial analysis, design process methodology, and development of communication skills; design literacy
- **Level II:** The foundation sequence continues with greater emphasis on the environment, user space study, and further skill development; introduction of qualitative technical materials; a minimum proficiency in the design and communication of simple buildings with an introductory understanding of construction and structural systems; data analysis, programming, site analysis, and design
- **Level III:** Simple and complex building case studies with qualitative technical input; individual and group projects; total building synthesis developed; a general proficiency in the complete design of simple buildings with a minimum ability to deal with complex buildings and multi-building complexes; site analysis and design
- **Level IV:** The synthesis of complex building and multi building complexes within the urban context; integration of technical information; general proficiency in the total synthesis of complex buildings and related systems; transportation, communication, life safety systems, and social ramifications of planning and architecture, and principles of sustainability
- **Level V:** Project emphasis on complex building design, planning, and urban design; Level V work must indicate a mastery of data collection, analysis, programming, planning, building design, structures, building systems, landscape design, and other related knowledge. Levels II-V must be satisfied by the completion of studio courses. Completion of a comprehensive studio in Level IV or Level V is highly desirable

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Short Title and Commencement

1. These standards may be called the “Accreditation Standard of Institute of Architects Bangladesh, 2010”.

Provision for Revision

1. Education related Standing Committee appointed by the Executive Committee of IAB has the authority to revise and modify the “Accreditation Standard of Institute of Architects Bangladesh, 2010” as deemed necessary in the future.

Admission to the Architecture Programme

1. The programme must ensure that admitted students are qualified to study courses offered in the respective B.Arch. programme.
2. The programme has to carry out an aptitude test to select student at the entry level.
3. The institution dealing with admission of candidates to the 1st year of 5-year B.Arch. Degree course are required to follow the minimum requirement of entry level student and the process as prescribed in Appendix 01: Human Resource Student.

Standards of Faculty and Staff

1. The programme has to possess enough faculty and staff to successfully run the B.Arch. programme. The quantity of faculty must ensure minimum ratio between teacher and student as prescribed in Appendix 02: Human Resource Faculty and Staff.
2. The programme must also ensure that it is run by qualified faculty as prescribed in Appendix 03: Minimum Qualifications of Faculty.
3. The programme may hire part time faculty but strictly within the limits of Appendix 02: Human Resource Faculty and Staff.

Courses and Periods of Studies

1. Each B.Arch. programme will develop its own curriculum to ensure that its respective mission statement is achieved. However, the curriculum of the B.Arch. programme must follow the minimum required courses and periods of study as given in Appendix 04: Architecture Curriculum.

Physical Resource

1. Adequate physical resource is essential to run a successful B.Arch. programme. The programme must have the minimum physical resource necessary to run a B.Arch. programme as prescribed in Appendix 05: Physical Resources.

Definition of Terms (continued)

Acceptable topics include analysis of structural systems, construction, construction assemblies, determinate and indeterminate systems, equilibrium, forces and force systems, free body diagrams, gravity, lateral forces, loads, mechanics of materials, resolution of external forces, shear and bending moments, sizing of structural members, stability, statics, strength of materials, stress and strain, structural elements, structural systems in wood, steel and concrete, and theory of structures.

- **Environmental Control Systems:** Environmental control systems is defined as building elements that pertain to the modification of the microclimate for purposes of human use and comfort. Acceptable topics include acoustics, air conditioning, building core systems, energy, energy efficiency, energy transmission, environmental systems, fire protection, heating, lighting (natural and artificial), plumbing, sanitary systems, solar energy utilization, sound, and sustainability.
 - **Construction Materials and Assemblies:** Construction materials and assemblies is defined as the characteristics of building materials and how they are used, made, and applied in a building project. Acceptable topics include building materials, conservation of structures, cost of materials, detailing, installation sequences, materials and assemblies characteristics, materials selection, and physical properties of materials.
- Practice:** (6 credit hours)
- **Project Process:** Process is defined as the entire range of activities involved in a typical architectural design project as it moves from inception through completion of construction. These activities include not only those which the architect carries out, but also those of other professionals. Acceptable topics include bidding and negotiation, client relationships, construction documents, contracts, design development, problem identification, project management, programming, site analysis, building code and accessibility analysis, and specifications.
 - **Project Economics:** Project economics is defined as the financial aspects of building, including the economics of development. Acceptable topics include building costs, cost and benefit analysis, cost control, development costs, estimating, finance, life-cycle costing, site acquisition and development, and value engineering.
 - **Business Management:** Business management is defined as the concepts, ethics, and procedures related to different forms of organization for architectural practice, including private and corporate offices as well as public sector organizations and agencies. Acceptable topics include business management, financial management, office management, office organization, legal agreements, negotiating legal agreements, professional liability, and professional rules of conduct.

