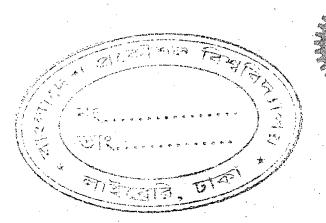
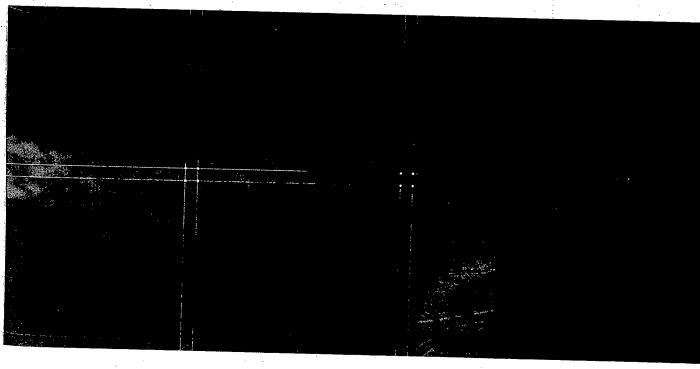
department of architecture BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY





PPOS DECTUS

Published by

The Department of Architecture Bangladesh University of Engineering and Technology Dhaka 1000, Bangladesh April, 2004

Disclaimer

Bangladesh University of Engineering and Technology, Dhaka, reserves the right to add, alter or modify without any notice, the contents of this Prospectus. The University shall bear no responsibility for inconvenience caused to or expenditure incurred by any person because of information contained in this Prospectus.

Cover, Layout & Graphics

Monjur Morshed Masum Md. Rashed Iqbal Lecturers, Department of Architecture, BUET

CONTACTS

Postai

Department of Architecture
Bangladesh University of Engineering and Technology Dhaka
1000
Bangladesh

Telephone

Direct 966 5623

PABX 966 5650-80, 861 6833-38

861 4640-44, 861 8344-49

Fax 880-2-861 3046, 880-2-861 3026

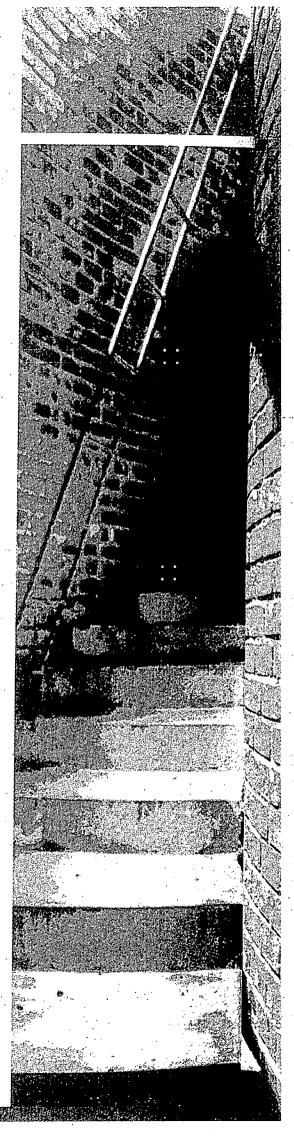
880-2-966 5622

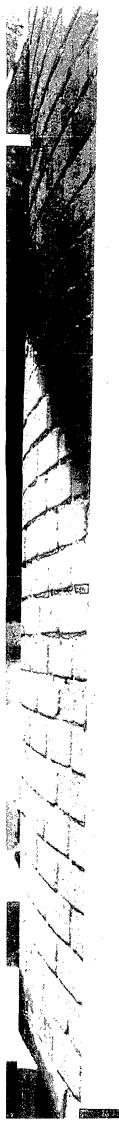
Website

www.buet.ac.bd

E-Mail

dsw@buet.edu





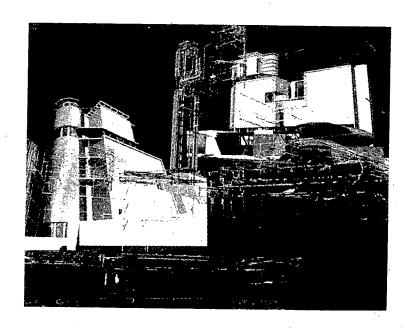
Prime Minister Begum Khaleda Zia Chancellor

Professor Dr. Alee Murtuza Vice-Chancellor

Professor A. S. M. Mahbub-Un-Nabi Dean, Faculty of Architecture and Planning

Professor Md. Khairul Enam Head, Department of Architecture

Professor M. Fazlul Bari
Director of Students Welfare, BUET



Prospectus Editorial Committee

Chairman

Prof. Dr. Nizamuddin Ahmed

Member-Secretary

Md. Ruhul Amin

Member

Dr. Farida Nilufar

Member

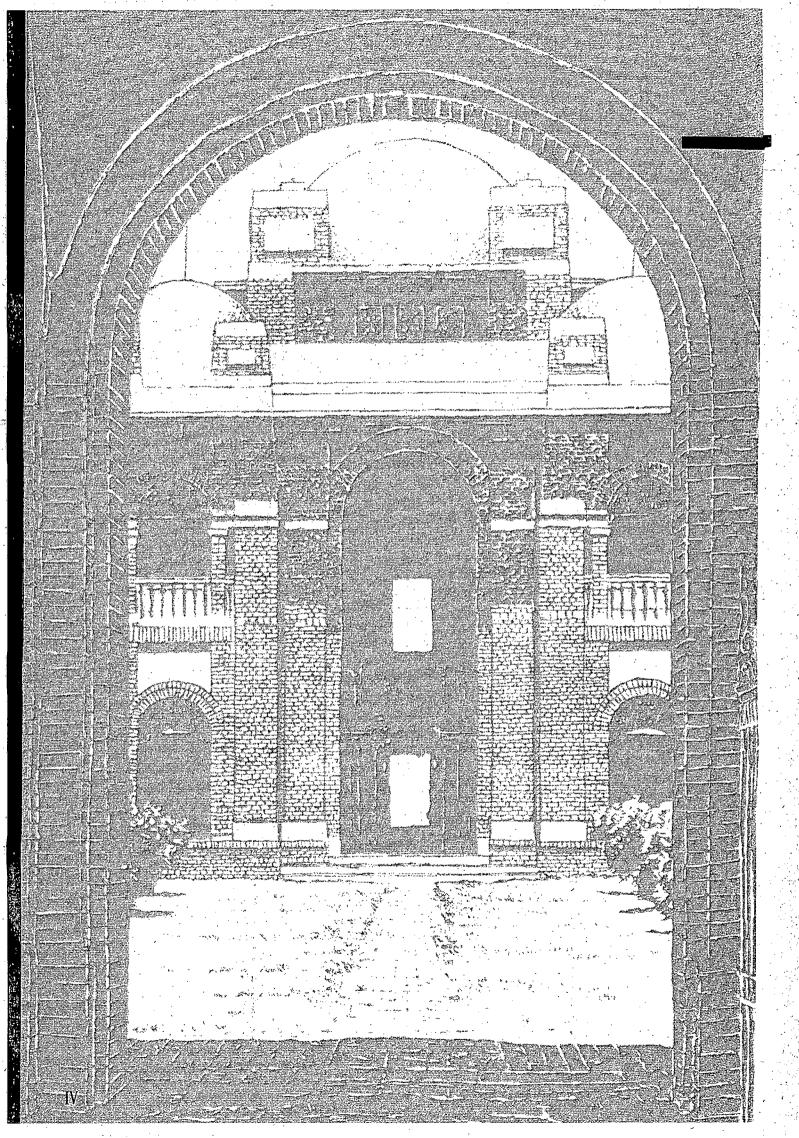
Dr. K. Shabbir Ahmed

Member

Dr. Shayer Ghafur

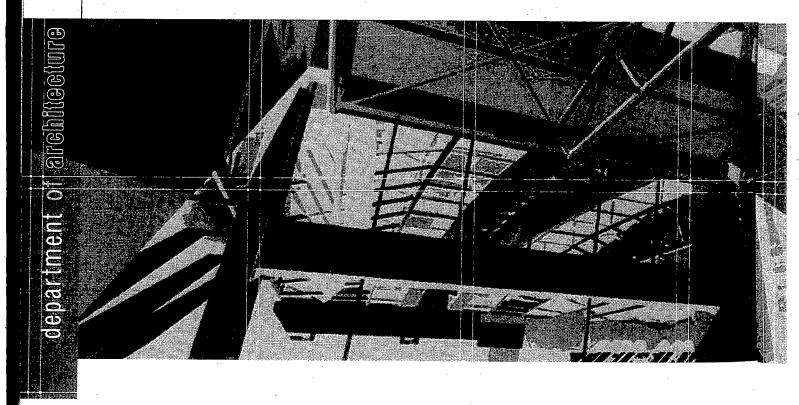
Member

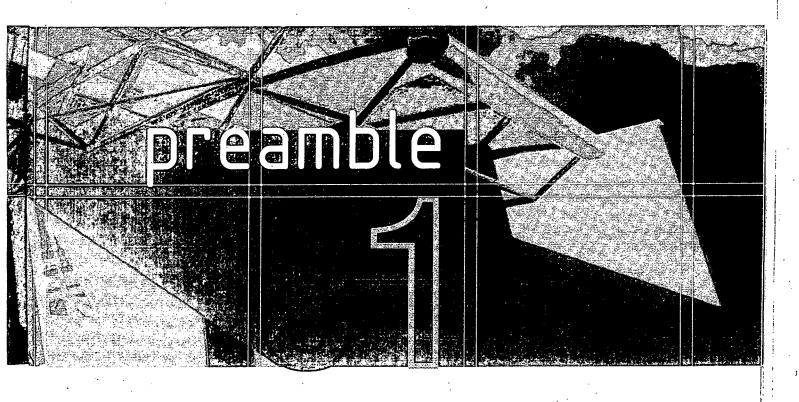
Md. Rashed Igbal



CONTENTS

1.1 The University 1.2 The Department of Architecture PREAMBLE 1.3 Architecture Alumni Association of BUET (ArcAAB) The Campus 2.1 Faculties & Departments 2.2 GENERAL Teaching Staff of the Department INFO .2.4 **Programmes Admission Requirements** 2.5 2.6 Academic Fees 2.7 Scholarships & Awards Central Library 3.1 3.2 **Computer Facilities CENTRAL Workshop Facilities** 3.3 SERVICES Directorate of Students Welfare 3.5 Halls of Residence Health Service 3.6 3.7 Athletic Club **Auditorium Complex** 3.8 Students Union 3.9 3.10 BUET Bus Service Course & Crèdit Requirement 4.1 4.2 **Course Content** UNDERGRADUATE Thesis/Project **PROGRAMME** 4.3 Submission Rules 4.4 .4.5 Courses from Architecture Department Course & Credit Distribution 5.1 Major Streams / Special Topic POST-GRADUATE 5.2 Course Content 5.3 PROGRAMME Thesis. 5.4 Doctor of Philosophy (Ph.D) 5.5 The Faculty 6.1 6.2 Full-time Teachers THE FACULTY Part-time Teachers 6.3 **Faculty Library** 7.1 7.2 Computer Facilities **RESOURCES & Journal Publication** 7.3 ACTIVITIES Seminar / Workshop 7.4 7.5 Lecture Series Joint Lecture/workshop Series 7.6 7.7 Exhibition **Design Competition** 7.8 Chhatra Shangshad 8.0 Design Brochuré 8.1 **Study Tour** 8.2 Adps 8.3 8.4 **Cultural Societies**





Bangladesh University of Engineering and Technology (BUET) in Dhaka is one of the oldest institutions for higher studies in Bangladesh. Its history dates back to the days of Dhaka Survey School established at Nalgola in 1876. The Survey School subsequently became the Ahsanullah School of Engineering offering three-year diplomas in Civil, Electrical and Technical Engineering. In 1948, the School was upgraded at its present premises as the Ahsanullah Engineering College and, as the Faculty of Engineering under the University of Dhaka. It was then offering four-year undergraduate programmes in Civil, Electrical, Mechanical, Chemical and Metallurgical Engineering. The college was set up to meet the increasing demand for engineers and to advance engineering education in the newly constituted country of Pakistan. In 1962, in order to facilitate postgraduate studies and research, and with the addition of a new faculty, that of Architecture, the Ahsanullah Engineering College was alleviated to the status of a university of engineering and technology. Following the independence of Bangladesh in 1971, it became the Bangladesh University of Engineering and Technology.

11

THE UNIVERSITY



DEPARTMENTAL PROFILE

Undergraduate students	380
Postgraduate students	25
Academic staff	31
Technical & secretarial staff	9

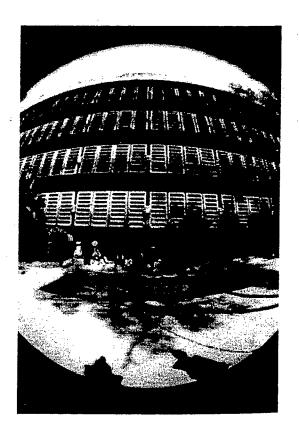
1.2

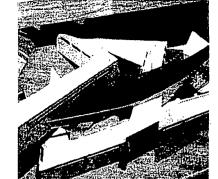
THE DEPARTMENT OF ARCHITECTURE

The process of industrialization and urbanization in the then East Pakistan (now Bangladesh) in the 1905s led to hectic development which suffered from lack of technological support. In view of the challenging situation, the Department of Architecture was established alongside the existing engineering education. The founding of the Department in 1961 helped in the transformation of the then Ahsanullah Engineering College to a full-fledged University. From its inception till 1990, the Department was the only institution of its kind imparting architectural education in the country.

Despite the support of the Texas A&M University, the Department had a humble beginning with only one expatriate teacher, Professor Richard E. Vrooman, and six students. By the year 1965 there were four American teachers and 68 students at five levels.

The year 1966 is a landmark in the history of Architectural education in this country. It was the year when the first five students graduated in Architecture after the completion of a 5-year programme. In the same year six Bangalees, on obtaining





their degrees in architecture from the USA returned to bolster the teaching staff. In 1968 all the expatriates left, entrusting the programme entirely with the local staff.

Tragedy hit the programme with the death of Professor Ahsanur Rahman on June 27, 1967. Professor Rahman was a dedicated teacher of outstanding merit. In fond memory of the late professor, the Ahsanur Rahman Award was instituted in 1968 to support postgraduate studies at the time. The award has since then been presented to students who achieve a high level of design and scholastic excellence.

With the independence of Bangladesh in 1971 the building industry gained a new lease of life. The pressure of students intending to study architecture increased continually. Initially, the yearly intake of students at the first year level was 25. In 1977, the number was raised to 35 and again to 50 in 1980. Since 1995-96 enrolment is 55 per batch.

Consequently the number of teachers has also increased. At present, the Department has a total of 31 teachers, 24 of whom have post-graduate degrees with specializations in Housing, Environment, Architectural Acoustics, Urban Design, Health Facilities, Educational Facilities and Industrial Buildings. In 1979, as the demand for higher education increased, a programme offering the Master of Architecture degree was introduced. From 1993-94 the department is offering PhD programme.

In 1986, the Department celebrated its Silver Jubilee.

Since 1966, degrees awarded to

Bachelor of Architecture	965 students
Master of Architecture	14 students

Students of the department have excelled in national and international design competitions. Student entries in 'Mimar' Design Competitions IV, V and VI were awarded as Winners, Highly Commended and Commended. In 1989, entries secured Honourable Mentions in the Students Jamboree of Commonwealth Association of Architects (CAA). In 1994, the Department's entry to the CAA won the First Prize.

The Department of Architecture is committed to advance architectural education through different programmes and researches. The department continuously endeavors to instil in the students a firm intellectual and professional base. The course curricula are designed to bring out the best in students aspiring to enter the profession. In the past, distinguished architects and professionals of the stature of Faziur R. Khan,

Louis I. Kahn, Paul Rudolph, Stanley Tigermann, Aptullah Kuran, Helmut Borcherdt, Kenneth Young, Charles Correa and B.V. Doshi have presented lectures in the Department. Views on architecture, practice and education are constantly exchanged with architects from home and abroad as well as with related professionals.

The Department has been fortunate to benefit from alliances with national and international organisations. The Aga Khan Award for Architecture (AKAA), the Institute of Architects Bangladesh (IAB), and the Department of Architecture jointly organised the Second Regional Seminar on architecture in 1985. Participants in the seminar included architects, critics and philosophers of international repute. The Workshop on Architectural Conservation in 1989 was the result of fruitful partnership with the Aga Khan Trust for Culture (AKTC) and the IAB. The Department made significant contribution in the International Technical Conference on Tropical Urban Climate, held in 1993 and organised by the World Meteorological Organization (WMO), Bangladesh Meteorological Department (BMD) and Bangladesh University of Engineering and Technology (BUET). The Department also runs link programmes consisting of study, research, lectures and visits with other international schools and organisations.

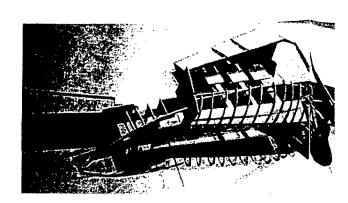
Architecture Alumni Association of BUET (ArcAAB) was founded on 27th July 2001 through a general meeting with Prof. Dr. Nizamuddin Ahmed, Dean of the Faculty of Architecture & Planning, BUET, being the convener. The current 14 member Executive Committee of ArcAAB was elected on 25th January, 2002.

