COUNCIL OF ARCHITECTURE

(Statutory Body of Govt. of India under the Architects Act, 1972)

MINIMUM STANDARDS OF ARCHITECTURAL EDUCATION REGULATIONS, 2015

In exercise of the powers conferred by clauses (e), (g), (h) and (j) of sub-section (2) and sub-section (1) 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, 2015.
- (2) These shall come into force from Academic Year 2016-17.

2. Definitions:

In these Regulations unless the context otherwise requires:

- a) "Act" means the Architects Act, 1972 (20 of 1972);
- b) "Approved Institution" means an Institution approved by the Council for imparting recognised architectural qualifications;
- c) "Architecture course" means an undergraduate course in Architecture approved by the Council;
- d) "Council" means of Council of Architecture constituted under Section 3 of the Act;
- e) "Executive Committee" means the Executive Committee constituted under Section 10 of the Act;
- f) "Faculty" means full time teaching staff members in the service of the institution;
- g) "Approved Teacher " means a full time teaching staff member selected by duly constituted selection committee by Institution / University, having representative of Council as its Member.
- h) "Institutions" means the colleges / departments / universities/ deemed universities / schools of architecture in India including offshore campuses of Indian Universities imparting full time recognised architectural qualifications, with the approval of Council;
- i) "Recognised Qualifications" means any qualification in architecture for the time being included in the Schedule under Section 14 or notified under section 15 of Act; and
- j) "Registrar" means the Registrar of the Council.

3. Duration and Stages of the Course:

- (1) The duration of architecture course shall be of minimum five academic years or ten semesters of 16 to 18 working weeks per Term/ Semester.
- (2) The architecture course shall be conducted in two stages.
- (3) Stage one of the course shall be minimum of first 3 academic years or 6 semesters (each of 16 to 18 working weeks) and shall be the basic course.

- (4) Stage one shall be completed by a candidate within 7 years of admission to the Architecture Course failing which he/she shall not be allowed to pursue the course nor will be eligible for registration as an architect.
 - Provided that the candidates may appear for the examinations by concerned universities/institutions, if allowed to keep term (ATKT).
- (5) Stage Two of the course shall be of minimum 2 academic years / 4 semesters including Practical Training of minimum 100 working days (One semester) up to maximum of 200 working days (two semesters). No candidate shall be eligible for Practical Training unless he/she successfully completes and declared pass in all the studio oriented subjects of years/semesters preceding the commencement of Practical Training.
- (6) For registration as an Architect, a candidate must successfully complete both stages from an institution approved by the Council.

4. Admission to the Architecture Course:

The Institutions shall admit only such candidates who qualify National Aptitude Test in Architecture (NATA) or any aptitude test in Architecture, drawn on the pattern prescribed in these standards, conducted by a competent authority in the country. The Institutions / Competent Authorities dealing with admission of candidates to the 1St year of 5-year B.Arch., Degree course shall follow the eligibility criteria and Admission Norms prescribed in Appendix-A.

5. Intake and Migration:

- (1) The institutions shall admit students at First Year level of the architecture course as per the intake sanctioned by the Council, from time to time. No admissions in the course over and above the intake of the Council shall be made by institutions.
- (2) The number of students shall not exceed a maximum of 40 in a class. If more than 40 students are admitted as per the sanctioned intake, classes for batches of 40 students each shall be conducted concurrently by the institution.
- (3) The seats under supernumerary quota shall be as per the policy of Central Government in force and shall be over and above the sanctioned intake. The institutions must create additional physical and academic infrastructural facilities, as may be required, for the same.
- (4) The Institutions may allow, at their discretion, migration of students from one Institution to another, within the Intake sanctioned by the Council, unless otherwise specifically instructed / permitted by the Council, with due intimation to the council.

6. Courses and period of Studies:

- (1) The Institutions shall follow the courses and period of studies as prescribed by Council in Appendix A1. The Council may revise the same from time to time.
- (2) The Conduct of Architectural Thesis / Project & Practical Training shall be as prescribed in Appendix A2.

7. Applying for commencement of architecture course:

- (1) No Institution shall set up and commence the architecture course, except with the prior permission of the Council.
- (2) An institution intending to commence course in architecture may apply to the Council in the prescribed application form along with evaluation charges before the last date of receiving such application, as may be fixed by the Council from time to time.
- (3) The Council, upon receipt of such application from an institution and subject to fulfillment of Norms and Standards, shall issue letter of intent to the institution and inspect the institution.

- (4) The Council, reserves the right to accept or reject any application for new course based on its policies / perspective plan / merit of the case.
- (5) Upon inspection of an institution and consideration of the inspection report by the Executive Committee, the decision to grant approval or otherwise shall be communicated to the institution.