Definition of Terms (continued)

- **Natural Sciences:** Natural science is defined as the study of the physical universe. Natural science is divided into two general areas: biological science and physical science. Acceptable courses include astronomy, astrophysics, bacteriology, biochemistry, biology, botany, chemistry, geology, microbiology, physical geography, physics, and zoology. Courses in cultural geography or economic geography are NOT acceptable in this subject, but they are acceptable in the subject of social studies.
- **Social Studies:** Social studies is defined as the analysis of economic, historical, political, psychological, and sociological aspects of human society. Acceptable courses include anthropology, archaeology, area studies, Asian studies, cultural geography, economic geography, economics, history, political science, psychology, sociology, and women's studies.

History, Human Behavior & Environment (16 credits)

- **History:** History is defined as the study of construction by which human needs have been satisfied and human aspirations have been met. Acceptable topics include historical movements in architecture, history of architecture, history of art and architecture, history of building technology, and theory of architecture. Courses in art history are NOT acceptable in this subject, but they are acceptable in the subject of humanities. Courses in cultural, economic, or political history are NOT acceptable in this subject, but they are acceptable in the subject of social studies.
- **Human Behavior:** Human behavior is defined as the study of characteristics and behavior of individuals and groups that relate to the physical environments in which they function, and to the processes of environmental modification and change. Acceptable topics include ergonomics, human behavior, post-occupancy studies, and social response to the environment.
- **Environment:** Environment is defined as the constructed artifacts, service infrastructure, and climatic, geographic, and other natural characteristics of the site that influence the setting for architecture. Acceptable topics include landscape architecture, site analysis, site planning, and urban planning as they relate to physical form and structure of the environment and issues of sustainability.

Technical Systems (24 credit hours)

- **Structural Systems:** Structural systems is defined as the basic structural elements of buildings, their interaction as a support system, the forces that act on and in buildings, and the principles and theory upon which an understanding of these systems is based.

Financial Resource

1. A Programme must have access to institutional support and financial resources comparable to those made available to the other relevant professional programmes within the institution
2. There should be a separate programme budget and development budget, prepared annually and updated frequently. It should also keep provisions for receiving endowments, and providing scholarships and stipends under a clear policy

Teaching-Learning Process

1. The programme must encourage and protect continuous interaction between practice and teaching of architecture
2. The programme is advised to create systems for self-evaluation and peer-review conducted at regular intervals

Supplementary Process

1. The Programme must provide clear, complete, and accurate information to the public by including in its catalogue and promotional literature explaining the parameters of an accredited professional degree programme
2. The programme will provide an educational environment to all faculty, students, and staff, without prejudices towards any race, creed, gender, age, physical ability, or sexual orientation
3. It must have a clear policy outlining both individual and collective opportunities for faculty and student growth within and outside the programme

Termination of Awarded Accreditation

1. The authority (Education Standing Committee) reserves the right to review or cancel awarded accreditation to a B.Arch. programme if considered necessary.