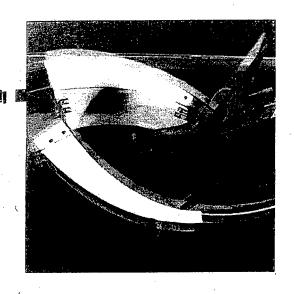
- To establish and maintain a bridge between the alumni (that is the graduates and the post-graduates) and the Department of Architecture, BUET (that is the Alma Mater).
- To create an environment for the exploration and sustainability of all possible methods through which the alumni can participate in the enrichment of the profession and the department for mutual benefits.
- To monitor by periodical evaluation the development, application, standing and influence of architecture in different sectors of the society, culture and economy and to find ways and means to broaden the scope of participation and contribution of the alumni.
- To provide a platform whereby the Association can correlate with different development works
- To promote the welfare of the members and their immediate families.
- To protect the academic, professional and civic rights of the alumni
- To establish, safeguard and further the professional well

13

ARCHITECTURE ALUMNI ASSOCIATION OF BUET (Arcaab)

AIMS & OBJECTIVES





being of the association such as to uphold, endorse and promote the professional interests of the members of the Association.

- To keep the alumni informed about each other.
- To make information available to the alumni with regard to development activities of the department & the alumni.
- To publish periodicals and to host seminars, workshops, exhibitions & competitions
- To provide recreational facilities for the alumni.
- To take effective measures for the creation of a permanent fund called the "ArcAAB Welfare Fund, for attainment of the following objectives: (a)To offer scholarships & loans to deserving undergraduate & postgraduate students. (b)To purchase relevant books and journals for the department. (c) To help procure materials and equipment for the department studio works and other research projects. (d) To provide travel and other expenses to ArcAAB members for attending conferences/ seminars abroad.
- To help the department keep pace with architectural education worldwide.
- To undertake any other activity which the Association deems necessary for the interest of the Alumni, the Department, the University and the country at large.
- To raise funds and acquire assets in pursuance of the objectives of the association, and enter into contracts with second parties as may be necessary.
- To maintain liaison with Alumni Associations with similar objectives at home and abroad.

MEMBERSHIP

- Architecture graduates of the erstwhile East Pakistan University of Engineering and Technology (EPUET) and the Bangladesh University of Engineering and Technology (BUET).
- Architecture postgraduates of the Bangladesh University of Engineering and Technology (BUET).

MEMBERSHIP

- ASSOCIATE All members and former members of the teaching staff of the Department of Architecture of EPUET and BUET.
 - Any person who has appeared in the examination of at least one course of 1st Year 1st Semester/Term or Level 1 Term 1 in the Department of Architecture of EPUET or BUET.



department of archilleclure

department of anchiteciume

bangladesh university of engineering and technology

generalinfo

The BUET campus, 77.84 acres hectares of lush greenery, is centrally located in the capital city of Dhaka. The campus being rather compact, the eight halls of residence are within walking distance of the academic buildings. The physical expansion of the University since independence has been impressive with the construction of academic and institution buildings, mosques, auditorium complex, halls of residence, gymnasium, medical centre and staff housing.

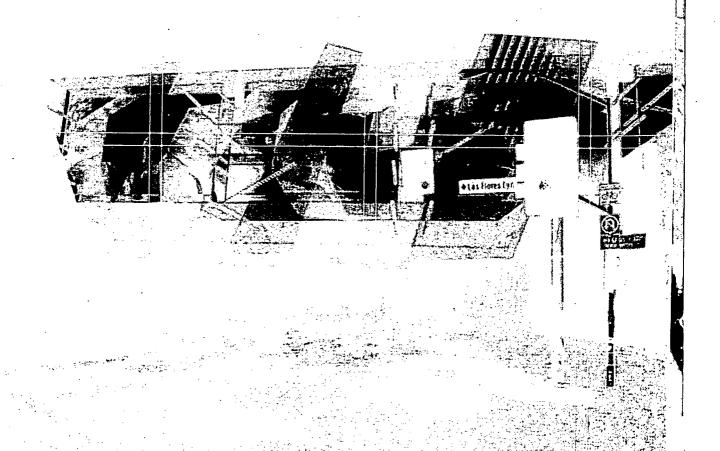
Z. I THE CAMPUS

The University is continually striving to include new courses and to improve the curricula and research facilities to meet the growing technological challenges. The University has sixteen departments under five faculties. Excepting one, all the Departments offer degrees.

Z.Z FACULTIES & DEPARTMENTS

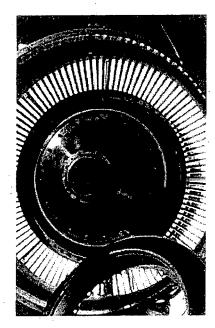
The Department of Architecture offers courses for the degrees of Bachelor, Master and Doctorate in Architecture. The other departments offer B.Sc. and M.Sc. in Engineering, M. Engineering, Bachelor and Master of Urban and Regional Planning and M. Phil degree. In some departments scholars have successfully completed Ph. D. programmes. The university introduced in 2001 Diploma computer based studies.

In addition to its own research programmes the University has undertaken researches sponsored by the Commonwealth foundation and the University Grants Commission. The expertise of the University, and the laboratory facilities are also available to other organisations in the country.



FACULTIES DEPARTMENTS & DEGREES

FACULTY DEPARTMENT STATUS OF DEGREE
PG UG NonPG Degree



		PG	PG	Degree
Architecture	Architecture		•	
and Planning	 Urban and Regional Planning 			
	 Humanities 			•
 Engineering	 Chemical Engg 		9	
	 Metallurgical Engg 		•	
	 Chemistry 	•		
	 Mathematics 			
	Physics			
	• Petroleum & Mineral	3	•	-
• .	Resources Engg			:
 Civil	 Civil Engineering 		•	
Engineering	 Water Resources 			
,	Engineering			
Mechanical	 Mechanical Engg 		•	
Engineering	 Industrial and 			
	Production Engg			
	 Naval Architecture 		•	•
	and Marine Engg.			
Electrical &	e Electrical and		•	
Electronic	Electronic Engg			
Engineering	 Computer Science 		•	

TEACHING STAFF OF THE DEPARTMENT

The department is supported by an excellent group of teachers, many of whom have overseas degrees and training. A good number of teachers pursue higher studies abroad. The following is a list of the different teaching positions which includes those on leave to pursue higher studies and training: (as on March, 2004)

Engineering

Designation	Departme Active	nt of Architecture On study leave
Professor	9	0
Associate Prof.	4	0
Assistant Prof.	9	2
Lecturer	8	2
Total	32	

Besides the above teaching posts, there are Professorships and Chairs:

[a] Dr. Rashid Chair

The Chair is in memory of late Dr. M. A. Rashid, Professor of Civil Engineering and the first Vice Chancellor of BUET. It has been instituted by the '61 Club, an association of BUET graduates of the year 1961.

[b] Professor Emeritus And Supernumerary Professors

The university has provisions to honour outstanding scholars in the fields of Engineering, Architecture and Planning as Professor Emeritus and Supernumerary Professors in order to benefit from the services of such eminent academic.

The Course System has been introduced at the undergraduate level from the 1990-91 academic session, commencing from October, 1992. The postgraduate programme follows the Semester System.

PROGRAMMES

NUMBER AND DURATION OF TERMS

An academic year comprises of two Terms (Term I and Term II). In addition, there is a Short Term in between the end of Term II and the commencement of Term I. During Short Term, students may take additional courses either to make up deficiencies in credit and/or GPA requirements or to meet the total credit requirements. Respective departments decide on the courses to be offered during the Short Term depending on the availability of course teacher(s) and the number of students registering for a course.

Distribution of weeks in Term I and Term II:

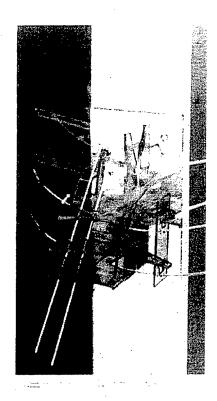
Classes	14 weeks	
Recess before Term Final Ex	2 weeks	
Term Final Examination	2 weeks	
Total	18 weeks	
Short Term Classes Short Term Examination		7 weeks 1 weeks

The entire undergraduate programme is covered through a set TYPES OF of theoretical and laboratory/ sessional / studio courses.

COURSES

- Theoretical courses: One 50 minute lecturer per week per term will be equivalent to one credit.
- 2. Laboratory / Sessional / Studio : Credits for laboratory / sessional and studio courses will be half of the class hours per week per term.

UNDERGRADUATE COURSE SYSTEM



Credits are also assigned to project and thesis work taken by students. The amount of credits assigned to such work may vary from department to department.

Categories of Undergraduate courses:

Core Courses

In each discipline, a number of courses are identified as Core courses which form the nucleus of the Bachelor Degree programme. One has to complete all the designated core courses before being eligible for a degree in a particular discipline.

Prerequisite Courses

Some of the Core courses are identified as Prerequisite courses which students require to complete prior to being eligible for higher course/s along a series.

Optional Courses

Apart from the Core courses, students will have the option to select certain Optional courses in order to meet the total credit requirement.

OFFERED COURSES

Courses to be offered in a particular term are announced and published in the Course Catalogue along with a tentative Term Schedule before the end of the previous term. Respective Boards of Undergraduate Studies (BUGS) decides on the courses to be offered in any term. Departments may arrange to offer any number of Core or Prerequisite courses in any term depending on the number of students who dropped or failed the courses in the previous term.

ATTENDANCE

Students are required to at least 60% of all classes held in any course in order to be eligible to sit for the examination.

CONTACT

TEACHER-STUDENT The system encourages students to work closely with the teachers. To promote teacher -student relationship every student is assigned an Adviser with whom the student is free to discuss all academic matters. Students are also encouraged to meet other teachers for help and guidance.

STUDENT ADVISER

Advisers are appointed by the respective Boards of Undergraduate Studies. He/She advises the students on the courses to be taken/ dropped/ improved. etc. During a term, the advisers regularly discuss the academic programme with the students and help them to decide on the number and nature of courses for which the students can register. The Adviser reviews and eventually approves the student's specific plan of study and assess subsequent progress. However, it is the responsibility of the student to maintain contacts with his/her Adviser.

For a student of second and subsequent terms, the number and nature of coursers for which he/she can register is decided on the basis of his/her academic performance in the previous term(s). The student can register for courses within the framework of minimum/ maximum credit hour limits and on the basis of the Adviser's guideline. A student may be permitted by the Adviser to add/ drop one or more courses.

SUBSEQUENT REGISTRATION

Any student who makes use of class room, laboratory facilities of faculty time is required to register formally. The student can register for courses he/she intends to take during a given term only on the basis of advice and consent of the Adviser.

REGISTRATION REQUIREMENTS

Students must register for a course. The date, time and venue REGISTRATION of Registration are announced in advance by the Registrar's Office. A student has to fill up a COURSE REGISTRATION FORM with the consent of his /her Adviser. The original Course registration Form is to be submitted through the concerned Adviser to the Head. Adequate counseling is provided during the registration time. It is absolutely necessary that students should be present for registration at the appointed time.

PROCEDURE

Permission to register in any course depends on available capacity in class-room and completion of prerequisite courses. Students having outstanding dues with the University or a hall of residence, are not permitted to register. All students must clear their dues and obtain the clearance or no -dues certificate, on the production of which, they will be given necessary Course Registration Forms for registration. The forms are normally available at the Registrars Office. An orientation programme is conducted for the Level I students at the beginning of Term I when all necessary instruction and advice are given.

PRE-CONDITION FOR REGISTRATION

A student has limited options to add and / or delete courses from his/her registration list. He/she may add courses only within the first two weeks of a regular Term, and only during the first week of the Short Term. In the case of dropping a course, a student is allowed to do so only within the first four weeks of a regular Term and the first two weeks of a Short Term.

COURSE **ADJUSTMENT**

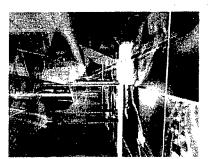
All changes in courses must be approved by the relevant Adviser and the Head of the concerned department. A COURSE ADJUSTMENT FORM has to be filled by the student. signed by the Adviser and the Head before submitting to the Registrar's Office. To add/ drop course, the consent of the respective course teacher is required.

WITHDRAWAL FROM A TERM

If a student is unable to sit for a Term Final Examination due to serious illness or accident, he/she may apply to the Head of the Department for total withdrawal from the term within a week from the end of the Term Final Examination. The application must be supported by a certificate from the Chief Medical Officer of the University; the final decision rests with The Academic Council.

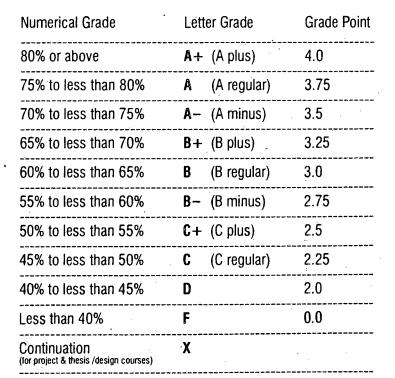
GRADING SYSTEM

The performance of a student in given course is based on a system of continuous assessment. For theoretical courses continuous assessment is constituted of class participation, class evaluation (homework, assignments, quizzes, etc.) and a Term Final Examination. The assessment in sessional courses/laboratory is made through observation of the student at work during sessional, viva-voce during laboratory hours, quizzes, etc. For students of architecture, assessment in departmental sessional is based on the evaluation of a number of projects/ assignments throughout the term.



Each course has a certain number of credits which describe its weight age. A letter grade with a specified number of grade points is awarded in each course for which a student has registered. A student's performance is measured by the number of credits he/she has completed satisfactorily and the weighted average of the grade points that he/she has achieved. A minimum Grade point Average (GPA) is required to be maintained for satisfactory progress. Also a minimum number of earned credits (190 in the case of Architecture) should be acquired in order to qualify for the degree. Letter grades and corresponding Grade points are awarded in accordance with the provisions shown:

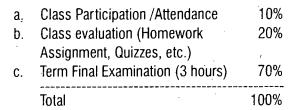






In a theoretical course, 30% (thirty percent) of mark is reserved for performance in the class and 70% (seventy percent) for the Term Final Examination conducted centrally by the University. There is an internal and an external examiner for each course in the Term Final Examination. The duration of the examination of each course is three hours. The distribution of marks of a theoretical course is as follows:

DISTRIBUTION OF MARKS





Corresponding marks for class participation / attendance:

Attendance / Class Participation	Marks
90% above	10
85% to less than 90%	. 9
80% to less than 85%	8
75% to less than 80%	7
70% to less than 75%	6
65% to less than 70%	5
60% to less than 65%	4.
Less than 60%	0



The minimum recommended number of quizzes, etc. is (n+1) where n is number of credits from the (n+1) number of quizzes etc. the best n is taken as class evaluation.

Candidates for the Bachelor's Degree in Engineering and Architecture is awarded the relevant degree with honours if their overall GPA is 3.75 or above.

HONOURS

The course/s in which a student has obtained a 'D' of a higher grade is counted as his/her earned credits. Any course in which a student has obtained an 'F' grade is not counted towards his/her earned credits.

EARNED CREDITS

A student who obtains an 'F" grade in any Core course of any term has to repeat the course when it is offered again. If a student obtains an 'F' grade in an Optional course, he/ she may choose to repeat the course or take an alternate course, if available and if it is so necessary.

'F' grades are not counted for GPA calculation but mentioned on the Grade Sheet and Transcript. When a student repeats a course in which he/she previously obtained an 'F' grade, he/she is not eligible to get a grade better than 'B' in that course.

CREDIT LIMIT A student is normally required to earn at least 15 credits in a Term. At the end of each term, the students are classified into the following three categories:

- Students who have passed all the courses Category 1 prescribed for the term and have no backlog for courses. A student belonging to Category 1 is eligible to register for all courses prescribed for the next term.
- Students who have earned at least 15 credits in Category 2 a term but do not belong to Category 1. A student belonging to Category 2 is advised to take at least one course less in the following term than is prescribed for students of Category 1 subject to the condition that he/she registers for such backlog courses as prescribed by the Adviser.
- Students who have failed to earn 15 credits in a Category 3 term. A student belonging to Category 3 is advised to take at least two courses subject to registration for a minimum of 15 credits. However, he/she is required to register for such backlog courses as prescribed by the Adviser.

EVALUATION

PERFORMANCE The performance of a student is evaluated in terms of two indices, the Term GPA, and the Cumulative GPA (GPA of all the Terms). The Term GPA is computed by dividing the total Grade points earned in a term by the number of credit hours taken in that term. The overall or Cumulative GPA is computed by dividing the total grade points accumulated up to date by the total credits attempted. Thus a student who has earned 275 grade points in attempting 100 credits of courses has an overall GPA of 2.75

> Students are considered making normal progress towards their degrees if their Cumulative GPA for all the courses attempted is 2.2 or above. Students who regularly maintain Term GPA at 2.2 or above are considered making good progress towards their degrees and are in good standing in the University. Students are not in good standing when one or more of the follwing conditions exist:

- i. Term GPA falls below 2.2,
- ii. Cumulative GPA falls below 2.2, and /or
- iii. Earned credits is less than 15 times the number of Terms attended.

Students not making good progress can make up deficiencies in GPA and credit requirements by completing courses of the following term(s) and the backlog courses, if any. When the required GPA and credit requirements are achieved, the progress of the student is considered satisfactory.

MAKE-UP COURSES

A student may take additional courses with the consent of his/her Adviser in order to improve GPA. However, he/she can take a maximum of 28 such additional credits in Architecture beyond the credit requirements (190) for Bachelor of Architecture Degree (B. Arch.) during his/her entire period of study.

In recognition of their brilliant performance, the names of students obtaining GPA of 3.25 or above in both the regular terms of each academic year (one level) are published in the Dean's List of the respective faculties. Students who have received 'F' grade in any course during any of the two regular terms will not be considered for the Dean's List in that year.

DEAN'S LIST

Inclusive of Core courses, the minimum credit REQUIREMENTS requirements to be eligible for B. Arch. Degree is 190 FOR DEGREE credits.

The minimum GPA required for obtaining a Bachelor's Degree in Architecture is 2.2.

