Council of Architecture
(Incorporated under the Architects Act, 1972)

MINIMUM STANDARDS OF ARCHITECTURAL EDUCATION REGULATIONS, 1983*

In exercise of the powers conferred by clauses (e), (g), (h) and (j) of sub-section (2) of section 45 read with section 21 of the Architects Act, 1972 (20 of 1972), the Council of Architecture, with the approval of the Central Government, hereby makes the following regulations, namely :-

1. Short Title and Commencement

(1) These regulations may be called the Council of Architecture (Minimum Standards of Architectural Education) Regulations, 1983.

(2) They shall come into force on the date of their publication in the Official Gazette.*

2. **Definitions**

In these regulations, unless the context otherwise requires

(a) "Act" means the Architects Act, 1972 (20 of 1972);

(b) "Council" means of Council of Architecture constituted under Section 3;

(c) "Executive Committee" means the Executive Committee constituted under Section 3;

(d) "Faculty" means the full-time teaching staff members in the service of the institution;

(e) "Institutions" means the colleges/departments/schools of architecture in India imparting instructions for recognized qualifications;

(f) "Recognised qualifications" means any qualification in architecture for the time being included in the Schedule or notified under section 15 of Act.

3. **Duration and Stages of the Course**

(1) The architecture course shall be of minimum duration of 5 academic years or 10 semesters of approximately 16 working weeks each inclusive of six months/one semester of approximately 16 working weeks of practical training after the first stage in a professional office.

(2) The architecture course may be conducted in two stages.

(3) The first 3 academic years / 6 semesters of approximately 16 working weeks each of the course shall be a basic standard course and shall be the first stage:

Provided that candidates admitted to the course shall complete the first stage within 5 years of admission to the course.

(4) The second stage of the course shall be of 2 academic years / 4 semesters of approximately 16 working weeks each.

(5) The completion of first stage shall not qualify candidates for registration under the Architects Act, 1972.

4. **Admission to the Architecture Course**

(1) No candidate, with less than 50% marks in aggregate, shall be admitted to the architecture course unless he/she has passed an examination at the end of the new 10+2 scheme of Senior School Certificate Examination or equivalent with Mathematics as a subject of examinations at the 10+2 level.**

(2) Where 10+2 scheme is not introduced, candidates must have passed after 11 years schooling the Higher Secondary/pre-university/ pre-engineering or equivalent examinations in the Science group of any recongnized University or Board with English, Physics, Chemistry and Mathematics as compulsory subjects.

(3) The Institutions may subject the candidates, seeking admission to the architecture course, to aptitude tests specially designed to assess the candidates' aptitude;

Provided that no separate aptitude tests may be conducted where admissions are made through competitive examinations.

(4) The institutions shall not give weightage of more than 50% marks for aptitude tests in the matter of admissions.

*Published in the Gazette of India, Part III Section 4, 26th March, 1983 and 27th August 1983.
**Amended by Notification in the Gazette of India dated January 7, 2006

5. **Intake and Migration**

(1) The sanctioned intake of candidates at the first year level shall not exceed a maximum of 40 in a class. If more than 40 candidates are admitted, separate classes shall be organised.

(2) The institutions may permit, at their discretion, migration of students from one institution to another subject to the maximum number of students not exceeding the permitted maximum intake in a class.

6. **Courses and periods of Studies**

(1) The institutions imparting instructions in architecture required for granting recognized qualifications may follow the courses and periods of studies as prescribed in Appendix-A.

(2) The institution shall, as an integral part of architectural education curriculum and as a part of teaching programme, arrange for study tours, visits to places of architectural interests.

7. **Professional examination, Standards of proficiency and conditions of admissions, qualification of examiners**

(1) The University or an independent examining body shall conduct the examinations at the end of each stage.

(2) The sessional work shall, as far as possible, be assessed by a jury of internal and external examiners.

(3) The weightage of marks for subjects having both class work marks as well as examination marks may not exceed the ratio of 50:50.

(4) The pass percentage shall not be less than 45% in each subject and shall not be less than 50% in the aggregate.