8. Applying for extension of approval for architectural course:

- (1) Institutions shall follow the academic calendar as prescribed by the Council for seeking approval for imparting architecture course(s).
- (2) An Institution once approved by the Council shall seek continuation and extension of its approval for imparting the architecture course, in prescribed application form upon payment of inspection/ extension of approval charges as may be fixed by the Council, from time to time.
- (3) The Council upon receipt of such application along with the requisite charges shall appoint inspectors to inspect the institution.

Provided where the Council is of the opinion that Institution is not maintaining the minimum standards prescribed by it, the Council may issue a show cause notice to the Institution seeking its response to the same within 21 days and upon considering such representation / response may decide as to grant continuation of approval or otherwise.

9. Applying for additional intake in architectural course:

- (1) An institution intending to seek additional intake in architecture course may apply to the Council in the prescribed application form along with evaluation charges before the last date of receiving such application, as may be fixed by the Council from time to time.
- (2) The Council, upon receipt of such application from an institution and subject to fulfillment of Norms and Standards, shall issue letter of intent to the institution and inspect the institution.
- (3) The Council, reserves the right to accept or reject any application for additional intake based on its policies / perspective plan / merit of the case.

10. Approval for imparting architectural course by new/existing institutions:

- (1) The Executive Committee, after going through the inspection report submitted by the inspectors in respect of commencement of new architecture course, extension of approval or additional intake (as the case may be) and information furnished by the institution, shall assess the standards of Architectural Education being imparted at the institution vis-à-vis the Council Norms & Standards and accordingly, decide on granting approval by specifying the intake and approval period or otherwise.
 - Provided where the Executive Committee is of the opinion that Institution is not maintaining the minimum standards prescribed by it, the Council may issue a show cause notice to the Institution seeking its response to the same within 21 days and upon considering such representation/ response may decide as to grant continuation of approval or otherwise including reduction in intake, no intake or discontinuation of course.
- (2) The Executive Committee may, if it so desires, constitute a Scrutiny Committee of Experts for scrutiny of the reports of inspectors and appoint members as per requirement, which shall submit its report to the Executive Committee after reviewing the facilities available and standards maintained by the Institution vis-a-vis the standards laid down by the Council.
- (3) The Executive Committee may ask the University or examining body, wherever required, to furnish its views/ observations on report of the inspectors within a specified period and upon receipt of such observations, may decide on the same.
- (4) The decision of the Executive Committee shall be communicated to the institution, university and other concerned authorities along with a copy of the report of inspectors and observations of the Executive Committee to ensure that the deficiencies, if any, in the conduct of architecture course are removed and Norms and Standards prescribed by the Council are followed.

11. Inspection of Institutions and their examinations

The inspection of institutions for the purposes of the Act shall be carried out in accordance with the following manner, namely:-

- (1) An Institution intending to impart a recognised qualification in Architecture shall be inspected by the Council for according approval or otherwise;
- (2) Each institution imparting instruction in architecture course shall be inspected by the Council at least once in five years or as deemed necessary by the Council;
- (3) The Executive Committee shall appoint such number of inspectors as may be deemed necessary to inspect an institution or to attend to any examination and to report thereon:

Provided that the minimum number of inspectors for such an inspection shall be two except when a surprise inspection or special academic review is conducted.

- (4) Every inspector shall receive from the Chairman, Executive Committee, a formal commission in writing under the seal of the Council;
- (5) the instructions of the Chairman shall specify the institution or institutions, courses of studies and scheme of examination or examinations or training programme or educational standards including staff, equipments, accommodation, training and other facilities which are required to be inspected or attended;
- (6) The Chairman shall inform the inspector that he is to report to the Executive Committee who shall submit their final report with recommendations to the Council in accordance with these regulations;
- (7) The Registrar shall provide the inspector with a copy of the documents and of recommendations, wherever exists, of the Council or the Executive Committee in regard to recognition of the qualification or educational standards and improvements to be made thereon.

12. Appointment, powers and duties of inspectors

(1) An architect possessing necessary qualifications and experience in the opinion of Executive Committee may be appointed as Inspector for inspection of an Institution;

Provided that the President, the Vice President, the members of the Executive Committee of the Council and officers of the Council shall not be appointed as Inspectors.

Provided further that the Executive Committee may appoint a member of the Executive Committee or an officer of the Council where an Inspection Committee for surprise Inspection or any Special Inspection or High Power Inspection is required to be appointed.