In each discipline a number of courses will be identified as core courses which form the nucleus of the respective bachelor's degree programme. A student has to complete all of the designated core courses for his discipline.

TYPES OF COURSES **CORE COURSES**

Some of the core courses are identified as pre-requisite PRE-REQUISITE courses. A prerequisite course is one which is required to be completed before some other course(s) can be taken. Any such course, on which one or more subsequent courses build up, may be offered in each of the two regular Terms.

COURSES

Apart from the core courses, students will have to complete a OPTIONAL COURSES number of courses which are optional in nature in that students will have some choice to choose the required number of courses from a specified group/number of courses.

A student may not be admitted to any University examination APPEARING IN unless he submits an application for appearing at the examination in the prescribed form to the Controller of Examinations. He/she also has to pay the prescribed examination fees, and all outstanding University and Hall dues. The dates of various examinations shall be announced by the Dean of the Faculty at the beginning of each session.

EXAMINATION

AWARD OF DEGREE A student who has fulfilled all the academic requirements for the B. Arch. degree has to apply to the Controller of Examinations through his/her Adviser for graduation. A provisional degree is awarded on completion of credit and GPA requirements. Such provisional degrees has to be confirmed by the Academic Council.

TIME LIMIT FOR DEGREE

A student must fulfil all the requirements for the B. Arch. Degree within a maximum period of eight years. The normal time period required for completing B. Arch. Degree is ten terms or five years.

POSTGRADUATE PROGRAMME

Master of Architecture (M. Arch.) course is of three semesters with a minimum duration of one and a half year. The minimum period for the degree of Ph.D. is five semesters or thirty three months. A candidate for a Master's degree shall have to complete all the requirements within five calendar years and for a Ph.D. within seven from his /her date of enrollment in the respective programmes.

Credits earned by a student indicate the academic progress made by him. There is one hour of class per week per credit for one semester. Required credits for respective degrees are as follows:

Degree	Taught Course credits	Thesis/Project credits	
M. Arch	18	18	
Ph.D	9	35	

ADMISSION

REQUIREMENTS **UNDERGRADUATE**

Admission requirements are framed by the Academic Council and administered by the respective Admission Test Committees. The number of entrants for undergraduate studies in each academic session to the Department of Architecture is 55 including one reserved for tribal student and to the seven Engineering Departments is 825.

For Local Students

- a. Candidates must have passed SSC/Dakhil examination of any Board of Intermediate and Secondary Education/Madrasa Education Board of Bangladesh or its equivalent examination from any foreign education board and obtained at least 50% marks on the average or equivalent grades.
- b. Candidates must have passed HSC/Alim examination of any Board of Intermediate and Secondary Education /Mad rasa Education Board of Bangladesh and obtained at least 60% marks on the average in the subjects of Mathematics, Physics

and Chemistry and minimum of 50% marks in each of these three subjects separately, or its equivalent examination from any foreign education board and obtained at least equivalent grades in the above mentioned subjects.

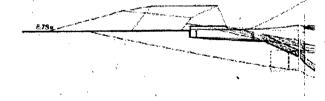
c. A merit list on the basis of the marks of Mathematics. Physics and Chemistry only of the HSC/Alim examination or the equivalent grades in these subjects will be prepared out of which only the first 4500 (four thousand and five hundred) candidates will be allowed to take part in the Admission Test. All candidates securing the 4500th (four thousand five hundredth) position having equal marks, will also be allowed to take part in the Admission Test. Moreover, all tribal candidates having minimum requirements and candidates from foreign education boards who obtained at least equivalent grade are eligible for the Admission Test.

For Foreign Students

- 1. The pre-requisite academic qualifications for admission into the first year B. Sc. Engineering, B. Arch. & BURP classes of this University are Higher Secondary Certificate (.i.e. twelve vears of schooling) in science group with at least 60% marks in average and individually not less than 50% marks in Mathematics, Physics and Chemistry, or GCE A-Level or equivalent with good grades in those subjects
- 2. Selection for admission is made on the basis of academic qualifications and availability of seats.

All the requirements are subject to changes by the Academic POSTGRADUATE Council.

- a. B. Arch. degree or its equivalent from any recognised institution
- b. At least one first class/division in any public examination,
- At least 50% marks or minimum GPA of 2.5 out of 4.0 or its equivalent in B. Arch /BURP in the relevant branch.
- d. No third division/class in any public examination.
- Ph.D DEGREE
- At least two first class/division in public examinations
- No third division / class in any public examination



- c. At least 50% marks or minimum GPA of 2.5 out of 4.0 or its equivalent in B.Arch./BURP in the relevant branch
- d. MURP/M.Arch. degree with a minimum GPA of 2.75 out of 4.0 or its equivalent from any recognised institution.

ACADEMIC FEES

Students are required to pay Academic Fees which are different for local & foreign students

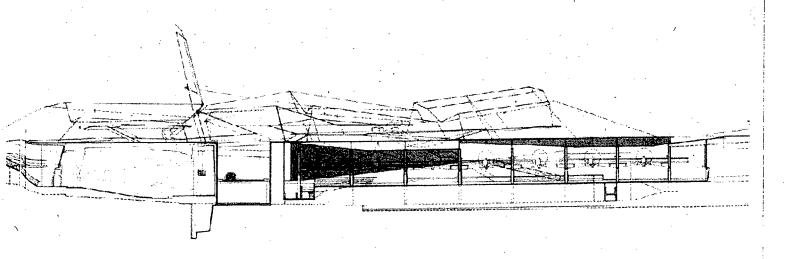
2.7 SCHOLARSHIPS AND AWARDS

Scholarships, stipends, teaching assistantship / fellowships. etc are awarded to local students. Students may enjoy technical and merit scholarships, university stipends, scholarships from the Education Boards, the University Grants Commission, Tafsils, District bodies, and other organizations.

Other scholarships include the Ahsanur Rahman, Habibur Rahman scholarship, the Dr. E. R. Khan scholarship, Dr. Khodeja Sarkar scholarship, Sarfuddin scholarship, Ahsanur Rahman Trust scholarship and Md. Ekram Hossain and Quamrunnessa Hossain Trust fund scholarship. Gold Medals dedicated to Shamsunnahar Khanam, as well as University Awards, are available for outstanding academic performances.

POSTGRADUATE

Postgraduate teaching assistantship are available for full time students. These are awarded to deserving students on the recommendation of the respective Head to the department. Teaching Assistants may be assigned to undertake some teaching load. The semester -wise awards are subject to performance and regularity of the students. The Ahsanur Rahman Award is also available for postgraduate research. Besides, there are provisions for research assistantship in CASR approved research undertaken by a teacher at the Department.



central services

The four storied Central Library building with a floor space of 22600 sft is situated near the Architecture Building. The library with built-in-facilities provides various services to students, teachers and researchers. It is primarily a reference and research library. It maintains an accession register, a catalogue of holding and a shelf list. The total holdings of the library are books: 119,505, journals: bound volumes 15,163 and current volume 218.

3.1 CENTRAL LIBRARY

Institute of Information & Communication Technology (IICT)

The Institute of Information & Communication Technology (IICT) was inaugurated on on 2nd September, 2001, making it the most recent institute of the university.

The main objectives of the institute include offering Post
Graduate Diploma (IT) programmes and computer-related

The activities of IICT are divided into two major wings. Service and Support Wing related to providing services to whole BUET and Academic Wing related to carrying out academic activities in the institute itself.

services to the university as well as external clientele.

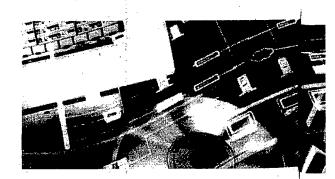
Service and Support Wing

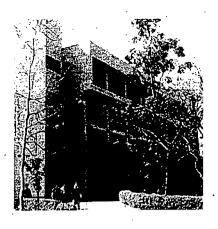
- Internet service and email facility with own VSAT and related services
- 2. Campus wide optic fiber backbone maintenance and extension related services
- 3. Maintaining BUET web page
- 4. Students' browsing facility
- 5. Students' Programming Laboratory
- 6. Computational support for students' thesis work
- 7. Computational support for teachers
- Hardware and software related services for different office and departments
- OMR (Optical Mark Reader) facility to evaluate class tests taken using OMR forms
- 10. Printer facility for students
- 11. Support service for BUET admission test
- 12. System development for different administrative offices
- 13. Consultancy/Support Services on the same terms as was exercised by the erstwhile Computer Center

Academic Wing

- 1. Post graduate Diploma and Master's Program in ICT
- 2. Academic program for students/teachers of BUET
- 3. Class room and laboratory maintenance
- 4. Library facilities
- 5. Arranging seminars/conferences







- 6. Arranging workshop for teachers/students/staffs
- Short courses/programming courses for BUET teachers /students/staffs
- 8. CISCO regional and local academy program jointly with dept. of CSE, BUET

The institute has started its journey with one Director, two Associate Directors, two System Analysts, two lecturers, two Programmers, one Instrument Engineer, two Assistant Programmers, one Assistant Maintenance Engineer and other supporting officials.

The institute frequently arranges different short courses for internal and external personnel and students. Most commonly offered courses are like C/C++, Visual BASIC, Java programming, Web programming, E-business, Database management system like ORACLE etc.

WORKSHOP FACILITIES

The University is well equipped with number a of workshops to provide engineering and workshop facilities for teaching and research. These workshops are administered and managed under a separate Directorate of Advisory, Extension and Research Services.

The workshops as teaching units impart practical knowledge in workshop technology, carpentry, metal cutting technology and on-job training to the Level-1 students in general, and to the students of higher Levels in Mechanical Engineering who undertake sessional works on Machine Tools, the Production Engineering. The Machine Shop, the Foundry and Pattern Shop, the Sheet Metal and Welding Shop, the Carpentry Shop, the Sheet Metal and Welding Shop, the Carpentry Shop and the Automobile Shop are major teaching cum-service workshops. The Central Instrument Workshop provides services in repair and maintenance of engineering and science equipments. This CIW also provides photocopying services and other reproduction facilities for academic and official purposes.



DIRECTORATE OF STUDENTS WELFARE

The Directorate of Students Welfare is responsible for the various activities related to the physical, psychological, social and general welfare of the students. These include supervision of halls of residence, programmes for physical education, games, and sports, supervision of programmes for extra curricular activities of students through the Central Students Union and the different hall students unions. It is also responsible for providing health services through the guidance programmes, to assist in the employment of graduates and to organize and maintain contact with the alumni of the University. The Central Students Union, which is elected by the students, oversees the socio-cultural activities of the students.

It particularly assists incoming students and looks after the interests of all students.

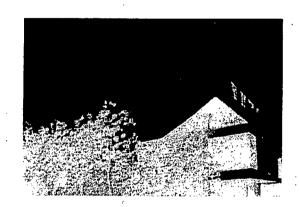
The University has eight halls of residence, including one for the female students. The halls can provide accommodation for about 2,500 male students and 350 female students. The halls are named after the national heroes, educationists, poets and eminent personalities of the country.

HALLS OF RESIDENCE

The existing capacity accommodates around 60% of the total number of students of the University. Nonresidential students have to be attached to a hall of residence. It is aimed at encouraging the students to participate in extra-curricular activities; and to strengthen the administrative supervision of students based on the halls of residence.

The halls are set in lush green lawns enlivened by gardens and are within walking distance of the Academic Buildings and the Palashi Bazaar. A number of bus routes to the city centre and suburbs as well as other modes of transport are available within close proximity. Rooms depending on sizes are shared by 3 to 4 students. Every hall has a common-room, a television lounge, a library, a dinning hall and prayer room. Other facilities such as laundry and barber shops are also available.

Hall activities include Milad Mahefil, observing Shaheed Dibash and Martyrs Day, celebrating Independence Day and Victory Day, publication of magazines, debates, athletics, sports and games, cultural competitions, indoor game competitions, Freshers' reception and farewell to Old Boys, picnics, etc.

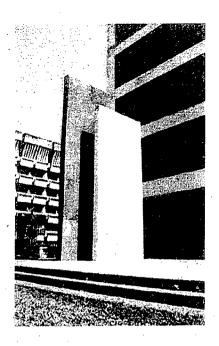


A students health centre including a health complex and an out-patient dispensary provides primary health care facilities to students, both residential and non-residential, free of charge. Seven full-time general practitioners including one Lady Doctor provides round the clock service including attending calls in halls of residence. For specialized consultation on complicated diseases, the centre refers the patients to specialist-consultants. The University bears all hospital expenses, in case a student needs hospitalization outside the centre. There are two part time specialist doctors who take care of various pathological and radiological tests done in the newly built pathology and radiogy laboratory.

The athletic club of the University provides excellent facilities to students for physical fitness indispensable for a healthy mind and body. The University maintains a beautiful playground, two squash courts, tennis lawns, cricket-pitch,

HEALTH SERVICE

3.7 ATHLETIC CLUB



volley ball and basketball courts. A well-equipped modern gymnasium provides ample facilities for various types of physical activities to a large number of students at a time. The athletic club arranges a colourful athletic competition every year.

For improvement of the standard of games and sports, regular coaching by experts are arranged. The University arranges inter-hall football, hockey, basketball, tennis, swimming competitions and inter faculty cricket and football competitions. It also participates in inter-University and national competitions in which the University Teams and participants have won medals on different occasions. Inter-hall indoor game competitions are held and sometimes teachers engage in friendly matches with students and teams from outside the university.

AUDITORIUM COMPLEX

The University has a modern Auditorium Complex which includes a 1000-seater Main Hall, a canteen for students and teachers, and a 250-seater Seminar Room. It also has a shop and rooms for student union leaders. There is another 200 capacity Seminar Room on the first floor of the Civil Engineering Building. The Auditorium Complex is the centre of most co-curricular and social activities of the teachers, staff and the students of the University. The yard in front of it is paved with red ceramic brick which, along with the green lawn, is frequently used for open-air activities.

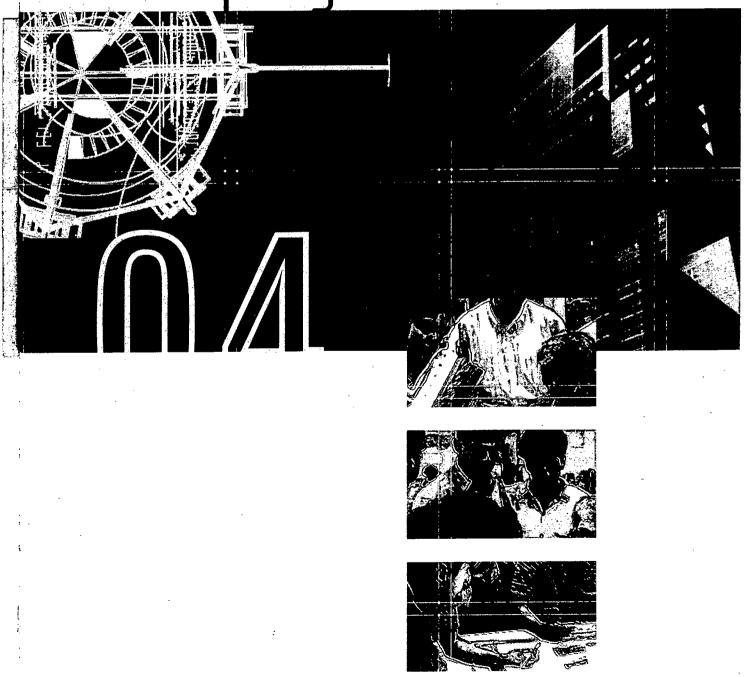
STUDENTS' UNION

Engineering University Central Students Union (EUCSU) is a representative body of the students and is responsible for arranging extra-curricular activities of the university. In addition, each hall of residence has its own elected students union which arranges various activities of the halls.

3.10 BUET BUS SERVICE

The University has facility to transport students to and from the University. It has 8 52-seater buses which ply on Tongi, Badda, Mirpur, Rampura and Uttara routes. Besides, there is 2 minibus for students running in Mohammadpur route while two micro-buses in Tejgaon and Uttara routes serve the off-campus teachers. The buses collect students, teachers and the staff from different stoppages to reach the university in time for classes and office. There are two departure times for the buses: the first at 1340 hrs. and the second. at 1710 hrs.

undergraduate programme





COURSE AND CREDIT REQUIREMENTS

The total credit requirement for B. Arch degree at BUET is 190. To complete the B. Arch degree in 5 years the Department of Architecture prescribes credits for every term. It considers one optional course (choice available) for every term, except in Term-I of Level-1 which has no optional course. The breakup is as follows:

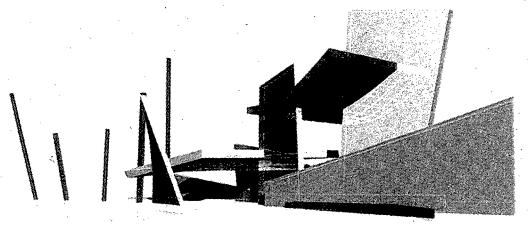
Level - 1	Term-l	18.50 Credits
·	Term-II	17.50 Credits
Level - 2	Term-I	19.00 Credits
	Term-II	19.00 Credits
Level - 3	Term-I	19.00 Credits
	Term-II	19.00 Credits
Level - 4	Term-I	19.50 Credits
	Term-II	19.50 Credits
Level - 5	Term-I	19.50 Credits
	Term-II	19.50 Credits
	Total :	190.00 Credits

In addition to above courses a student is required to take a non-credit compulsory course (Arch 600) titled Professional Training.

A regular student must take a minimum of 15 credits per term. The maximum allowable credits for any term is 24.

To give more emphasis on design, the ratio of credits between sessional and theory courses is progressively increased in higher levels. Also, in the design studios the ratio between the credit and contact hrs/wk is progressively increased for the same reason.