Condition	Minimum Standard
Minimum qualification of a student at entry level	<p>Minimum CGPA of 2.5 in SSC and HSC (or equivalent examinations) separately. Candidates must have Mathematics at least in one of the examinations, i.e. SSC and HSC (or equivalent examinations).</p> <p>Minimum CGPA of 3 in O level and A level examinations separately, where letter grade A = 5, B = 4, C = 3, D = 2, and E = 1. Candidates must have Mathematics at least in one of the examination, i.e. O level and A level.</p> <p>The student must obtain at least 55% of the total mark in an examination for which there is no equivalency with HSC examination is available.</p>
Exemption/ Credit Transfer	Exemption will be allowed only for course that is similar in content, credit, and is offered from an accredited bachelor degree program.
Aptitude Test	Each programme must have an Aptitude test to select student at the entry level.
Minimum Number of Students in a Design Studio	There should be at least 10 students in each design studio to ensure studio culture.

Definition of Terms (continued)

Credit hour	for the purposes of accreditation the IAB will calculate credit hour as follows:		
	Course Type	Awarded Credit Hour	Contact Hour Per Week
	Lecture (Taught) or Seminar (Discussion)	1	1
	Laboratory	1	2
	Studio/Practice	1	2
	Independent Study (thesis or dissertation research)	1	2

IAB will use the following definitions to evaluate the category of subjects taught¹:

GED: General Education (14 credits)

- English:** English is defined as written or oral communication that explains, interprets, analyzes, or presents and supports a point of view, utilizing the principles and conventions of standard English. Acceptable courses include composition, grammar, and public speaking. Courses in English literature are NOT acceptable in this subject, but they are acceptable in the subject of humanities. Courses in English as a foreign language are NOT acceptable.
- Humanities:** Humanities is defined as the recognition, comprehension, analysis, and interpretation of various forms of art and literature. The following types of courses are not acceptable in this subject but may be acceptable as electives: instrumental music, vocal music, and performance, courses in dance, film, opera, radio, television, or theater. Studio art courses are not acceptable in this subject, but they may be acceptable in the design, subject area or as electives. Courses in philosophy and languages other than English are acceptable in this area.
- Mathematics:** Mathematics is defined as the logical study of quantity, form, arrangement, and magnitude. It includes the methods for using rigorously defined self-consistent symbols to disclose the properties and exact relationships of quantities and magnitudes, either in the abstract or in their practical connections. Acceptable courses include algebra, analytic and descriptive geometry, calculus, differential equations, linear algebra, trigonometry, and all courses for which calculus is a prerequisite. The following types of courses are NOT acceptable in this subject, but may be acceptable as electives: business mathematics, discrete mathematics, finite mathematics, mathematics for business students, mathematics for teachers, probability, statistics, and symbolic logic.

¹Source: NCARB (2010): NCARB: Education Standard. Washington DC: National Council of Architectural Registration Boards. www.ncarb.org

Condition	Minimum Standard
Design Studio	There should be one designated space for each student registered to a design studio course. Minimum size of the designated space is 30 square feet (2.8 square meter)
Lecture Class	Minimum numbers of theory class room are 4 (Four). There should be enough class room to ensure that each theory course can be taught without any difficulties due to shortage of room. Minimum area of the theory class room is 15 sft (1.40 square meter) per student registered to the course
Computer Lab	Minimum number of working station should not be less than the maximum number of student currently registered to a course that requires use of computer. For example, computer graphics One designated space for computer supervisor or Lab assistant Provision for input and output facilities (For example, scanner, printer, and plotter)
Library	Minimum collection of title - 1000 Programme should have a system to continuously develop the collection of the library. At least one regular subscription of a journal related to the programme One designated space for the librarian
Teacher's Workspace	There should be at least one designated working space for each full time faculty. Minimum size of the teacher's working space is 56sft (5.20 sq.m)
Exhibition Space	Programme must have an adequate exhibition space. Programme has to ensure regular exhibition of relevant item
Jury Space	A jury space is essential where a public attendance is possible and accessible to all students of the programme.
Archival System	Programmes are encouraged to have an archival system for studio works
Workshop	Programmes are encouraged to have workshops

Condition	Minimum Standard
Minimum Number of Faculty in a Program	At least one of the faculties must be a Professor. Minimum number of faculty in a B.Arch programme is 5 (Five) regardless of admitted student's number. Number of current admitted batch will not exceed the number of full time faculty.
Teacher Student Ratio	The teacher and student ratio must not exceed 1:15 in the studio based class
Visiting Faculty	The visiting faculty must not take more than 25% of the teaching load excluding GED and Technical courses (The definition of GED and Technical courses are given in Appendix 04).