- (2) It shall be the duty of the inspector: -
 - (a) to make himself/ herself acquainted with such previous reports, if any, of the institution(s) which he is appointed to inspect and with the observations of the University or examining body and the report of the Council thereon;
 - (b) to visit personally the institution or examination or training which he/ she is required to inspect but not to interfere with the conduct thereof;
 - (c) to inspect the institution which has applied for approval and recognition of its course of study or is providing recognised qualifications and to see that the course is run in conformity with the standards laid down by the Council;
 - (d) to report to the Executive Committee in writing in the prescribed format his/ her opinion on the sufficiency or insufficiency of standards of education or examination of institution inspected by him/her;

- (e) to set forth in his/ her report, in order, all the necessary particulars as to the question proposed in the written, oral or practical parts of each examination attended by him/her, the sessional and class work submitted by the candidates at the time of practical or viva-voce examination, the arrangements made for invigilation, the method and scales of marking, the standards of knowledge shown by the successful candidates and generally all such details as may be required for adjudicating on the scope and character of the examination;
- (f) to report necessary particulars in respect of institutions so as to enable the Executive Committee to assess the existing facilities for teaching as well as the extent to which the recommendations of the Council has been given effect to;
- (3) Every report of the inspector(s) shall be deemed confidential and shall be submitted to the Council in such manner as may be prescribed by the Executive Committee, from time to time.
- (4) The Executive Committee may, if it so desire, constitute a Scrutiny Committee of Experts for scrutinizing the reports submitted by inspectors by appointing required number of members.
- (5) The Scrutiny Committee shall make comparison of facilities available and standards maintained by the Institution vis-a-vis the standards laid down by the Council and submit its findings/observations to the Executive Committee.
- (6) The Executive Committee may ask the University or examining body, wherever required, to furnish its views / observations on report of the inspectors within 15 days and upon receipt of such observations, may decide on the same.

13. Examination, Standards of Proficiency and Qualification of Examiners:

- The University or an independent examining body shall conduct the examinations at the end of each stage.
- (2) In case where the independent examining body is not a University or a statutory body, the conduct of examination shall be as per the scheme approved by the Council.
- (3) The sessional work shall, as far as possible, be assessed by a Jury / Panel of internal and external examiners.
- (4) The weightage of marks for subjects having both class work and examination may not exceed the ratio of 50:50.
- (5) The pass percentage shall not be less than 45% in each subject and shall not be less than 50% in the aggregate.
- (6) The pass percentage shall not be less than 45% in each subject.
- (7) 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) The Council may appoint inspectors to attend and inspect any Examinations including Thesis held by any Institution as well as affiliating University.
- (9) The Affiliating University (including IITs, NITs and SPAs) must have an independent Faculty of Architecture. The Institution should be independent entity and not Department of the Institution.

14. Standards of staff, equipment, accommodation, training and other facilities:

- (1) All institutions shall maintain strength of full-time faculty based on sanctioned intake as prescribed in Appendix - B. In addition to the full-time faculty, the visiting faculty will take approximately 25% of the teaching load.
- (2) The institution shall maintain an overall teacher-student ratio of 1:10.
- (3) All full time teaching staff members are to be selected by duly constituted selection committee having a representative of Council of Architecture as one of its Members.
- (4) The minimum qualifications, experience and structure for teaching posts in Degree level Institutions shall be as prescribed in Appendix B1.
 - Selection/ recruitment of Faculty of Architecture shall be made in a transparent manner through Interview Board / Selection Committee for Institutional / University Selection Process. Interview Board / Selection Committee setup for Recruitment(s) / Promotion(s) in respect of Faculty positions shall have a representative of Council who shall act as a full-fledged member.
- (5) The Retirement Age including Superannuation for Teaching posts for Assistant and Associate Professors, excluding Professor (Design Chair) shall be 65 years or as stipulated by the Central Government. The Retirement Age including Superannuation for Professors and Head of Institution shall be 70 years. The retirement age of the Teaching posts under Central / State Government Employees shall be as stipulated by the respective Governments from time to time.
- (6) All institutions shall be required to create space and infrastructure requirements in relation to sanctioned intake as prescribed in Appendix-C for imparting architecture course.
- (7) Career Advancement Scheme for faculty of Architecture shall be prescribed by the Council from time to time.

15. Policy on Courses and Intake in Existing and New Institutions:

- (1) The Council may, from time to time, lay down the process and criteria for undertaking inspections, granting intake and according approval for commencement of architecture course, extension of approval, increase/decrease in intake, based on the prescribed standards and perspective plan.
- (2) The Council may conduct surprise inspection of any Institution through its inspectors to ascertain the minimum standards of architectural education available for ensuring that the said course is being imparted as per the Rules / Regulations / Guidelines prescribed by Council, from time to time.
- (3) The institution applying for commencement of architecture course may commence the course at a temporary location and building, meeting the minimum standards prescribed by the Council provided the institution must possess its own land at the time of applying for the course and make available permanent built-up space and building with necessary infrastructure for the course within the next 3 years of commencement of course.
- (4) The Institutions imparting courses in Architecture, in temporary location for more than 3 years or at location not approved by the Council, shall be liable for closure and / or any other appropriate action, as the Council or the Executive Committee deems necessary.
- (5) No course other than those specifically approved by the Council shall run in the premises of an Institution sharing the same facilities.
- (6) The institutions imparting architecture course must have valid affiliation with a University established by an Act of the Central or State Legislature or conferred authority by Law to

award Degree Course in Architecture. No admission shall be made by the Institution without valid affiliation with a University.