(5) Candidates who have passed in the internal assessment, shall only be permitted to appear in an examination.

(6) An examiner for any of the subjects of examination shall have a minimum of 3 years teaching/professional experience in his/her field of study.

8. **Standards of staff, equipment, accommodation, training and other facilities for technical education**

(1) The institutions shall maintain a teacher/student ratio of 1:8.

(2) The institutions shall have a minimum number of 12 faculty members for a student strength of 100.

(3) The institution with the maximum intake of 40 in a class may have the faculty pattern as prescribed in Appendix-B.

(4) The institutions shall encourage the faculty members to involve in professional practice including research.

(5) The institutions shall provide facilities as indicated in Appendix-C.

(6) The institutions shall encourage exchange of faculty members for academic programmes.

Notwithstanding anything contained in these regulations, the institutions may prescribe minimum standards of Architectural Education provided such standards does not , in the opinion of the Council, fall below the minimum standards prescribed from time to time by the Council to meet the requirements of the profession and education thereof.

APPENDIX - A

Courses, Periods of Study and Subjects of Examination

Stage I - Basic Course

Sl No.	Subjects of Examination	Minimum No. of periods of 50 to 60 minutes duration
1.	Architectural Design	600
2.	Building Construction	360
3.	Building Materials and Sciences	60
4.	Architectural Drawing and Graphics	360
5.	History of Architecture	120
6.	Workshop Practice	120
7.	Landscape Design	60
8	Structural Mechanics and Theory of Structure	300
9.	Surveying and Levelling	60
10.	Building Services & Equipment	90
11.	Humanities	60
12.	Estimating & Costing	60
13.	Principles of Human Settlements	60
		2310

Note:

1. The names given to the subjects of study are suggestive only. The same subjects pertaining to the architecture may be taught under different names. The emphasis on teaching various subjects may vary from institution to institution. New subjects may be introduced and certain subjects given less emphasis depending upon the requirement and educational philosophy of an institution. The subjects of Landscape Design, Humanities and Estimating & Costing may, if desired, be taught in the second stage of the course.
2. For the purpose of calculating the periods of study, 30 periods per week per semester/term of class are considered to be adequate. For 3 years of study at the rate of 16 weeks per semester/term, the total for first stage works out to be 2880 periods.
3. In order to give freedom to the Institutions to orient the Course as per their own philosophy, approx. 75 percent of the total periods of study have been taken into account for calculating the minimum hours of study for each subject while the institutions may allot the balance approx. 25 percent of the study periods to the subjects of the choice.
4. Minimum total contact periods should be 2880. Thus, 570 periods are to be allotted by the institution to the subjects of their choice.

Brief description of the subjects listed in the Stage-I of the Course

1. ARCHITECTURAL DESIGN

Applying the knowledge gained in other subjects and to design buildings of medium complexity e.g. Schools, Colleges, Dispensaries, Shops and Houses, etc., and present them in graphic form.

2. BUILDING CONSTRUCITON

Knowledge of various methods of building construction of medium complexity with timber, stone, bricks, concrete etc. including foundation, walls, roofs, staircase, joinery and finishes.

3. BUILDING MATERIAL AND SCIENCES

Knowledge of basic building materials and their behaviour such as bricks, stones, metals, timber and finishing materials. Effects of climate on built environment to be able to design for comfortable conditions.

4. ARCHITECULTRAL DRAWING AND GRAPHICS

Ability to present in graphic form all elements of design - Study of shades and shadows, textures, tones, colours, geometrical form, perspectives and projections, free hand drawing and rendering.

5. HISTORY OF ARCHITECTURE

Study of various styles of Architecture and methods of construction through the ages in the world with emphasis on Indian Architecture.

6. WORKSHOP PRACTICE

Ability to make building models with various materials such as card-board, wood, plastics, plaster of paris and metals. Ability to make simple joints in timber, pipes and other materials.

7. LANDSCAPE DESIGN

Understanding of Landscape elements like trees, shrubs, plants, water, rocks and development of landscape planning and application in architectural design.