There are recommended levels at which optional courses may be taken, However, if offered, a student may take it in any term provided the class routine allow that. Certain optional courses may also have prerequisite courses.



·Ť	<u> </u>		STREAMS	TERM I	TERM II	TERM I	÷2. TERM II
		A L	DESIGN STUDIO	Arch102 DESIGN(STUDIO2) 9745	Arch 104 DESIGN STUDIO-II 9/4.5	Arch 202 Design Studio III 97/6	Arch 204 DESIGN STUDIO-IV 9 / 6
		N 0 - S	VISUAL COMMUNICATION	Archi12 ARCHITECTURAL GRAPHICS 1 673	Arch114 ARCHITECTURAL GRAPHICS-II 3/1.5	Archi212 ARCHITECTURAL GRAPHICS AIII	Arch 214 GRAPHIC ART 3 / 1.5
		S E S	DESIGN SUPPORT STUDIO		Arch 124 COMPUTER APPLICATIONS 3/1.5	Arch 222 COMPUTER GRAPHICS 3/41-5.	Arch 224 PHOTOGRAPHY 3 / 1.5
	ွ		Contact / Credit Hours	15/7.5	. 15/7.5	1679	15/9
	U R S E		ENVIRONMENT AND DESIGN	Phy:115 PHYSICS FOR ARCHITECTS	Arch 133 ED -1 CLIMATE AND DESIGN 2	Arch 231 ED-II VISUAL AND SONIC ENVIRONMENT 2:	
	ပ		ART AND ARCHITECTURE	Arch 141 ART AND ARCHITECTURE J 2	Arch 143 ART. AND ARCHITECTURE-II 2		Arch 243 ART AND ARCHITECTURE-III 2
	O R E	R Y	THEORY OF DESIGN & PLANNING	Ärch 151 DESIGN THEORY-1 22		Plan 219* BASIC PLANNING 23	Arch 253 DESIGN THEORY-II 2
	Ö	г.н.е.о.	BUILDING SCIENCE		Arch 163 BUILDING AND FINISH MATERIAL 2	Arch 261 CONSTRUCTION METHODS AND DETAILS 2	CE 231 BUILDING SERVICES-I PLUMBING 2
			SOCIAL SCIENCE	Hum 211 SOCIOLOGY 2	Arch 173 SOCIETY AND ARCHITECTURE OF BENGAL 2		
			STRUCTURE	Math 1111 MATHEMATICS 2		CE 223 STRUCTURE I MECHANICS	CE 225 STRUCTURE-II BASIC MECHANICS OF SOLIDS 2
	S	>-			Arch 147 ART APPRECIATION 2	Arch 265 Building Technology	Arch 237 ED-III DESIGN IN THE TROPICS 2.
	COURSE	E O R			Arch 177 MUSIC APPRECIATION 2	Hum 111. ENGLISH:	Hum 119 PSYCHOLOGY 2
	OPTIONAL (. ±				Hum 113 ECONOMICS	
ľ	P T I	· .	Contact & Credit Hours	11	10	10	10
	0		TOTAL CONTACT HOURS	26	25	25	25
	·		. TOTAL CREDIT . HOURS	18.5	17.5	19	19

^{*} Compulsory non-credit course : Arch 600 Professional Training-

UNDERGRADUATE COURSE DISTRIBUTION

LEVEL	. ?	LEVEI	-4	LEVEL	<u>-</u> 5	
TERMI	TERM II	TERM I	TERM II	TERM I	TERM II	
Arch 302 DESIGN STUDIO-V 12 / 8	Arch 304 DESIGN STUDIO-VI 12 / 8	Arch 402 DESIGN STUDIO-VII 15 / 10	Arch 404 DESIGN STUDIO-VIII 15 / 10 .	Arch 502 DESIGN STUDIO -IX 15 / 12	Arch 504 DESIGN STUDIO X THESIS <i>or</i> Arch 506	
Arch 312 SCULPTURE 3/1.5	Arch 314 COST ESTIMATION 3 / 1.5	. •			DESIGN STUDIO X PROJECT 15 / 12 Arch 524	
Arch 322 WORKING DRAWING-I CONSTRUCTION DRAWING 3 / 1.5	Arch 324 WORKING DRAWING-II PRODUCTION DRAWING 3/1.5	Arch 422 INTERIOR DESIGN STUDIO 3/1.5	Arch 424 LANDSCAPE DESIGN STUDIO 3/1.5	Arch 522 SEMINAR 3/1.5	DISSERTATION or Arch 526 CONSTRUCTION DOCUMENT 3/1.5	
18/11	18/11	18 / 11.5	18 / 11.5	18 / 13.5	18 / 13.5	
		Arch 431 LANDSCAPE DESIGN 2				
Arch 341 ART AND ARCHITECTURE-IV 2		Arch 441 Art and Architecture-v 2				
	Arch 353 URBAN DESIGN-1 2					
ME 363(N) BUILDING SERVICES-II MECHANICAL EQUIPMENT 2	EEE 373 BUILDING SERVICES-III ELECTRICAL EQUIPMENT 2		Arch 463 SURVEY TECHNIQUE AND ANALYTIC METHODS 2	Arch 561 SPECIFICATION 2	HUM 311 MANAGEMENT 2	
			Arch 473 · HOUSING	Hum 313 PRINCIPLES OF ACCOUNTING	Arch 573 PROFESSIONAL PRACTICE	
			2	2	2	
C321 STRUCTURE-III MECHANICS OF SOLIDS 2	CE 323 STRUCTURE-IV STEEL AND TIMBER STRUCTURE 2	CE 423 STRUCTURE-V REINFORCED CONCRETE DESIGN 2	CE 425 STRUCTURE-VI ELEMENTS OF BUILDING STRUCTURE 2			
Plan 319 THEORY AND PRACTICE OF PLANNING 2	Arch 377 URBAN ANTHROPOLOGY 2	Arch 445 Architectural Conservation 2	Arch 447 ART & ARCHITECTURE VI MODERN ART AND ARCHITECTURE 2	Arch 595 Industrial Buildings Planning & Design 2	Arch 547 CONTEMPORARY ARCHITECTURAL THEORY 2	
Hum 315 LOGIC AND PHILOSOPHY 2	Arch 379 · Architecture and Society 2	Arch 455 Urban Design-II 2	AICH 497 HEALTH FACILITIES PLANNING & DESIGN 2	Arch 597 Educational Facilities	Plan 531 RURAL PLANNING 2	
•	Arch 397 INTERIOR DESIGN			Arch 599 Commercial Buildings Planning & Design		
•	2	ρ	8	6	6	
8		•				
26	26	26	26	24	24	
19	19	19.5	19.5	19.5	19.5	

**In the table, read Course Number, Course Tale, Contact Hours (for Sessionals) and Credit Hours, in that order

***Contact hours for theory is same as Credit hours

SESSIONAL COMPULSORY LEVEL- 1 TERM-I

Understanding nature in terms of forms. Exercises in twodimensional composition in various media. Basic compositions with points, straight and curved lines and pure geometric shapes. Study of order and balance, proportion, solid-void relationship, symmetry, movement, flexibility, harmony, and shade and shadow through composition.

Arch 102 Design Studio I 4.50 Credits. 9 Hrs/Wk

Mechanical and freehand architectural presentation drawings. Multi-view drawings such as plan, section and elevation. Single-view drawings such as axonometric and one-point perspective. Lettering and graphic presentation symbols.

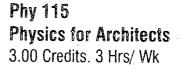
Arch 112
Architectural Graphics I
3.00 Credits. 6 Hrs/ Wk

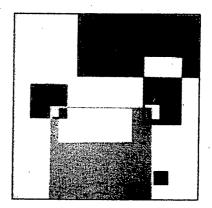
THEORY COMPULSORY

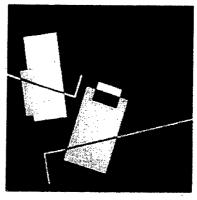
Sound : Simple Harmonic Motion : Differential equation of Simple Harmonic Oscillation, Energy of Simple Harmonic Oscillator, Damped Oscillation Forced oscillation; Characteristics of mechanical waves, Equations of a traveling wave, Energy; Stationary waves: Beats, Physical qualities of sound, Reflection, Transmission and Intensity of sound waves, Variation of sound intensity with distance, Units of sound Intensity: Decibel and other units, Doppler principal

Light: Illumination and Photometry, Luminous intensity; their measurements and units, phosphorescence, fluorescence, discharge lamps. Theories of light: Interface: Young's double slit, experiment, Determination of thickness of a film, Diffraction: Diffraction due to a single slit, Polarization: Different methods of polarization, Intensity of polarized light.

Heat: Humidity, Vapour pressure, Temperature related humidity; Transmission of heat: conduction: conductivity, Rectilinear flow of heat, Determination of thermo-conductivity of good and bad conductors, Heat flow through compound walls; Convection: Free and forced convection, domestic and industrial applications; Ventilation; Radiation: Different laws of radiation, Black body radiation, Radiation from surfaces, Solar radiation.







Arch 141 Art and Architecture I 2.00 Credits. 2 Hrs/ Wk

Origin of architecture in prehistoric times. History of art and architecture as a perpetual process of evolution through ages. Critical Evaluation of architecture from political, social and religious viewpoints with examples from ancient Egypt, Mesopotamia and Persia. City planning and architecture in Indus civilization: Mohenjo-daro and Harappa. Comparative study with examples from Aegean, Greek, Etruscan and Roman Architecture.

Arch 151 Design Theory 1 2.00 Credits 2 Hrs/Wk

Design fundamentals, motivation behind designing, its diversified purposes and design methodologies. Various design disciplines and designs in nature as an universal source of inspiration. Critical analysis of design as a non-verbal language structured in a basic design grammar. Traditional and contemporary design methods, definition of designing and the role of design in the changing perspective of the society. Basic philosophy of design as a vehicle to transmit the values and attainments of cultures through the ages.

Hum 211 Sociology 2.00 Credits. 2 Hrs/Wk

Scope, Some Basic Concepts, Social evolution and techniques of production, culture and civilization. Social structure of Bangladesh, Population and world resources. Oriental and occidental societies. Industrial revolution, Family, Urbanization and Industrialization. Urban Ecology. Cooperative and Socialist movements. Rural sociology.

Math 111 Mathematics 2.00 Credits. 2 Hrs/Wk

Calculus: Definition of limit, continuity and differentiability, successive and partial differentiation, maxima and minima. Integration by parts, standard integrals, definite integrals, Area under a plane curve in Cartesian co-ordinates. Solid Geometry: system of co-ordinates, distance between two points. Section formulae. Direction cosines. Equations of planes and straight lines. Shortest distance between two given straight lines. Standard equations of sphere and ellipsoid, Tangent planes.

LEVEL-1 TERM-II SESSIONAL COMPULSORY

Arch 104 Design Studio II 4.50 Credits. 9 Hrs/Wk Prereq. Arch 102

Understanding nature in terms of forms. Exercises in three dimensional composition in various media. Basic composition with colour schemes; planes, cubes and other geometric forms. Study of order and balance, proportion, symmetry, asymmetry, movement, flexibility, harmony, shade and shadow through composition.

Mechanical and free hand architectural drawing. Single view drawing: two and three-point perspectives. Shade and shadow and reflection in perspective. Presentation drawing in black and white, and colour.

Arch 114
Architectural Graphics-II
1.50 Credits. 3 Hrs/Wk
Prereg. Arch 112



Introduction to computers and operating systems: DOS and Windows. Word processing and spreadsheets and other basic computer applications. Introduction to computer aided design and drafting.

Arch 124
Computer Applications
1.50 Credits. 3 Hrs/ Wk

THEORY COMPULSORY

Study of external and internal climatic condition of buildings. Behaviour and performance of a building and its components as a climatic modifier to provide comfort and energy savings through Climate and architectural design. Factors of climate, site climate, human comfort criteria and ranges. Thermal design criteria, principles of thermal design and natural ventilation.

Arch 133
Environment and Design I:
Climate and Design
2.00 Credits. 2 Hrs/Wk

Study of European art and architecture from the 4th to the 18th century. Early Christian, Byzantine, Romanesque, Medieval, Gothic, Renaissance, Baroque and Rococo periods with their context and background.

Arch 143
Art and Architecture II
2.00 Credits. 2 Hrs/Wk

Classification of different types to building and finish materials. Preparation, manufacture, properties, uses and applications of clay and brick, concrete, timber, glass, tile, paint, terrazzo, and plaster.

Arch 163
Building and Finish
Materials
2.00 Credits. 2 Hrs/Wk

Study of society, culture and architecture of Bengal through the ages: Mauryan, Pala, Sena, Sultanate, Mughal and Colonial penods. Language, custom, art and literature, and their relevance to architecture and planing.

Arch 173
Society and Architecture
of Bengal
2.00 Credits.2 Hrs/Wk

THEORY OPTIONAL

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.

Arch 147
Art Appreciation
2.00 credits. 2 Hrs/Wk

Arch 177 Music Appreciation 2.00 Credits. 2 Hrs/Wk

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 Prashad, D. L. Roy and Rajani Kanta. Introduction to western classical music and works of some European masters- Bach, Beethoven, Handel, Mozart, Tchaikovsky.

LEVEL-2 TERM-I SESSIONAL COMPULSORY

Arch 202 Design Studio III 6.00 Credits. 9 Hrs/Wk Prereq. Arch 104

Development of awareness and perception of fundamentals of architecture: scale, proportion and space, The emphasis is on understanding man-space relationship, activity-space relationship and form-space relationship.

Architectural Graphics III 1.5 Credits., 3 Hrs/Wk Prereq. Arch 114

Complex perspective drawings. Presentation techniques in various media. Use of tools and materials in presentation with colour pencil, pastel, water colour-wash and gouach, ink, charcoal, airbrush and marker.

Arch 222 Computer Graphics 1.50 Credits. 3 Hrs/Wk Prereq. Arch 124

Computer graphics and its basics. 2-D and 3-D graphics with the help of computers. To understand and to use graphic software in architectural presentation and design.

THEORY COMPULSORY

Arch 231 Environment and Design II: Visual and Sonic Environment 2 Credits. 2 Hrs/Wk

Visual: The environment, physical nature of the lighting environment, human responses to environmental vision factors. Daylight in architecture, prediction tools and techniques of supplementary and artificial lighting, designing for daylight in the tropics. Sonic: The concepts and problems related to architectural acoustics; properties of sound; the fundamentals of sound perception, generation and propagation; behaviour of sound in enclosed spaces. Principles of acoustic design of rooms for speech. music and multi-purpose use. The concept of noise and noise and control; criteria for noise control design and acoustical measurements.

Plan 219 Basic Planning 2.00 Credits. 2 Hrs/Wk

Origin and evolution of settlements and cities. City planning during ancient, classical medieval, neo-classical and modern periods. Industrial revolution and changes in the character of cities. New thoughts and ideas in planning after the industrial revolution. The spatial structure of cities: concentric zone theory, sector theory, multiple nuclei theory, Christaller theory of size, spacing and distribution of central places. Rank-size rule.

Types of structures and their methods and techniques of construction. Foundation, floor, wall and roof systems. Use of different types of modules. Moisture and thermal protection of floor, wall and roof. Doors and windows. Details of kitchen, bathroom and stair. Elevators and escalators.

Arch 261
Construction Methods
and Details
2.00 Credits. 2 Hrs/Wk

Force; equilibrium, free body diagrams; resultants and Components; coplanar Concurrent forces; moments and parallel coplanar forces; centroid; moment of Inertia of areas; Maximum and minimum forces; friction; flexible chord; calculation of bar forces for simple trusses.

CE 223 Structure I: Mechanics 2.00 Credits. 2 Hrs/Wk

THEORY OPTIONAL

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.

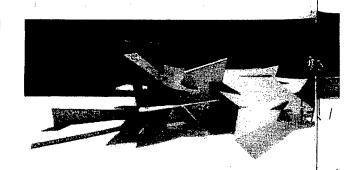
Arch 265
Building Technology
2.00 Credits. 2 Hrs/ Wk

English phonetics: the places and manners of articulation of the English sounds. Vocabulary. English grammar: English 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.

Hum 111 English 2.00 Credits. 2 Hrs/Wk

Definition of economics. Economics and engineering. Principles of Economics: Micro economics: The theory of demand and supply and their elasticity. Price determination. Nature of an economic theory, applicability of economic theories to the problems of developing countries. Indifference curve technique, Marginal analysis. Optimization. Market, production, production function, types of productivity, Rational region of production of an engineering firm. The short run and the long run. Fixed cost and variable cost. Internal and external economics and diseconomics. Macro economics: Savings, investment. National income analysis. Inflation. Monetary policy, fiscal policy and trade policy with reference to Bangladesh. Planning in Bangladesh.

Hum 113 Economics 2.00 Credits. 2 Hrs/Wk



LEVEL-2 TERM-II SESSIONAL COMPULSORY

Arch 204 Design Studio IV 6.00 Credits. 9 Hrs/Wk Prerea. Arch 202

Understanding function, form and structure. Principles of environmental performance of building, site and surrounding. Analysis of site, circulation pattern and built form. Report writing based on literature survey and field studies. Design of buildings with simple functions.

Arch 214 Graphic Art 1.50 Credits. 3 Hrs./Wk

Basic techniques used in graphic design. Selection of drawing instruments, surfaces, typography. Graphic reproduction techniques and the pros and cons of the different systems to achieve the most effective presentation. Sketching as an essential technique to record design ideas during conceptualization. Graphic design of posters, products, display, portfolio. Introduction to computer generated presentation.

Arch 224 Photography 1.50 Credits. 3 Hrs/Wk.

Introduction to photography. Parts and operations of camera, types of camera, lenses, films. Understanding exposure. Importance of photography in architectural study and documentation. Architectural photography: typical exercises starting with bracketing, depth of field, etc. and continuing into photography of buildings, panorama, details, interiors and models. Dark room techniques in black and white.