Condition	Minimum Standard		
Designation	Educational Qualification	Professional Experience (Practice/ Research/ Teaching)	Publication/ Other
Head (Chairperson) of the programme		Must be an Architect with at least 10(Ten) years of active teaching experience in a programme offering IAB accredited B.Arch. degree.	Membership (Full or Candidate) of professional body (IAB)
Lecturer	Must possess a First Class (See note 1) B.Arch. or equivalent degree in relevant discipline from a recognized university/institution	-	Membership (Full or Candidate) of professional body (IAB)
	Must possess an M.Arch. or equivalent degree in relevant discipline from a recognized university/institution and a Second Class B.Arch. or equivalent degree in relevant discipline from a recognized university/institution	-	Membership (Full or Candidate) of professional body (IAB)
Assistant Professor	Minimum educational qualification of a Lecturer	5 years of professional experience	Membership (Full or Candidate) of professional body (IAB)
	Minimum Educational qualification of a Lecturer	3 years of professional experience of which 1 year in active teaching	Membership (Full or Candidate) of professional body (IAB)

Condition	Minimum Standard
Professional Internship	7.5 weeks (300 Hours) and Internship will start only after successful completion of 3rd year/ level.
Final Evaluation	Must be done through a jury with panels including practicing architects and teachers from other schools or abroad
Specialization	Specialization is encouraged; emphasizing research and special teaching methods; Encouragement is given to offer advanced degrees
Non Architecture Courses	Courses outside of architecture must be included
Research	Research-teaching nexus in design studios will be encouraged; involving students in teacher's research relevant to discipline or staff guided student research relevant to discipline will be encouraged
Real Life Projects	Encouragement is given for live and community development projects in the design studios

Condition	Minimum Standard																																																		
Minimum Credit Hour required for B.Arch. degree	160 Credit Hours ² (Without Credit Hours earned from Internship) Respective programme has the flexibility to decide the subject area of 1/4 th (40 Credit Hours) of the total Minimum Credit Hour requirement. However, out of these 40 Credit Hours at least 20 Credit Hours have to be studio based. Break-down of 160 Credit Hours as follows: General Education 14 Credit Hour History, Human Behavior & Environment 16 Credit Hour Technical Systems 24 Credit Hour Practice 06 Credit Hour Design + Design Communication Studios 60 Credit Hour Subject Area Not Defined (Studio Based) 20 Credit Hour Subject Area Not Defined (Taught or Seminar) ³ 20 Credit Hour																																																		
Design Studio Credit Hour	Each level may have a minimum of 8 Credit Hours																																																		
Minimum period of study	5 years (Full time student) minimum																																																		
Ratio of studio : theory courses (credit wise)	1:1 (50% each) or more of studio courses																																																		
Minimum total contact hour	3180 Hours Break-down as follows:																																																		
	<table border="1"> <thead> <tr> <th>Subject Area</th> <th>Credit</th> <th>Contact Hour</th> <th>Weeks Per Semester</th> <th>Total Contact Hour</th> </tr> </thead> <tbody> <tr> <td>General Education</td> <td>14</td> <td>14</td> <td>12</td> <td>168</td> </tr> <tr> <td>History, Human Behavior & Environment</td> <td>16</td> <td>16</td> <td>12</td> <td>192</td> </tr> <tr> <td>Technical Systems</td> <td>24</td> <td>24</td> <td>12</td> <td>288</td> </tr> <tr> <td>Practice</td> <td>06</td> <td>06</td> <td>12</td> <td>072</td> </tr> <tr> <td>Design + Design Communication Studios</td> <td>60</td> <td>120</td> <td>12</td> <td>1440</td> </tr> <tr> <td>Electives (Taught/Seminar)</td> <td>20</td> <td>20</td> <td>12</td> <td>240</td> </tr> <tr> <td>Electives (Studio)</td> <td>20</td> <td>40</td> <td>12</td> <td>480</td> </tr> <tr> <td>Internship</td> <td>-</td> <td>40</td> <td>7.5</td> <td>300</td> </tr> <tr> <td>TOTAL</td> <td></td> <td></td> <td></td> <td>3180</td> </tr> </tbody> </table>	Subject Area	Credit	Contact Hour	Weeks Per Semester	Total Contact Hour	General Education	14	14	12	168	History, Human Behavior & Environment	16	16	12	192	Technical Systems	24	24	12	288	Practice	06	06	12	072	Design + Design Communication Studios	60	120	12	1440	Electives (Taught/Seminar)	20	20	12	240	Electives (Studio)	20	40	12	480	Internship	-	40	7.5	300	TOTAL				3180
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TOTAL				3180																																															