8. STRUCTURAL MECHANICS AND THEORY OF STRUCTURES

Understanding the structural concepts and behaviour of structural elements, simple calculations for columns, beams, frames, footings, slabs, walls in concrete, steel and timber.

9. SURVEYING AND LEVELLING

Understanding of various survey and levelling instruments, carrying out surveys of land of medium complexity and preparation of survey plans.

10. BUILDING SERVICES & EQUIPMENT

Study of and designing for water supply, drainage, sewage disposal, electricity supply, wiring and lighting for buildings.

11. HUMANITIES

Study of sociology, economics and culture, as applicable for design of human settlements.

12. ESTIMATING AND COSTING

Systems of taking out quantities and estimating for all trades involved in construction of medium complexity.

13. PRINCIPLES OF HUMAN SETTLEMENTS

Man and environment : Biological and behavioural responses to human settlements; Design for living, natural and built-environment.

Ancient texts and treatises on settlement and area planning in India.

Human settlements during ancient medieval and modern periods in India, Europe and other parts of the world. Characteristics of human settlements built by Muslims and Hindu rulers in India.

Stage-II

	Subjects of Examination	Minimum No. of periods of 50 to 60 minutes duration
1.	Architectural design, planning and thesis	570
2.	Building Construction, Materials and Specifications	210
3.	Building Sciences & Services	60
4.	Town Planning (Theory)	60
5.	Professional Practice	90
6.	Building Bye-laws	15
7.	Structure System	45
8.	Electives such as : (i) Housing (ii) Urban Design (iii) Interior Design (iv) Building Management (v) Landscape Design (vi) Urban Planning	60
		1110

Note:

1. The names given to the subjects of study are suggestive only. The same subjects pertaining to the architecture may be taught under different names. The emphasis on teaching various subjects may vary from institution to institution. New subjects may be introduced and certain subjects given less emphasis depending upon the requirement and educational philosophy of an institution. Teaching in the second stage may be a lot more flexible. Students may obtain employment and may come back to complete the prescribed course later. It may also be possible to complete the second stage of the course as a part time course depending upon the facilities available in an institution.
2. For the purpose of calculating the periods of study, 30 periods per week per semester/term of class are considered to be adequate for 1½ years of study at the rate of 16 weeks per semester/term, the total for second stage work out to be 1440 hours.
3. In order to give freedom to the institutions to orient their course as per their own philosophy, approx. 75 per cent of the total periods of study have been taken into account for calculating the minimum period of study for each subject while the institutions may allot the balance approx. 25 per cent of the study periods to the subject of their choice.
4. Minimum total contact period should be 1440. Thus 360 periods are to be allotted by the institution to the subjects of their choice.

Brief Description of the Subjects Listed in the Stage-II of the Course

1. ARCHITECTURAL DESIGN, PLANNING AND THESIS

Design of complicated buildings and campuses involving analytical studies of building and spaces from sociological, economic and cultural points of view such as Universities, industrial Estates, Housing Schemes etc. Thesis on a subject requiring detailed analytical study to lay down validity and design criteria presented in graphic form, models and report. Thesis may also be on research projects presented as a written report.

2. BUILDING CONSTRUCITON, MATERIALS AND SPECIFICATIONS

Study of advanced building construction methods with new materials such as plastics, metals, synthetic boards and latest techniques in the use of concrete.

3. BULDING SCIENCES & SERVICES

Study of Accoustics, Air-Conditioning, Heating, Cooling, Mechanical installations, Fire-control, Water supply and Drainage system for complicated buildings.

4. TOWN PLANNING (THEORY)

A general understanding of Town Planning principles as they have evolved through the ages.

5. PROFESSIONAL PRACTICE

The examination in professional practice is designed to assess the knowledge, skill and maturity which fit the architect to fulfil his professional duties and his understanding of the management of an office organisation for such as a purpose. The sylabii should cover the following areas of study:-

General principles of Indian Contract Act; Building Contracts generally, Conditions and forms of contract, Administration of contracts, Principles of arbitration, Indian Arbitration Act, 1940, valuation of properties, Architectural competitions; Easements of properties; Report writing; Codes of Practice; Conditions of Engagement; Duties and responsibilities of an architect in relation to owner, contractor, relate professional and public; Indian Standards & Codes of Practice.