THEORY COMPULSORY

Art and Architecture III 2.00 Credits. 2Hrs/Wk Prereq. Arch 143

Study of art and architecture in the Indian sub-continent with special emphasis on the styles of the Vedic, Buddhist and Hindu periods up to the 17th century.

Arch 253 Design Theory II 2.00 Credits. 2 Hrs/Wk Prereq. Arch 151

Basic theories of architecture related to use of point, line, plane, form, volume and space. Overview of theories and application of architectural proportion, scale and composition. Principles of spatial and formal organization. The source, generation and transformation of architectural elements, forms and spaces.

CE 231 Building Services I: Plumbing 2.00 Credits. 2 Hrs/ Wk

Introduction to plumbing, water requirements, water sources; water supply and distribution in buildings. Sewage and sewer system, building plumbing of multi- storied buildings; rural sanitation programmes in Bangladesh.



Fundamental concepts of stress and strain; mechanical properties of materials; stresses and strains in members subjected to tension, compression, shear and temperature changes; Joints- welded and riveted; shear force and bending moment diagrams for statically determinate beams and frames.

CE 225 Structure II: **Basic Mechanics of Solids** 2.00 Credits. 2 Hrs/Wk

THEORY OPTIONAL

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.

Arch 237 **Environment & Design III: Design in The Tropics** 2.00 Credits. 2 Hrs/Wk Prereg. Arch 133

Introduction to psychology: Nature and scope of psychology; maturation and development; biological bases of behaviour. Learning: Factors of learning; classical conditioning; instrumental conditioning; perceptual learning. Motivation and emotion: Nature of motive; fulfillment and frustration of motives; constructive and destructive effects of frustration; nature of emotional development; emotion and personality. Sensory processes and vision: auditory processes, eye and visual processes; perceptual organization and colour perception. Social influences on behaviour. Conflict and adjustment: Nature of conflict; problems of marital adjustment.

Hum 119 Psychology 2.00 Credits. 2 Hrs/Wk

SESSIONAL COMPULSORY LEVEL-3 TERM-I

Design exercises on buildings with simple functional and Arch 302 technical requirements, emphasizing imaginative concepts for expressing form and functional relationship, spatial quality, indoor- outdoor relationship and structural systems.

Design Studio V 8.00 Credits. 12 Hrs/Wk Prereg. Arch 204

Study and and analysis of three- dimensional aspects of different volumetric forms. Exercises based on the use of different types of materials.

Arch 312 **Sculpture** 1.50 Credits. 3 Hrs/Wk

Design and drawings specifying materials and instructions for construction. Understanding construction process and techniques. The construction drawing will include preparation of working and detail drawings of all building components. Details of drainage, damp-proofing and insulation. Bathroom and kitchen layouts. Application of building codes and bylaws.

Arch 322 Working Drawing I: **Construction Drawing** 1.50 Credits. 3 Hrs/Wk.

THEORY COMPULSORY

Arch341 Art and Architecture IV 2.00 Credits. 2 Hrs/Wk Prereq. Arch 243 Art and Architecture in the Indian sub- continent from the advent of the Muslims in the 13th Century to the end of the colonial era.

ME 363(N)
Building Services II:
Mechanical Equipment
2.00 Credits. 2.00 Hrs/Wk

Review of basic concepts and definitions., Application of air-conditioning. Psychometry. 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.

Structure III : Mechanics of Solids 2.00 Credits. 2 Hrs/Wk

Flexural and shearing stresses in beams; principal stresses; direct integration and Area moment methods for finding slopes and deflections in statically determinate beams. Indeterminate beam analyses; buckling of columns.

THEORY OPTIONAL

Plan 319
Theory and Practice
of Planning
2.00 Credits. 2 Hrs/Wk
Prereg. Plan 219

Meaning, scope and significance of planning. Development planning. sectoral and spatial approaches; need for integration. Planning theories; normative versus positive; procedural versus substantive. Traditional planning theories: incremental versus comprehensive; master plan and zonal plans. Modern planning process/ cyclical planning: strategic approach, structure, local and action plans. Systems approach, decision theory and conflict management. Advocacy and corporate planning. Planning and public policies. Planning practices in Bangladesh: master plan of Dhaka 1959, Dhaka metropolitan area integrated urban development project 1981, Dhaka metropolitan development planning 1993.

Hum 315 Logic And Philosophy 2.00 Credits 2 Hrs/Wk Introduction to Deductive Logic: Definition and scope of deductive logic; terms and predicable; proposition and opposition of propositions; inference and syllogism. Introduction to inductive Logic: Definition and scope of inductive logic; nature, characteristics and bases of scientific induction; methods of scientific induction; nature of hypothesis; inference and analogy. Introduction to Philosophy: Nature and scope of philosophy; relation of philosophy to other sciences, methods of philosophical inquiries, epistemology, metaphysics. Ideas of great philosophers.

Design exercises on complex building problems emphasizing innovative ideas incorporating formal and functional expressions, environmental qualities, circulation and linkages and organization.

Arch 304 Design Studio VI 8.00 Credits. 12 Hrs/Wk Prereg. Arch 302

Preparation of tender documents, rules, regulations and obligations. Determination of cost of construction. Cost analysis of the various items of construction. Preparation of schedules. Control of cost. Case studies.

Arch 314 **Cost Estimation** 1.50 Credits 3 Hrs/Wk

Design and drawings specifying materials and instructions to manufacturers of building elements, components, fittings and fixtures which are industrially produced. Understanding manufacturing process to generate creative design. The production drawing will include designing with variety of materials and manufacturing processes of a range of building components like door, window, fitting and fixture of functional and decorative nature.

Arch 324 Working Drawing II: **Production Drawing** 1.50 Credits 3 Hrs/Wk. Prereg. Arch 322

THEORY COMPULSORY

Principles of design- unity and space, proportion and scale, balance, uniformity and contrast and their application in urban design. Urban aesthetics - grain and texture, urban frame, fabric and function. Perception and meaning of urban spacesform, order and time space relationships. Definition of urban design, its aims and objective. City planning according to artistic principles. Urban design approaches and levels of analysis.

Arch 353 Urban Design I 2.00 Credits. 2 Hrs./Wk

Electrical units and standards, electrical networks and circuit **EEE 373** theorems. Alternating current RLC series and parallel circuits. Introduction to electrical wiring for residential, commercial and industrial installations and buildings. Illumination and different types of lighting.

Building Services III: Electrical Equipment 2.00 Credits. 2 Hrs/Wk.

Introduction: allowable stresses; different types of trusses; wind and static load analysis of trusses; design of truss sections; design of steel beams, columns; timber Steel & Timber Structures structures.

CE 323 Structure IV: 2.00 Credits. 2 Hrs/Wk

THEORY OPTIONAL

Arch 377 Urban Anthropology 2.00 Credits. 2 Hrs/Wk

Origin and development of social anthropology: ethnography and ethnology. Tools of anthropological research and their applications in architectural studies and analysis. Mutual interaction of people and their built environment. Impact of social stratification. Pluralism in complex societies.

Architecture and Society 2.00 Credits. 2 Hrs/Wk

A generalized course for both architecture and non-architecture students. The cultural history of human development in different regions of the world as depicted in architecture. Vernacular architecture and social interaction. The evolution of 'society - power structure- architecture'. The influence of the various art and cultural movements.

Arch 397 Interior Design 2.00 Credits. 2 Hrs/Wk

Principles of interior design. Design of various interior spaces in relation to occupancy and environmental factors. Functional separation of spaces and interior furniture. Colour schemes. Artificial lighting and mechanized ventilation. Use of non structural materials such as false ceiling. Wall panelling and floor finishes. Interior plantation.

LEVEL-4 TERM-I SESSIONAL COMPULSORY

Arch 402 Design Studio VII 10.00 Credits 15 Hrs/Wk Prereg. Arch 304

Understanding of projects in urban and regional context. Urban design and master planning . Design of building complexes with reference to socio-cultural aspects associated with the use and user.

Arch 422 Interior Design Studio 1.50 Credits, 3 Hrs/Wk

Preparation of interior design drawings for different types of spaces such as office, studio, bank, restaurant, club and shop. Detailed specifications of finish materials for floor, ceiling and wall. Natural and artificial lighting and ventilation. Fixed and movable furniture, decorative element, upholstery, drapery, art work, interior plantation, fountain.

THEORY COMPULSORY

Arch 431 Environment & Design IV : Landscape Design 2.00 Credits. 2 Hrs/Wk

Introduction to principles and elements of landscape design. Historical references. Biosphere and eco-system. Organization of various outdoor spaces. Environment and design. Site development. Location and sequence of outdoor activity. Circulation and linkages. Planting and gardening. Utility, services and maintenance.

Modern art and architecture in the 19th and 20th centuries. Impressionism to Cubism in art. Modern architecture: romantic classicism, iron and glass construction, rise of commercial architecture, the art noveau, Bauhaus, masters of modern movement.

Arch 441 Art and Architecture V 2.00 Credits. 2 Hrs/Wk Prereg. Arch 341

Fundamentals of reinforced concrete design; working stress design method; analysis of reinforced beams by WSD; design _Sturcture V : Reinforced way and two- ways. Preliminary analysis of flat slabs, flat plated, waffle slabs, ribbed slabs; introduction to ultimate strength design(USD).

CE 423 Concrete Design 2.00 Credits, 2 Hrs/Wk

THEORY OPTIONAL

Conservation, its meaning, nature, scope and principles, Preservation, restoration, reconstruction, adaptation, area conservation. History of conservation. Conservation laws and practices. Issues of conservation, legislation, finance, regulating bodies, the role of government and public. Conservation of areas and buildings, Planning controls. Case _studies.

Arch 445 **Architectural Conservation** 2.00 Credits. 2 Hrs/Wk

Responsive environment - permeability, variety, legibility, appropriateness, richness and personalization. From of a city and normative theories. Theory of good city form. Growth and conservation. Urban textures and networks. City models and city design. Urban design process. Urban quality of life.

Arch 455 **Urban Design II** 2.00 Credits. 2 Hrs/Wk Prereq. Arch 353

SESSIONAL COMPULSORY LEVEL-4 TERM-II

Projects focusing on urban renewal-regeneration, Arch 404 conservation, redevelopment and rehabilitation of city blocks. Investigation, analysis and design of housing/ communities with specific themes and their impact on the immediate environment. Architecture of spiritual and emotional content.

Design Studio VIII 10.00 Credits. 15 Hrs/Wk Prereq. Arch 402

Analysis of landscape elements through sketches, drawings and reports on outdoor environment, Site analysis. Application of the principles and techniques of landscape design through design exercises of site planning and area development.

Arch 424 **Landscape Design Studio** 1.50 Credits. 3 Hrs/Wk

THEORY COMPULSORY

Arch 463 Survey Technique and Analytical Methods 2.00 Credits.2 Hrs/Wk.

Introduction to surveying- principles and techniques of physical surveys. Chain survey, traverse survey, plane table survey, levels and leveling, contours and layout surveys. Research and its types. Design and plan of research-purpose and goal, variables and universal, selection of methods. Design of questionnaire, pretest, pilot survey. Collection and filing of data. Data processing.

Arch 473 Housing 2.00 Credits. 2 Hrs/Wk

A generalized course on housing. Provides an overview on housing development and existing situation in the country. Introduces major policies, reforms, legislation and movements. Compares traditional and contemporary housing. Examines mass housing problems with emphasis on housing for low and middle income groups. Outlines the problems of housing in our local context with reference to others in the developing world.

CE 425 Structure VI : Elements of Building Structure 2.00 Credits. 2 Hrs/Wk

Reinforced concrete columns, stocky and long. Preliminary analysis of column sections in multistoried buildings., Grids, approximate analysis. Approximate analysis of multistoried buildings for gravity and lateral loads. Vierendeel truss. Folded plates. Introduction to shear-walls - preliminary design. Introduction and preliminary design of arches, domes and shells. Classification of shells. Prestressed concrete: introduction, analysis and preliminary design of beam sections.

THEORY OPTIONAL

Arch 447 Art & Architecture VI: Modern Art & Architecture 2.00 Credits, 2 Hrs/Wk

2.00 Credits. 2 Hrs/Wk Prereq Arch 441 Modern art, and architecture in the 20th century. Age of 'isms' in art - cubism, purism, futurism, Dada and surrealism, constructivism, pop and op art, minimalism. Modern movement. Integrity of form and monumentalized technology-Mies Van der Rohe. Le Corbusier and means of expression. Standardization and irrationality - Alvar Aalto. Louis I. Kahn and architecture of great occasions J. Stirling and others.

Arch 497 Health Facilities Planning and Design 2.00 Credits. 2 Hrs/Wk.

Approaches to health facilities planning and design. Philosophy, policies and processes within comparative and historical perspective. Fundamentals of programming, planning and design of health care facilities.

Identifying design tasks to specific realistic problems in an assigned setting. The assignment will include all design phases from formulation of architectural programme to preparation of preliminary working drawings. Emphasis will be laid on design quality in terms of formal, functional and structural aspects to attain professional level of achievement, within the giver socio- economic context.

Arch 502
Design Studio IX
12.00 Credits. 15 Hrs/Wk
Prereq. Arch 404

Overview of current development in research related to art and architecture. Preparation of research papers including literature search, writing skills and referencing. Verbal and written presentation skills and techniques.

Arch 522
Seminar
1.50 Credit

Arch 522 Seminar 1.50 Credits. 3 Hrs/Wk

THEORY COMPULSORY

Written details answering what, where, when, how in relation to drawn details for building construction. Specifying materials and methods of installation and precautions.

Arch 561
Specifica

Arch 561
Specification
2.00 Credits. 2 Hrs/Wk

Principles of accounting: accounts, transactions, the accounting procedures and financial statements. Cost in general: objectives and classifications. Overhead costing. Cost sheet under job costing, operating costing and process costing. Marginal costing: tools and techniques, cost - volume profit analysis. Relevant costing: analyzing the profitability within the firm, guidelines for decision making. Long-run planning and control; capital budgeting.

Hum 313
Principles of Accounting
2.00 Credits. 2 Hrs/Wk

THEORY OPTIONAL

Historical development and classification of industrial buildings; site development and master planning; environmental impact assessment; working conditions; criteria for overall design; machinery layout; environmental control; services; fire protection; security and safety measures; signs and symbols; legislation and codes. Case studies.

Arch 595
Industrial Planning 2.00 Credit

Arch 595
Industrial Buildings
Planning and Design
2.00 Credits. 2 Hrs/Wk

Historical development of educational facilities. Elements of education and classification of educational institutions. Socio-economical, cultural and environmental aspects influencing educational facilities design. Components of institutions: grouping and organization of spaces. Design criteria: forms, modifiers and standards. Furniture design. Case studies.

Arch 597

Education

Planning

2.00 Credit

Arch 597
Educational Facilities
Planning and Design
2.00 Credits. 2 Hrs/Wk

Arch 599 Commercial Buildings Planning and Design 2.00 Credits. 2 Hrs/Wk

Introduction to commercial building as occupancy and building type. Structural system and space articulation. Service, maintenance and fire protection standards. Natural and mechanized ventilation and lighting. Safety and security. Design criteria for commercial buildings. Case studies.

LEVEL-5 TERM-II SESSIONAL COMPULSORY

Arch 504 Design Studio X (Thesis) 12.00 Credits. 15 Hrs/Wk Prereg Arch 502

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 Studio X (Project)

Alternative to Arch 504 Design Studio X (Thesis) 12.00 Credits 15.00 Hrs/Wk Prerea. Arch 502 Design exercises of realistic complexities emphasizing professional level of achievement. Formulation of architectural programmms for given projects. Preparation of design solution and development through the various phases.

Arch 524 Dissertation

1.50 Credits. 3 Hrs/Wk

Approach to report writing. Preparation of report to supplement the various aspects of the thesis project of Arch 504. Design Studio X (Thesis). The report should reflect the student's research in areas related of the thesis, comparative analysis and case studies. This should lead to the formation of criteria and conceptual approaches to the design of the thesis in Arch 504: Design Studio X (Thesis)

Arch 526 Construction Document

Alternative to Arch 524 : Dissertation 1.50 Credits 3 Hrs/Wk

Preparation of working drawings, specification and cost estimation of the project of Arch 506: Design Studio X (Project) based on current construction practices.

THEORY COMPULSORY

Hum 311 Management

2.00 Credits. 2 Hrs/Wk

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.

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.

Arch 573 Professional Practice 2.00 Credits, 2 Hrs/Wk

THEORY OPTIONAL

Modern style as a point of departure for new theories. Arch 547 Architectural theories developed by the modern masters Alvar Aalto, Le Corbusier, Mies Van Der Rohe, Walter Gropius and Frank Lloyd Wright. Influence of technology in the contemporary theories of mass-culture, mass-media, mass housing and mass transport. Influence of Louis. I. Kahn, Christopher Alexander, Robert Venture, Leon Krier, Norberg Schulz. Significant theories as developed in the last quarter of the twentieth century.

Contemporary **Architectural Theory** 2.00 Credits. 2 Hrs/Wk.

Alternative theories and meaning of development. Nature and scope of integrated rural development, social, economical and physical characteristics of rural settlements. Problems and issues in rural development: population, urbanization and migration, human resource development. Formulation of rural development projects: concepts, principles and techniques. Institutions for rural development. The process of planning. Policies and strategies of rural development.

Plan 531 Rural Planning 2.00 Credits. 2 Hrs/Wk

NON-CREDIT COURSE SESSIONAL COMPULSORY

Non- credit compulsory training. The student is required to work in an architectural firm/organization for a minimum of six weeks to gain practical experience. This training will include Prereq. Level- 3 sessional courses working drawings and site supervision.