² See definition of credit-hour based on contact-hour at the end of this section

³ Studio based courses can be more than 20 credit-hours and can be substituted for "not defined" taught/seminar courses

Condition	Minimum Standard		
Designation	Educational Qualification	Professional Experience (Practice/ Research/ Teaching)	Publication/ Other
Assistant Professor	Minimum Educational qualification of a Lecturer and an M.Arch. or equivalent degree in relevant discipline from a recognized university/institution	3 years of professional experience	Membership (Full or Candidate) of professional body (IAB)
	Minimum Educational qualification of a Lecturer and an M.Arch. or equivalent degree in relevant discipline from a recognized university/institution	2 years of professional experience of which 1 year in active teaching	Membership (Full or Candidate) of professional body (IAB)
Associate Professor	Minimum educational qualification of a Lecturer and a Ph.D. or equivalent degree in relevant discipline from a recognized university/institution	6 years of professional experience of which 3 years in active teaching as Assistant Professor	Membership (Full or Candidate) of professional body (IAB) Must have at least 2 numbers of publication (See note 2 at the end of this appendix)
	Must possess an M.Arch. or equivalent degree in relevant discipline from a recognized university/institution	8 years of professional experience of which 3 years in active teaching as Assistant Professor	Membership (Full or Candidate) of professional body (IAB) Must have at least 2 numbers of publication

Condition	Minimum Standard		
Designation	Educational Qualification	Professional Experience (Practice/ Research/ Teaching)	Publication/ Other
Professor	Must possess an M.Arch. or equivalent degree in relevant discipline from a recognized university/institution	12 years of professional experience of which 5 years in active teaching with at least 1 year active teaching as Associate Professor	Membership (Full or Candidate) of professional body (IAB) Must have at least 5 numbers of publication
	Must possess a Ph.D. or equivalent degree in relevant discipline from a recognized university/institution	10 years of professional experience of which 5 years in active teaching with at least 1 year active teaching as Associate Professor	Membership (Full or Candidate) of professional body (IAB) Must have at least 5 numbers of publication
	Educational qualifications may be relaxed in case of meritorious person with major contribution in the field of Architecture nationally/internationally. The person must possess B.Arch. or equivalent degree in relevant discipline from a recognized university/institution.	25 years of professional experience	Membership (Full or Candidate) of professional body (IAB) Must have at least 5 numbers of publication

Note	
Note 1:	Each faculty has to possess the minimum qualifications prescribed. Designated faculty has to meet only one row of qualifications for the respective post.
Note 2:	Incase of CGPA the following conversion system will be used First Class = CGPA 3 and above (CGPA on a scale of 4) Second Class = CGPA below 3 (CGPA on a scale of 4)
Note 3:	Required publication may be replaced by projects of the following category. However, maximum number of projects will not be more than 50% of the required number of publications. Respective teacher must be the principal architect of the concerned project. <ul style="list-style-type: none"> • Project must show significant contribution to the field of Architecture in local /international context. • Project published in reputed Architectural or related journal or Book. • Awarded by national/international recognized bodies/institutions.