(Planning and Building legislation etc. has been omitted because this is covered under Building Bye-laws - item 6)

6. BUILDING BYE-LAWS

Study of building regulations to enable to design and prepare drawings for submission to concerned bodies.

7. STRUCTURE SYSTEMS

Study of new structural technology such as space frames, prestressing, shells and understanding of the limitations and scope of these techniques. Calculations for these techniques are not expected.

8. ELECTIVES SUCH AS:

(a) Housing
(b) Urban Design
(c) Interior Design
(d) Building Management
(e) Landscape Design
(f) Urban Planning

Intensive study of one or more of the subjects offered as elective depending upon the expertise available to an institution. The list of the subjects may be enlarged but they should be related to Architecture.

APPENDIX - B

Statement showing the designation, pay-scale and qualification etc. required to be prescribed for faculty positions

Sl. No.	Designation	Pay-Scale	Qualifications
1.	Lecturer	Rs. 700-40-1100-50-1600	Bachelor's Degree in Architecture or equivalent plus two years of relevant professional experience. OR Master's Degree in Architecture or equivalent and one year's relevant professional experience. Provided further that if a candidate does not possess a Master's Degree in Architecture and professional experience or a person possessing such experience is not found suitable, the person appointed will be required to obtain the desired professional experience within a period of five years on his appointment failing which he will not be able to earn future increment until he fulfils this requirement.
2.	Reader/Asstt.Professor	Rs. 1200-50-1300-60-1900	B.Arch. or equivalent with 7 years experience in Teaching / Research/ ProfessionalWork, OR M. Arch. Or equivalent with 5 years experience in Teaching/Professional Work.
3.	Professor	Rs 1500-60-1800-100-2000-125/2-2500	B.Arch. or equivalent with 10 years of experience in Teaching/Research Work. Experience of guiding research. OR M. Arch. or equivalent with 8 years of experience in Teaching/Research/ Professional Work.
4.	Principal/Head of Department	Rs. 1500-60-1800-100-2000-125/2-2500 plus special pay	B.Arch. or equivalent with 10 years experience in Teaching/Research/Professional Work. Experience of guiding research. OR M. Arch. Or equivalent with 8 years of experience in Teaching/ Research/ Professional work.
5.	The Institution may appoint Professor of Eminence.		

Note :

1. It is advisable that approx. 25% of the teaching load should be allotted to the visiting faculty so that the students are brought in closer contact with the persons actively engaged in practice.
2. Each institution may have a staff structure consisting of the following :

   Principal or Head of Department and Professors, Asstt. Professors/Readers and Lecturers in the ratio of 1:2:4.
3. The Institutions may recruit qualified persons in the field of Engineering/Qty. Surveying/Art/Humanities depending on the actual requirements against the total sanctioned strength.
4. The equivalent qualification shall mean any such qualification as recognised by the Council of Architecture for registration as an Architect under section 25 of the Architects Act, 1972.

APPENDIX - C

Physical Facilities

The Institution of Architecture should be located in a building to have a floor area of about 15 sq.m. per student. The building should include class rooms and at least 5 studios, adequate space for faculty members, library, workshop, materials museum, laboratories, exhibition/conference room, office accommodation and common area for students and staff. The space requirements per student for architectural education whether in the Institution or in the Hostel are apt to be more than for most other types of professional courses like engineering and medicine because of the large space required for preparation of drawings. This factor should be borne in mind in the design of Hostels and Studios.

Facilities may also be provided for extra-curricular activities and sports.

The equipment in the workshop/laboratories has also to be provided to meet with the special requirement for architectural education. It is desirable to provide locker facilities in the studios for students.

The Library, Workshops, Laboratories and Photography unit should be managed by professionally qualified staff with adequate supporting staff to assist the students and faculty members in their academic programmes. There should also be administrative supporting staff to run the Architectural Institutions.

It is desirable to provide hostel accommodation and residential accommodation for staff and students in close proximity of the institution.