Arch 600 **Professional Training**

The final design project undertaken by students of Level-5 Term-II in partial fulfillment of the requirement of the Degree of Bachelor of Architecture is termed as Thesis/ Project. Each student needs to defend the thesis/project in a Final Jury who will decide the acceptability of the thesis. Also, a student needs to acquire at least 40% of the assigned 1200 marks.

The Thesis/Project enables students to fully articulate their concepts and understanding of architecture as a discipline. It 4,3 THESIS / PROJECT provides them the scope to reflect on understanding of the pattern of life, culture, and the sense of history. At the same time the thesis/project enable the examiners to assess the maturity, competence and the ability of the students, to handle projects independently.

The student prepares and submits a thesis/project proposal for approval of the Department. On approval, a detailed design programme is prepared. The individual student is to ensure that the programme is followed through, from the conceptual up to the final design stages.

The design should reflect a minimum standard of professional competence.

The thesis is supported by a dissertation (Arch 524) which draws upon the existing body of knowledge, and rationalizes the parameters and standards of design, and defines the programme. On the other hand the Project is supported by a Construction Document (Arch 526).

Report and design stages, these two components of the thesis/project are interlinked to each other and their progress proceed simultaneously. To assist and guide the process from initiation to the final design of a thesis, a student is assigned a supervisor by the studio teachers, for the duration of a thesis/project.

In addition to the assigned studio teacher and supervisor the student is encouraged to discuss the thesis project also with other teachers, architects, and relevant professionals, to integrate inputs from all quarters and thus to enrich the output. Such discussions will have to be arranged on the personal initiative of the student.

ELIGIBILITY FOR THESIS:

CGPA B or (3.00) in all sessional classes including Design Studio Courses from L-1/T-1 to L-4/T-2 & in Arch-522 (Seminar) course in L-5/T-1.

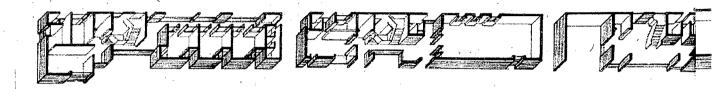
SUBMISSION RULES

The submission rules apply for students sessional works. It is framed by the Board of Under graduate Studies and approved by the Examination Committee of the Department. However, it is subject to change from time to time.

GENERAL RULES FOR DESIGN AND SESSIONAL COURSES

1. Date of Submission of the sessional class project will be declared at the time of the introduction of the project. There will be no late submission for class projects.

2. In spacial cases where a student require special consideration, the respective Course Tutor can make necessary adjustments only after having approval from the Head of the Department. If the classes of the University could not be held due to an accident, calamity or in situation beyond the control of students/teachers, with the permission from the respective Course Tutor and the Head of the Department the submission will take place in the next working day. All submissions, evaluation and jury will take place before the preparatory leave.



COURSES FROM SESSIONAL COURSES ARCHITECTURE DEPT.

4.5

Forms in nature, their understanding and evolution; two dimensional composition, points, straight lines and curves, and geometric shapes; understanding and use of composition elements like balance, proportion, scale, harmony, movement, etc.

Arch 106 **Basic Design** 3.00 Credits. 6 Hrs/Wk

Lettering; mechanical and freehand drawings; use of scale and instruments: sectional and isometric views of solid geometric figures: plan, evolution, and section.

One and two point perspectives; shade and shadow of different projection drawings

Arch 116 **Graphics for Planners** 3.00 Credits. 6 Hrs/Wk

Application of design and planning principles and techniques of landscape developments. Site analysis and study of landscape elements. Application of landscape conservation principles and strategies on regional level development process.

Arch 226 **Landscape Planning Studio** 3.00 Credits. 6 Hrs/Wk

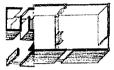
Historical overview of urban design - form tree dwelling to Arch 355 Renaissance. Definition of urban design, its aims and objectives. Elements of design-unity and space, proportion and scale, balance, uniformity and contrast, etc. and their application in urban design. Urban aesthetics. Urban spaces and their types and perception. City planning and design according to artistic principles, approaches and levels of analysis.

Urban Design 3.00 Credits. 3 Hrs/Wk

THEORY COURSES

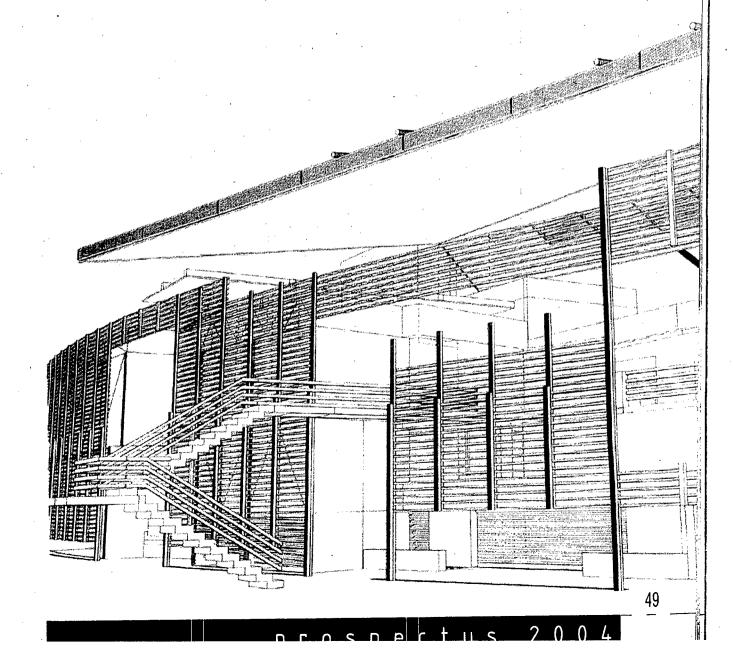
Arch 145
Element of Architecture
2.00 Credits. 2 Hrs/Wk

Introduction to Architecture and Architectural Design. Elements of composition: balance, scale, proportion, etc. Understanding of different architectural historical periods: Ancient, Classical, Roman, Gothic Renaissance, Baroque, Roccoco. Different art movements and their impact. The cultural history of human development in different regions of the world as depicted in architecture. Environmental and regional influences on architecture in Bangladesh.



Arch 233
Landscape Planning
and Design
2.00 Credits. 2 Hrs/Wk

Introduction to landscape planning and its scope. Historical references landscape planning and design. Basic design methods and approaches. Ecological systems and climatic elements. Landscape conservation in macro and regional level. Landscape planning in urban scale for residential, recreational and commercial environments. Site development objectives and design principles. Plantation and plantation design.



postgraduate programme The Department presently offers the degree of Master of Architecture, M.Arch., Ph.D in Architecture. Postgraduate studies and research are co-ordinated by the Post Graduate Centre (PGC). Postgraduate degrees are inclusive of taught courses and research.

5.1 POSTGRADUATE COURSES

For admission to the course leading to the award of the degree of M.Arch a candidate must have obtained a B.Arch degree from any recognized institution. A candidate should have CGPA of a minimum of 2.50 out of 4.0 in B.Arch. Application for admission to the M.Arch course shall be invited through regular means of advertisement and shall be received by the Registrar. Before being finally selected for admission a candidate may be required to appear at an oral examination by a Selection Committee as constituted by the BPGS.

MASTER OF **ARCHITECTURE** (M. Arch)

ADMISSION REQUIREMENTS AND **PROCEDURE**

After admission each student shall be assigned, by the BPGS, an Adviser from among the teachers of the Department. In advance of each enrolment and course registration of any semester, the Adviser shall check and approve his/her. student's schedule for subjects, pre-requisites as recommended by the Selection Committee and the total hours.

APPOINTMENT OF **ADVISOR**

In an academic year there will normally be two semesters. All ACADEMIC course registration must be completed within two weeks from the start of a semester, otherwise, the student shall not be allowed to continue the course in that semester. The minimum duration of the M.Arch course shall be three semesters. A candidate for the Master's degree must complete all the requirements for the degree within five academic years (Session) from the date of the first admission in the M.Arch course. For the degree of M.Arch a student must earn a minimum of 36 credit hours including a thesis for which 18 credit hours shall be assigned.

REQUIREMENTS AND REGULATIONS

There shall be two categories of students, namely, full-time and part-time students. Students, serving in different organizations, may be admitted as part-time students with a written consent of the employer. A part-time student may be assigned a maximum of 9 credit hours of course including thesis/project work in any semester. While a full-time students must register for a minimum of 12 credit hours and a maximum of 15 credit hours per semester. A full-time student shall not be allowed to be in the employment of any organization.

The qualifying requirement for graduation is that a student COURSE AND CREDIT must earn a minimum grade point of 2.65 based on the weighted average in his/her course work. If at the end of the

DISTRIBUTION

GRADING SYSTEM Final grades for courses shall be recorded as follows:

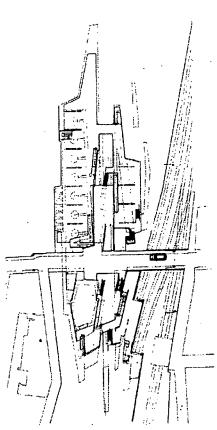
MARKS		GRADE	· MERIT DESCRIPTION	GRADE POINTS
90% and above 80% to below 90% 70% to below 80% 60% to below 70% 50% to below 60% Below 50%	:	A+(Plus) A B+(Plus) B C F I S U	Excellent Very good Good Average Pass Failure incomplete Satisfactory Unsatisfactory Withdrawn	4.0 3.5 3.0 2.5 2.0 0.0

MAJOR STREAMS/ **SPECIAL TOPICS**

Postgraduate courses in Architecture are offered in four major areas. Each course is of 3 credits, two hours of theory and a three-hour sessional per week. Students may choose courses from any stream and /or from the special topics.

Courses under different streams and the special topics are:

Course No.	Course title	Credits	
6100	ENERGY AND ENVIRONMENT	• .	
Arch 6101	Thermal Environment and Built Form	3	
Arch 6102	Sonic Environment and Built Form	3	
Arch 6103	Luminous Environment and Built Form	3	
Arch 6104	Bioclimatic Design	3	
Arch 6105	Environmental Design in Tropical Cities	3	
Arch 6106	Ecosystem and Built Environment Desig	n 3	
6200	HISTORY, THEORY AND CRITICISM		
Arch 6201	Architecture of Bengal	3	
Arch 6202	Architecture, Theory and Criticism	3	
6300	HUMAN SETTLEMENT		
Arch 6301	Housing Problems and Policies	3	
Arch 6302	Housing Finance	3	
Arch 6303	Domestic Architecture	3	
Arch 6304	Multi-Ownership Housing	3	
Arch 6305	Informal Sector Housing	3	
Arch 6306	Human Settlement & Development Issue		
Arch 6307	Urbanism & Housing in Developing Countr	ies 3	
Arch 6308	Rural Housing in the changing context	3	



905	Educational Facilities : Planning and Design	-3
904	Safety and Security in Buildings	3
903	Health Facilities: Planning and Design	3
902	Health-care Planning	3
901	Analytic Methods	3
900	SPECIAL TOPICS	
6404	Urban Design Practices	3
6403	Urban Morphology-I	3
3402	Urban System	3
6401	Theories of Urban Design	3
3400	URBAN DESIGN	
	6401 6402 6403 6404 900 901 902 903 904	Theories of Urban Design Urban System Urban Morphology-I Urban Design Practices SPECIAL TOPICS Analytic Methods Health-care Planning Health Facilities: Planning and Design Safety and Security in Buildings

ENERGY AND ENVIRONMENT STREAM

5.3 COURSE CONTENT

Interaction between Man, Climate and Architecture; understanding of theory and practice of climate responsive design. Design of buildings with respect to thermal comfort without the assistance of mechanical means, use of energy in buildings versus mechanical means. People's response to thermal environment. Fundamental physical principles with respect to buildings interaction with climate, and architectural design possibilities, modification of climate through thermal design. Quantitative and qualitative assessment of indoor environment in relation to heat gain or loss, ventilation and air movement, determination of comfort level and to design buildings as climate modifiers. Study of specific buildings for environmental performance evaluation.

Arch 6101
Thermal Environment
and Built-Form
3.00 Credits. 5 Hrs/Wk

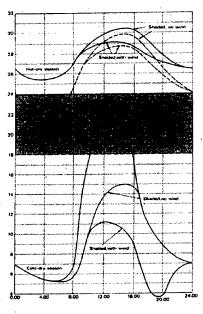
Physiological and psychological effects of the sonic environment; Determinants of the sonic environment; the sonic quantities; Octave Band Analysis, Measuring techniques; Sonic environmental design criteria; Sonic environment evaluation; Acoustic characteristics of materials. Behaviour of sound in enclosed spaces with emphases on architectural acoustics design: Geometrical and statistical methods of study; Designing rooms for speech and music; Designing auditoriums, cinema halls, recording studios, lecture halls, class-rooms, multi-purpose spaces; Sound reinforcing systems; Noise and the built environment; Noise control in spaces, External noise.

Arch 6102 Sonic Environment and Built-Form 3.00 Credits. 5 Hrs/Wk

Arch 6103 Luminous Environment and Built-Form 3.00 Credits. 5 Hrs/Wk

Human responses to the luminous environment. External vision factors; brightness, contrast/glare, colour, size, time etc. Daylighting and the determinants of the daylight environment; Daylighting measurement and calculations; Daylight design criteria under differing climatic conditions. Artificial lighting and the determinants of artificial lighting environment; measurements and calculations; Artificial lighting design criteria, permanent supplementary artificial lighting installation design; Creative lighting for different environments

Arch 6104 Bioclimatic Design 3.00 Credits. 5 Hrs/Wk



Introduction to bioclimatic design; designing with the natural elements and without the need for artificial environmental systems. The built-form and the ecosystem. interactions. Historical references to bioclimatic design: Shelter of the early man, shelter in different climates, extreme climates, in the sub continent. Contemporary approaches and innovations: rethinking energy, renewable energy, solar, wind, earth shelters, photovoltaic etc. The basis for bioclimatic design: Thermal Comfort Concepts. Questioning the comfort zone with reference to the tropics. Towards establishing a comfort zone for the tropics. Experimental methods and statistical analysis. Concepts in bioclimatic design. Building environment interactions. Thermal balance and heat flow. Thermal quantities and properties of building materials. Calculations for heat gain and losses in buildings. Passive cooling: Principles, applications and examples. Key concepts of passive cooling. Options for passive cooling and design considerations. Design for passive cooling, means and techniques. Examples with reference to Bangladesh. Environmental analysis of buildings. Environmental accounting. Monitoring of buildings (experimental). Assessments (computer modeling).

Arch 6105 Environmental Design In Tropical Cities 3.00 Credits. 2 Hrs/Wk

Influence of buildings and other urban artefacts on ambient climate, climate modification having energy implications. Interaction of urban form and space with the processes of urban environment. Outdoor urban environment in the context of tropical areas with special reference to cities in Bangladesh. Conventional approaches to urban design and its impact on the environment and non-renewable energy resources. Concepts of sustainability, green design and energy conscious design. Thermal comfort outdoors; its perception and use as urban design criteria. Effects of urban from and geometry, built density and land use, open spaces and streets and urban greens on microclimates. Tools and techniques of urban environmental research, computer based simulation techniques and models as prediction tools. Role of changing technologies in search of new directions for environment conscious urban design and architecture.

department of arci

Theoretical Antecedents in Environmental Design, Law of interdependence, Inseperable nature of environmental categories; Ecology & Ecosystem - Definition and Concepts, Community metabolism and biotic community concept, Ecology and its relationship with other branches of knowledge; Human Community and the Ecological crisis; Man and Environment; Geo-physical forces and Built-Environment, Concepts and application in environmental design; Ecosettlement Concepts, Passive means of built environmental controls. Analysis and Synthesis of Indigenous Built-Environments; Perception of Environmental qualities environmental evaluation and preferences, Lessons from the failures. Crisis in the built-environment with case studies. Technological Developments and their applications in Environment friendly buildings and settlements; Appropriate Technology for sustainable built environment design - Models, Materials and Methods; Safer built environment with reference to Third World Cities with case studies; Built Environment Design in the local context.

HISTORY, THEORY AND CRITICISM STREAM

Architectural heritage: History of Architecture in the region of Bengal (from Gupta period). Buddhist, Hindu and Muslim structures, monuments, public buildings, palaces, mosques and monasteries. Spatial characteristics, proportion, use of materials, craftsmanship, constructions techniques, other architectural features. Survey/ documentation of historical structures of Bengal. Vernacular Characteristics; Investigation of the vernacular characteristics of the structures studied. Examination of the existence of the architectural elements with respect to the socio-cultural context: availability, application and use of building materials and other relevant aspects. Comparative analysis. Contemporary trend: Critical evaluation of the transformation reflection of the heritage question, vernacular features etc. on the contemporary architecture of the country.

A dialectic between a diachronic sequence of architectural-theories and related architectural works. Theories of Vitruvius, Alberti, Perrault, Boullee, Quatremere de Quincy, Schinkle, Viollet-le Duc, Semper, Loos, Ruskin, Le Corbusier, Mies Van Der Rohe, Wright, Kahn, Venturi, Alexander, Rossi, Norberg-Schultz. Concepts of architectural theoreticians with an emphasis on the prevailing social and intellectual situation. Related critical writings to clarify the different epistemological dimensions. Understanding of the formation of theories. Developing a critical awareness of architectural theories and the skill to apply theoretical knowledge in the comprehension, evaluation and criticism of architecture.

Arch 6106 Ecosystem and Built-Environment Design 3.00 Credits. 2 Hrs/Wk



Arch 6201
Architecture of Bengal
3.00 Credits. 5 Hrs/Wk

Arch 6202 Architecture : Theory and Criticism

3.00 Credits. 5 Hrs/Wk

Arch 6301 Housing Problems 3.00 Credits. 5 Hrs/Wk

An overview of the Theories and Concepts of Housing, Review of Housing Policies, the Process of Policy formulation, Mechanism of Implementation, Process of devising housing strategy, Formulation of Standards. Background of Housing Development Institutions, Form and control of Public and Community participation in shaping the Housing Environment, Inter-relationship of housing and other issues, major housing issues, land, labour, materials, techniques, services, finance, Housing Infrastructure, Threshold Analysis.

Arch 6302 Housing Finance 3.00 Credits. 5 Hrs/Wk

Role of Finance in Housing; Income, Expenditure and Affordability; Housing Need, Effective Demand and Housing Supply; Housing Cost and Economics of Housing; Investment cnteria and Market Forces; Housing Policy and Finance; Housing Finance and Financial Institutions; Grameen Bank; Sources of Housing Finance; Financial Parameters; Savings; Measures to Improve Finance and Affordability.

Arch 6303 Domestic Architecture 3.00 Credits. 5 Hrs/Wk

Development of house through the ages; the pre-urban house; the oriental urban house; the occidental urban house; Rural house in Bangladesh; Influence of socio-technical changes in domestic design; Meaning and purpose of different domestic spaces: Relationship between domestic organization and the house design; Family and house-changing need, adaptation, space appropriation in different stages of family life.

Arch 6304 Multi-ownership Housing 3.00 Credits. 5 Hrs/Wk

Planning and Design of multi-ownership housing; Economics of housing; the concept of multi ownership; Apartment housing, housing cost and affordability; Investment criteria, Repayment period and rate of interest; Sources of housing finance; Financing cost; Savings; alternative means of housing finance; Land policy and its impact on housing; Land Value; the Role of public and private institutions in providing developed land for housing. Housing co-operatives and its role in supplying built flats/ apartment. Developer-built housing and its cost. Ownership pattern and the legal issues. The salaried group and their affordable limits. Study of developer and co-operative built housing and the assessment of user satisfaction level.

Arch 6305 Informal Sector Housing 3.00 Credits, 5 Hrs/Wk

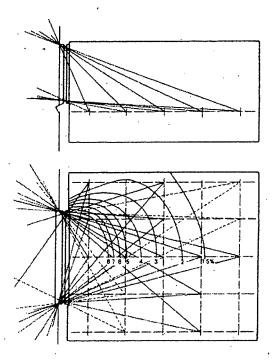
Urbanization characteristic, migration; Urban housing question in relation to the informal sector, (slum, squatters, etc.) Defining the levels and dimensions of poverty. The socioeconomic impact/ implication of poverty in the context of Bangladesh. Poverty alleviation policy; performance of the programme. Income distribution pattern. Relationship between

the household expenditure and affordability of lower income population. Urban growth and limitations in relation to the lower income housing problems. Policies for urban land and housing development. Role played by urban development institutions.

Overview of nature, process and considerations of Development Planning, Meaning and theories of development, Approaches to Third World Development, Development Policy and its influence on Human Settlement, Global Issues. Definition and classification of Developing Countries, Diverse structure of Third World, Common Characteristics of Developing Countries. Colonization, Historical perspective of Developing Nations, Impact and consequences of Colonization on the urbanization, settlement pattern, development issues and policies, Neo- colonialism. Growth, Poverty and Income Distribution, Extent and measurement of poverty, Affordability, Impact of poverty and affordability on housing-provisions, Policy options. Growth, characteristics and facts in population change and control, Demographic transition, Economics of population and development; Pattern and process of Urbanization and Migration, Housing and social structure, Urban transition in Third World, Expansion, agglomeration and dispanties. Effects of urbanization and migration on human settlement pattern and housing. Issues, dimensions and analyses of Unemployment, Informal Sector and Entrepreneurship, Education and human resources, Income generation and poverty alleviation, Savings and credit, Vulnerable groups. Housing for the urban poor, Spontaneous housing, Struggle for land and finance, Housing and Settlement Policy, Housing Rights, Housing and Poverty alleviation. Rural Development, Agriculture transformation, Peasant farming and Rural societies, Role of women, Modernization and adaptation. International Trade and Finance, Third World debt crisis, International flow of financial resources, Resource transfer and aid, Political and economic associations. Role of International funding agencies in housing and urban development.

Introduction to urban studies and housing. Approaches to Arch 6307 Urbanism; Urbanism as a way of life, capitalism as a cause of urbanism; urbanism as civic design. The role of Cities, Society and Space; Mode of production and the urban built environment; urban design as uneven development; urbanism and colonialism; Post-colonial urbanism; issues in the urbanism-housing Nexus: urban poverty, co modification of housing; formal-informal sector linkage; housing rights; homelessness; gender; social justice; Colonial and postcolonial profile of South Asian Cities; from dual economics to dual society; Emerging Conditions of Contemporary marginality.

Arch 6306 **Human Settlement and Development Issues** 3.00 Credits. 5 Hrs/Wk



Urbanism and Housing in Developing Countries 3.00 Credits. 3 Hrs/Wk

Arch 6308 Rural Housing in the Changing Context 3.00 Credits. 3 Hrs/Wk

Rural housing as a field of study; rural housing typology and patterns; user participation and other development philosophies; building materials and construction technologies; rural housing in Bangladesh; rural housing and culture; rural housing and environment; settlement patterns and project implementation methods; labour patterns in rural house construction; indigenous construction technologies; innovation in construction; self-help housing; issues related to water-and-sanitation and community facilities; financing and funding strategies; preparedness and impact of natural hazards; communicating, disseminating and replicating new concepts.

URBAN DESIGN STREAM

Arch 6401 Theories of Urban Design 3.00 Credits. 5 Hrs/Wk

Growth of human settlements and urban centres, generative and parasitic nature of urban growth, factors influencing growth. Definition, scope and relationship with architecture and planning. Dominant trends in Urban Design; Utopian, Monumentalist, Environmentalist, Modernist, Perceptionist, etc. Normative and Organic theories of urban form and design. Steps of Urban Design processes, approaches toward the problems and levels of analysis. Analysis of urban physical pattern. Physical and non-physical functioning of areas, community action and conflict management.

Arch 6402 Urban Systems 3.00 Credits. 5 Hrs/Wk

Analysis and understanding of the city as a social system with reference to ethnicity and religion; distribution of income and occupation, class structure, culture and life styles, their effects on communities and neighbourhoods. Analysis of the activity systems and the resultant built form as a product of economic, political and physical forces. Development of business, commerce and industry and their effects on urban pattern. Inter- relationship of urban planning and design and the political setup, urban planning and design institutions and coordination of their activities, project programming, implementation, management etc. Urban locational decisions and transportation; understanding of infrastructure system and sub-systems. Principles and practices of urban controls, proscriptive and prescriptive modes, land value and urban form, land use guidance tools and techniques.

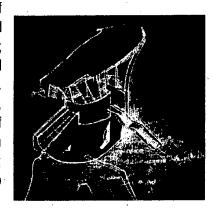
Arch 6403 Urban Morhpology - I 3.00 Credits. 3 Hrs/Wk

Urban Morphology History; Spatial analysis of Urban Form; Theory of Space Syntex for configurational analysis of urban form. The Spatial Nature of Societies; Theory of space in the structuring of society; Philosophical clebate about space; Social logic of the spatial morphology of urban form. Form of cities and how they function; Configuration of Urban Grid and Urban Core; Theory of movement economy; Problems in urban structure- Part and whole, Disurbanism; order and structure in

urban desing. Spatial Morphology of cities-Medieval, Islamic, Colonial; Geometry in Organic and Planned cities; Morphology of cities of Organic cities. Tranformation of Urban Form with particular reference to change in activity pattern and sustainable urban form; Modernizing Medieval cities, Urban transformation and the morphological characteristics of Dhaka.

Context & Theoretical underpinning of Urban Design, analytical debate, urban form debate and procedural debate; Postmodernism and Design Theory; Reading the context, Environment Behaviour Studies; The Social Logic, The Social Production of space - Theory and Practice; The Social Production of Architecture, Ideology and Urban Design. The Technology of Form - An analytical Overview; The question of Aesthetics, Aesthetics, Ideology & Urban Form; Structure and Analogy - Study of different Models; Global Urban Crisis. Comparative Study on various societies; The Properties of Space; Concepts of Adaptability; Typological and Morphological elements of the Concepts of Urban Space: Meaning, Form, Space, Symbols and Territory; Spatial Manifestation of Societal Norms / values in various societies. Design Dilemma, Ideology and Power, Lieu, Endroit, Milieu, and Locale; Urban Form and Space; The Conservation of Ideology and Society: Prospects and constraints of information age and its impact on form and morphology of settlements; Morphological Evolution of Urban Settlements; Case studies to understand the generic pattern.

Arch 6404 **Urban Design Practices** 3.00 Credits. 3 Hrs/Wk



SPECIAL TOPICS

Data and decision-making process. Concepts used in quantitative analysis-data, information, data collection and analysis, variables and values. Summarizing tables and charts; Statistics. Sampple and sampling techniques; & statistical inferences. Relations and association. Use of computer data analysis, SPSS.

Arch 6901 **Analytic Methods** 3.00 Credits. 5 Hrs/Wk

Review of the fundamentals of Health Care Planning, Focus on Arch 6902 the historical process of change in relations between resources, priorities, policy, and socio-cultural factors. Environmental and health issues of both developed and developing countries in its diversity and magnitude, with special emphasis to Bangladesh. Analysis of some of the principal issues arising in the contemporary theories and philosophy regarding health saervice planning in the developing world. Study and analysis of the health care planning process and the evaluation of the health care delivery system of Bangladesh.

Health Care Planning 3.00 Credits. 5 Hrs/Wk

Arch 6903 Health Facilities: Planning and Design 3.00 Credits. 5 Hrs/Wk

Analysis of the development mechanism in which health care facilities perform. Study of the whole range of health care facilities as 'Complex System'. History and analysis of the forces influencing the form and function, and role of the health care facilities e.g. the relationship between changes in health policy and social priorities and its impact on the form, function and institutional structure of the health care facilities. Review of the contemporary philosophy, approaches, and systems followed in programming planning, and designing of health care facilities especially in the developing countries. Orientation of the participants to the local situation through case-studies and projects.

Arch 6904 Safety and Security in Buildings 3.00 Credits. 5 Hrs/Wk

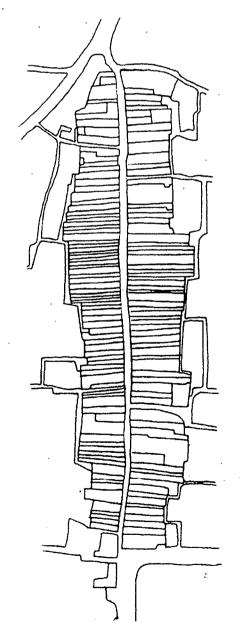
Introduction to safety and security, difference between safety and security in buildings, implication on design, legislation and need for good safety and security in buildings, implication on design, legislation and need for good safety and security practices. Current practices with reference to the following:

Safety from accidents: Definition, monitoring accidents; Socio-economic effects of accidents; Aims and objectives of the basic principles of safety responsibility; Duties and responsibilities of owners, employers and users; Types of accidents; General process accidents and disasters; Prevention of accidents, etc.

Security in Buildings: Need for security in buildings; Risks of security breach; Aims of physical security control; Targets; Lines of defense against intruders, thieves and vandals; Relationship between security and fire prevention; Protection of a building, its occupants and its effects: Layout of buildings for achieving security; Control measures and barriers; Access control systems; Principles and laws of internal policing etc.

Pire prevention and control: Socio-economic and physiological implications of fire; History of fire; Evolution of fire prevention regulations; Risks of fire by building groups; Classification of fires; Objectives of fire precautions; Action in case of fire; Internal and external hazards; Planning for fire prevention and control; Pattern of fire development; Structural measures against fire; Causes of fire; Design of escape route; Effects of smoke, principles of compartmentation; Fire detection, alarms and extinguishing systems, etc.

Safety signs and symbols: Need for signs and symbols; Psychology of signs and symbols; Characteristics; Use of colors, shapes and size; Meaning of signs and symbols; Examples of uses, etc. Security and emergency lighting: Objective, basic techniques, need for such lighting; Transmission from normal to emergency lighting; Luminaires for security and emergency lighting; Planning for such lighting.



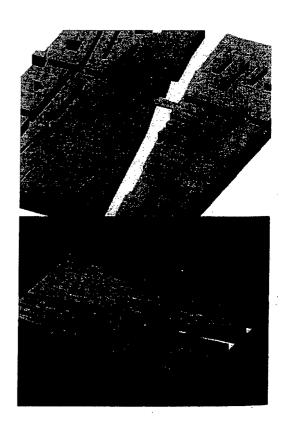
development. Organization of education; components of educational system. Other social, cultural and educational agencies in the community. Analysis of the magnitude and diversities of problems of education in the Asian developing countries in general and in Bangladesh in particular. Participation in education. Unemployment and technical education, community education. Education resources-user of resources. Administration of educational institutions. Financing the education. Education programming and curriculum. Meaning and purpose of different educational spaces and activities. Design considerations. dimensional coordinates. Local technology and construction system. Design criteria regarding planning, form, materials, structures, site, spaces and circulation. Determinants of form and modifiersenvironmental factors. Flexibility and school design. Standards. Influence of socio technical changes in school design. Thesis of Masters of Architecture degree is by research which

Concept of education, ideas and theories and their

Arch 6905
Education facilities:
Planning and Design
3.00 Credits. 5 Hrs/Wk

shall demonstrate an evidence of satisfactory knowledge in the chosen field. A student is allowed to proceed with thesis work if the cumulative GPA is at least 2.5. Students may chose a thesis topic from any of the streams and other special topics emphasizing architectural and allied issues related to Bangladesh which has to be approved by the BPGS. It shall be carried out under the supervision of a full time faculty member; if necessary, a cop-supervisor may be appointed from within or outside the department. The thesis proposal shall be prepared under the guidance of the supervisor(s), and should include title, scope and objective, methodology, laboratory and departmental support, budget and other relevant information. The proposal shall have to be approved by the Head of the Department, BPGS and the Committee for Advanced Studies and Research (CASR) prior to final approval of the Academic Council. The Head of the department in consultation with the supervisor(s) shall suggest to the Vice-Chancellor through the CASR a panel of examiners for thesis and its viva-voce. A student submitting a thesis in partial fulfillment of the requirement of M.Arch degree is required to appear for vivavoce.

5.4 THESIS



DOCTOR OF (Ph.D)

PHILOSOPHY A candidate shall be provisionally selected by the Selection Committee constituted by the BPGS (Board of Post Graduate Studies) on recommendation of the Head of the Department and may be required to pass the prerequisite non-credit courses as prescribed by the Committee.

SELECTION

APPOINTMENT OF A SUPERVISOR

On provisional admission, the Selection Committee shall submit a name of a Supervisor who shall be a full-time member of the staff of the department and a Co-supervisor from within or outside the department, if necessary. The Supervisor shall prescribe a plan of study to be undertaken by the student and supervise the progress of the candidate's work.

COURSE & CREDIT DISTRIBUTION

The minimum duration of the Ph.D course shall be four semesters from the date of provisional admission. A student must complete all requirements for the Ph.D degree within six academic years (session) from the date of his provisional admission. There shall be two categories of students, namely, full-time students and part-time students. A part-time student may be assigned a maximum of 9 credit hours of course work in any semester. Full-time students must register for a minimum of 12 credit hours and a maximum of 15 credit hours per semester. A full-time student shall not be allowed to be in the employment of any organization (even as a part-time employee). However, they may be employed as Teaching/ Research Assistant at the University.

GRADING SYSTEM

Final grades for courses shall be recorded as follows:

GRADE POINTS
4.0
3.5
3.0
2.5
2.0
0.0
-
• -
-

A Doctoral Committee for every student, shall be set, up by the Head of the Department in consultation with the Supervisor and approved by the CASR (Committee for Advanced Studies & Research). The Doctoral Committee should meet from time to time at the request of the Supervisor to review the progress of the student.

DOCTORAL COMMITTEE

The student shall submit a research proposal to the Doctoral Committee which shall examine the proposal and recommend it for the approval of the CASR through the Head of the department.

RESEARCH TOPIC

To qualify for the degree a student must earn a minimum grade COURSE WORK point of 2.75 based on the weighted average in his course work.

The date and time of the comprehensive examination shall be fixed by the Doctoral Committee on the request of the Supervisor. Comprehensive Examination shall ordinarily be held after the completion of the course work by the student. The comprehensive examination shall comprise a written examination and/or an oral examination to test the knowledge of the student in his field of study. The Doctoral Committee shall conduct the comprehensive examination. If a student fails to qualify in a comprehensive examination he shall be given one more chance to appear in the examination as scheduled by the Doctoral Committee.

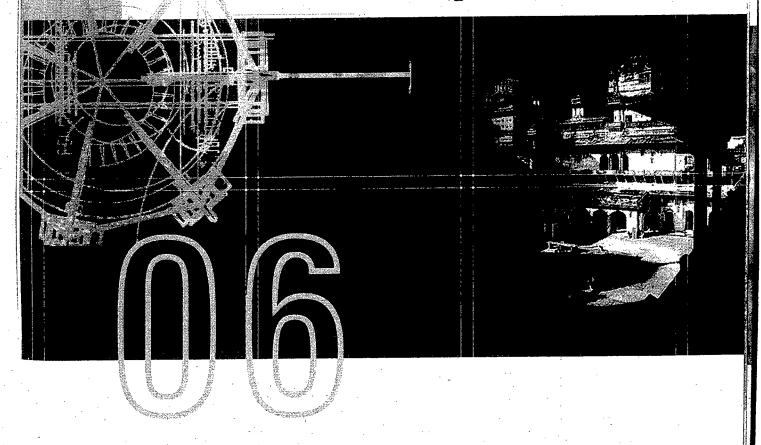
COMPREHENSIVE

At the end of the student's research work the student shall THESIS submit a thesis which must be an original contribution to architecture/engineering/sciences and worthy of publication.

An Examination Board for every student for thesis and oral examination shall consist of the Doctoral Committee and one or more external examiners to be appointed by the CASR on recommendation of the thesis Supervisor in consultation with the Head of the department. At least one external examiner shall be appointed from outside the University. If the external examiner is appointed from outside the country a copy of the thesis may be sent to him for his evaluation and his written opinion. The Board shall consist of at least six members including the Head of the department and the Supervisor.

EXAMINATION BOARD

the faculty





THE FACULTY

PROFESSORS 01 Professor Meer Mobashser Ali 02 Professor Md. Khairul Enam 03 Professor Dr. Faruque Ahmad Ullah Khan

- 04 Professor Khaleda Rashid
- 05 Professor Dr. Nizamuddin Ahmed
- 6 Professor Dr. M Shahidul Ameen
- 07 Professor Shaheda Rahman
- 08 Professor Dr. Zebun Nasreen Ahmed
- 09 Professor Dr. Qazi Azizul Mowla

ASSOCIATE 01 Shamim Ara Hassan PROFESSORS=:02 Dr. Farida Nilufar

- 03 Dr. Khandaker Shabbir Ahmed
- 04 Dr. Shayer Ghafur
- 02 Dr. Khondkar Iftekhar Ahmed

ASSISTANT 01 Sheikh Ahsan Ullah Mojumder PROFESSORS 02 S M Najmul Imam

- 03 Catherine Daisy Gomes
- 04 Bayezid Ismail Chowdhury
- 05 Mamun ur Rashid
- 6 Mahmudul Anwar Riyaad
- 07 Dr. Nasreen Hossain
- 08 Zakiul Islam
- 09 Atigur Rahman
- 10 Md. Ruhul Amin

LECTURERS 01 Monjur Morshed Masum

- patrick Rozario
- 03 Pronoti Rani Saha
- 04 Md. Rashed Igbal
- 05 Tarek Haider
- 06 Shikha Rani Roy
- 07 Sultana Emrana Sikder
- 08 Anisur Rahman
- 09 Nayma Khan

on leave

on leave

Professor Meer Mobashser Ali, IAB, FIEB

BSc. Engg (Civil) (BUET 1962), B.Arch (Florida 1966), M.Phil (Newcastle-upon-Tyne 1976) <meerkaneta@usa.net>



Former Dean, former Head, former President BUET Teachers Association

Fields of interest: Housing, Conservation, Works of Master Architects



Professor Md. Khairul Enam IAB

B. Arch (BUET 1969), M.Arch (BUET 1984) <enam_khairul@yahoo.com>

Professor

Head of the Department (2003-) and Syndicate Member

Former Dean, former Head, Advisor Architecture and BUET squash racquets

Fields of interest: Commercial high-rise buildings, Housing, Landscape design



Professor Dr. Faruque Ahmad Ullah Khan, IAB

B. Arch (BUET 1972), M.Arch (BUET 1984), Ph. D (DU 2001) <faruque@arch.buet.ac.bd>

Professor

Former Dean, former Provost, former Head, Former Syndicate Member

Field of interest: Educational Facilities - Planning & Design



Professor Khaleda Rashid, IAB, BIP

B. Arch (BUET 1974), MURP (Hawaii 1980) <hrashid@dominox.com>

Professor

Former Dean, former Head

Fields of interest: Urban design, Urban planning, Housing & Gender issues





Professor Dr. Nizamuddin Ahmed, IAB

B. Arch (BUET 1979), M.Arch (BUET 1984), Ph.D (Sheffield 1987), Post-doctoral research (Sheffield 1997-98) < nizamarchitect@yahoo.co.uk>

Professor

Former Dean, General Secretary BUET Teachers Association, former Asst. Provost, former executive member IAB, Advisor BUET football, founder Rover Scout Leader and incumbent Vice-President BUET Rover Scout Group, Convenor Arcaab (Architecture Alumni Association of BUET)

Fields of interest: Industrial buildings & working condition, Architectural Acoustics, Fire prevention & control



Professor Dr. M Shahidul Ameen, IAB

B. Arch (BUET 1979), M. Phil Diploma in Architecture (Newcastle-upon-Tyne 1985), Ph.D (Newcastle-upon-Tyne 1988) ameen@arch.buet.ac.bd>

Professor

Former Head, Asst. Provost, executive member BUET Teachers Association, Moderator BUET Poetry Society

Fields of interest: Housing, Architecture of Bengal, Historical conservation of Dhaka city



Professor Shaheda Rahman, IAB

B. Arch (BUET 1976), Post-graduate diploma (London 1980), M. Arch Engg (Leuven 1982) <shaheda@arch.buet.ac.bd>

Professor

Former Asst. Provost

Fields of interest : Hospital planning, Architectural conservation, Modern Art History



Professor Dr. Zebun Nasreen Ahmed, IAB

B. Arch (BUET 1981), M.Phil (Sheffield1987), Ph.D (Leicester 1994) </pre

Professor

Former Asst. Provost, Moderator BUET Musical Society (Murchchana)

Fields of interest: Climate-building interactions, Lighting environment, Music Appreciation

Professor Dr. Qazi Azizul Mowla, IAB

B. Arch (BUET 1981), M. Arch. Hons. (Roorkee 1985), M. Urban Design with Distinction (Hong Kong U 1990), Ph.D (Liverpool 1997) <qamawla@arch.buet.ac.bd>

Professor

Fields of interest: Theory and Practice in Architecture & Urban Design, Urban Morphology, Built-Environment Design



Shamim Ara Hassan, IAB

B. Arch (BUET 1978), M. Arch(Canada 1984) <sahassan@bol-online.com>

Associate Professor

Field of interest: Energy and Environment issues in Architecture



Dr. Farida Nilufar, IAB

B. Arch (BUET 1991), Ph.D (Bartlett 1997) <farida@arch.buet.ac.bd>

Associate Professor

Field of interest: Urban Design



Dr. Khandaker Shabbir Ahmed, IAB, Assoc. AIA

B. Arch (BUET 1991), Ph.D (AA 1996)

<shabbir@citechco.net>

Associate Professor

Former member (Education & Research, EC, 11th~13th, IAB)



Fields of interest: Bio-climatic architecture, Sustainable city, Environmental simulation

Dr. Shayer Ghafur, IAB

B. Arch (BUET 1989), Ph.D (Oxford Brookes 1997)

<sghafur@bangla.net>

Associate Professor

Fields of interest: Housing and Development, Urban design





Sheikh Ahsan ullah Mojumder, IAB

B. Arch (BUET 1992), M.Arch (BUET 2000), Post Graduate Research (Tokyo 2002)

<ahsan@arch.buet.ac.bd>

Assistant Professor

Fields of interest: Architectural Design, Environmentally Responsive Architecture, Painting & Electronic Art



Dr. Khondkar Iftekhar Ahmed, IAB

B. Arch (IIT 1984), M.S. Arch. S. (MIT 1991), Ph.d (Oxford Brookes 1999)

Assistant Professor

Fields of interest: Rural Housing, Participatory Methods, Appropriate Technology



S M Najmul Imam, IAB

B. Arch (BUET 1989) M. Arch (BUET 2000) naimul@arch.buet.ac.bd>

Assistant Professor

Fields of interest : Islamic Architecture, Computer for Architecture, Ergonomics, Architectural Acoustics



Catherine Daisy Gomes, IAB

B. Arch (BUET 1992) M. Arch (BUET 2003) <catherine@arch.buet.ac.bd>

Assistant Professor

Field of interest: Church Architecture, Landscape Architecture



Bayezid Ismail Choudhury

B. Arch (BUET 1993), M.Arch (BUET 2002) <afribic@hotmail.com>

Assistant Professor

Field of interest: Urban Design, Architectural Theory and Criticism, Housing

Mamun ur Rashid, IAB

B. Arch (BUET 1993) M. Arch (BUET 2001) <mamunras@proshikanet.com>

Assistant Professor

Fields of interest: Urban design, Housing



Mahmudul Anwar Riyaad

B. Arch (BUET 1995), M.Arch (Bartlett 1998) < riyaad@latitude-23.net >

Assistant Professor

Field of interest: Experimental Art & Architecture



Dr. Nasreen Hossain

B. Arch (BUET 1993), M. Arch (BUET 1995) Ph.D (Bartlett 2000) <nupurz@hotmail.com>

Assistant Professor

Field of interest : Urban Morphology (at the scale between building and the city)



Mohammed Zakiul Islam

B. Arch (BUET 1995), M.Arch (UTAustin1999) <doza@bol-online.com>

Assistant Professor

Field of interest: Urban design, Islamic cities



Atiqur Rahman, IAB

B. Arch (BUET 1996) M. Arch (BUET 2004) <nayreet@accesstel.net>

Assistant Professor

Field of interest : Computer for Architecture, Environmental Simulation



Md. Ruhul Amin

B. Arch (BUET 1996) M.Cons.Mgt. (UNSW 2003) <ruhulshaila@yahoo.com>

Assistant Professor

Field of interest: Interior design, Construction Management





Patrick D' Rozario

B. Arch (BUET 1997) <dejmond@aitlbd.net>

Lecturer

Field of interest: Urban design, Criticism in Architecture



Pronoti Rani Saha

B.Arch (SPA 1998) <saha@bol-online.com>

Lecturer

Field of interest: Interior design, Urban Design



Md. Rashed Iqbai

B.Arch (BUET 2000) <rashed@citechco.net>

Lecturer

Field of interest: Digital graphics and modeling, Multimedia



Md. Tarek Haider

B.Arch (BUET, 2001) <towfique@citechco.net>

Lecturer

Field of interest: Digital Graphics & Architecture



Shikha Rani Roy

B.Arch (Roorkee 1998), M. Landscape Arch (SPA 2001) <shikha y 2000@yahoo.com>

Lecturer

Field of interest: Landscape Design & Planning



Sultana Emrana Sikder

B.Arch (BUET, 2003) limia1094@hotmail.com>

Lecturer

Field of interest: Photography, Graphic Design, Interior Design

Anisur Rahman

B.Arch (BUET, 2003) <rahmana@citechco.net>

Lecturer

Field of interest: Environmental and health issues

Nayma Khan

B.Arch (BUET, 2001) <khanmnzl@bol-online.com>

Lecturer

Field of interest : Interior Design





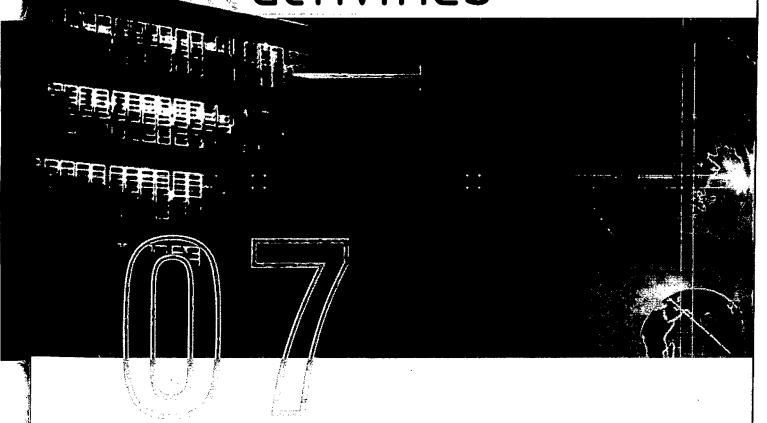


6.3 PART-TIME TEACHERS

The Department from time to time solicits the support of various practicing professionals in Architecture allied fields. Teachers have included Architect Shah Alam Zahiruddin, Architect Bashirul Haq, Architect Kazi Golam Nasir, Sculptor Md. Hamiduzzaman, Painter Samarjit Roy Choudhury

department of archibitecture

resources & activities



DEPARTMENTAL RESOURCES

Concomitant with the increase in number of students & teachers, facilities in the Department is being increased. The department is within close distance of other facilities in the campus, the central library, registrar's office, bank, post office and medical centre, etc.

The faculty library is located in the first floor of the administrative building. Presently it contains 5,547 books, 484 journals and 569 theses. To improve the facilities for study and research, steps have already been taken to enrich and expand the faculty library.

7.1 FACULTY LIBRARY

The Department has a computer laboratory with about 30 workstations under two servers, including color printing and plotting facilities. Programmes are updated regularly. There is a committee for the operation and maintenance of the computer laboratory. The Department has two computer sessional courses in its undergraduate course system.

7.2 COMPUTER FACILITIES

DEPARTMENTAL ACTIVITIES

The Department publishes a peer-reviewed research journal Protibesh, meaning environment. Articles are contributed by faculty members, professionals and other experts. The Editors welcome papers from interested academics and practicing architects. Papers published so far were on topics as varied as Housing Satisfaction, Temple Architecture, Industrial Architecture, Health Facilities Planning, Educational Buildings, Domestic Architecture etc.

7.3
JOURNAL
PUBLICATION

The Department and the teachers participate regularly in national and international seminars, conferences and workshops which in turn benefit the teachers and students enormously. The Department had recently organized an internaitonal seminar Architecture: Overcoming Constraints, which was held on 11-13 June, 2003; papers submitted under Environment, Housing, Technology and Urban Issues were published in the siminar proceedings. A workshop on Lakes of Dhaka City: Problems and Prospects was held on 21 April, 2001, jointly organised by the Department, The Daily Star and Bangladesh Scouts. In the past, the Department has also jointly organised several such events: the noted include a seminar on Regional Architecture, a seminar on Urban Tropical Climate, a Seminar on Tall Buildings and a Workshop in Architectural Conservation.

7.4 SEMINAR / WORKSHOP

7.5 **LECTURE SERIES**

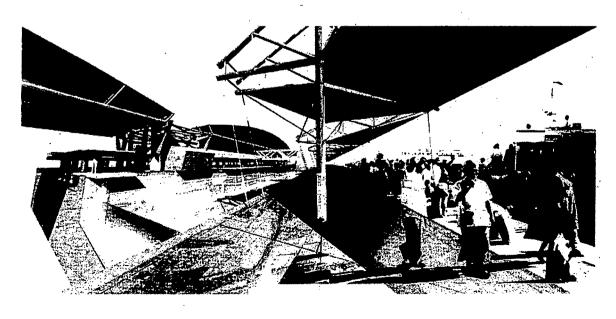
Aalap, a Bengali word meaning casual conversation, is a fortnightly forum of the Department for architectural discussions. It mostly takes place on Tuesday afternoons either at the Kahn Lecture Gallery or F. R. Khan Gallery. Aalap aims at broadening the sphere of academic activity beyond the classrooms. As such, this informal forum complements the academic curriculum and acts as a vehicle for the exchange of ideas and information. Slide shows and lectures by teachers, professionals and related experts are being delivered in Aalap; discussions that follow are enthusiastically participated by all. Speakers of international and national repute with diversified experience and expertise have spoken; recent speakers invited include Prof. Abdullah Abu Sayeed and Dr. Nawajish Ahmed.

7.6 JOINT LECTURE/ WORKSHOP SERIES

The Department maintains a close link with the Institute of Architects Bangladesh (IAB) and other professional bodies. The BUET-IAB lecture series and colloquia with experienced architects are regular events. Presentation of topics as diverse as Architect's own work, Solar Energy and Architecture, Developer Built Housing, Architecture in USA and Modern Printmaking have featured in the BUET-IAB lecture series.

7.7 EXHIBITION

The Department regularly arranges exhibition of student's selected works, on the ground floor of the academic block. In addition, the students of various levels and years make displays of studio projects periodically in the lounge. Few years ago, an exhibition 'Contemporary Thoughts in Architecture 1994' was held at the Shilpakala Academy Gallery, Dhaka. Events of these natures aim to generate consciousness about architecture and state of academic outputs among academia and people.



Design competitions on various topics are held from time to time for the students of architecture with great deal of enthusiasm. Design of the Street is the most recent student competition organised in June, 2003; architecture students from different universities in Bangladesh had participated in this competition. The Jury included academic and professionals. Students of the Department of Architecture are continuously participating in other national and international competitions and winning awards.

7.7 DESIGN COMPETITION



STUDENT ACTIVITIES

The Chhatra Shangshad, with Head of the Department as its Chairman, is an organisation of the students of the Department. The Shangsad arranges various extra-curricular activities of the students. Among these are Nabin Baran and Probin Biday, Picnic, Exhibition, publishing magazines etc.

8.0 Chhatra Shangshad

The final year students of the department have initiated the documentation of students' projects in the form of a brochure, DEEK. So far, two impressive issues have prompted support and encouragement from all quarters. The effort is appreciated through advice and contribution of resources.

8.1 DESIGN BROCHURE

The senior students of the Department undertake a month-long tour of India and other SAARC countries every year. They visit places and structures of architectural and historical significance, important school, famous architects and their studios. Other short-term tours inside Bangladesh are also taken from time to time. Teachers usually accompany the students in such tours.

8.2 STUDY TOUR

To encourage and support students' interest in photography, the Architecture Department Photographic Society (ADPS) was formed in August, 1991. With nearly one hundred members, the society has successfully pursuaded photohyraphy as a hobby. Lectures and work-shops involving emminent photographers are organised by the society It has also arranged several exhibitions. So far 23 awards including three international prizes were won by ADPS members. Two Gold Medals were secured in 53rd The Ashahi Shimbun- 92 and in May Day-93 Photo Contest. Other prizes include several Silver and Bronze medals. Solo exhibitions of photographs by two of the ADPS members were recently held in Calcutta and Ankara.

ARCHITECTURE DEPARTMENT PHOTOGRAPHIC SOCIETY

CULTURAL SOCIETIES

Traditionally, students of the Department lead the University in all cultural activities. To encourage the students, participation in such activities, formation of societies are underway under the Department auspicious. Among the societies in childhood are Music Club. Drama Society, Debating Society, etc.