(7) The institutions imparting architecture course shall be required to submit online information related to the institution along with physical & academic infrastructure and facilities, as may be prescribed by the Council, as mandatory disclosure. The institutions shall be required to maintain the information updated at all times.

16. Sanctions:

Any violation of these Regulations by an Institution / University may attract action as listed below. In case of continuous failure to maintain the standards, the Council may initiate process for derecognition of the qualification awarded by the particular College / Institution / University or any such other action as the Council deems necessary in such cases.

A. Unapproved Institutions:

- No Institution shall offer or impart Architecture course without obtaining approval from the Council.
- (2) Any Institution offering Architecture course, without approval of Council shall be treated as unapproved Institution.
- (3) Any unapproved Institution imparting architecture course already in existence prior to these standards coming in force, which intends to seek approval of the Council for introduction of Architecture course or regularize its earlier batches, shall follow the procedure as prescribed from time to time.
- (4) Students admitted by unapproved Institutions shall be subjected to First Stage Test/ Competency Test to be conducted by Council for regularization.

B. Action in case of violation of Minimum Standards:

The following actions may be initiated by the Executive Committee based on the report of the Inspectors and/or observations/recommendations of Scrutiny committee or any other committee appointed by Council:

- (1) Any Institution running an Architecture course in violation of the Minimum Standards shall be liable for appropriate action including withdrawal of recognition under Section 20 of the Act.
- (2) Where the recognition of an Institution has been withdrawn, the restoration shall be as per the procedure for setting up a new Institution as defined in this regulation.
- (3) Appropriate action above means and includes any of the following:
 - i) Issuance of Warning Letter.
 - ii) Imposing appropriate Fine.
 - iii) Reduction of the duration of Grant of Approval including Re-Inspection.
 - iv) Reduction of Intake.
 - v) Suspension of admission status.
 - vi) Any other appropriate Legal Action.

Provided that no action under Regulation 16 (B) (3) (iii) to (vi) shall be taken without granting pre-decisional hearing to the institution before the Executive Committee.

Provided further that nothing in this Regulation shall prevent an Institution which claims to have remedied the deficiencies to seek review of the decisions of the Executive Committee under Regulation 16 (B) (3) (iii) to (vi) if such representation is made within the prescribed period as per the academic calendar.

- C. Nothing in this Regulation shall prevent the Council to devise a Competency Test/ Remedial Teaching/ undertake Comprehensive Academic Audit/ Review or devise a mentoring programme or any such other measures, to enable students who have undergone deficient courses in Architecture, to evaluate their suitability for Registration as an Architect.
- 17. Repeal of Regulation 29 and 30 of Council of Architecture Regulations, 1982 and Council of Architecture Minimum Standards of Architectural Education Regulations, 1983 and Saving.
 - (1) The Regulation 29 and 30 of Council of Architecture Regulations, 1982 and Council of Architecture Minimum Standards of Architectural Education Regulations, 1983 are hereby repealed.
 - (2) Notwithstanding such repeal, any action taken or anything done in pursuance of any provision of the Regulations 1982 or Regulations of 1983 shall be deemed to have been made, done or taken under the provisions of these Regulations.

New Delhi January 8, 2016

Registrar

1.0 ADMISSIONS

- 1.1 The candidates admitted to 1st year of a 5-year course without fulfilling the eligibility prescribed by the Council shall not be deemed to have attained recognised qualification listed in the schedule of qualifications appended to the Architects Act, 1972. Such candidates will not be eligible for registration as an architect with the Council of Architecture.
- 1.2 No admission shall be made under the Central Government Nominee / Minority Institution / Management / Non-Resident Indian / Person of Indian Origin or any another Quota unless a candidate has passed an Aptitude Test in Architecture.
- 1.3 No lateral admission to any stage / semester of the 5-year course in Architecture shall be made.

2.0 ELIGIBILITY FOR ADMISSION

(1) *No candidate, other than a candidate possessing 50% marks in aggregate and with Mathematics, Physics and Chemistry as subjects of examination at the end of 10+2 scheme of Senior School of Certificate Examination or equivalent examination, shall be admitted to the architecture course:

Explanation -

- (a) *Equivalent examination shall mean any 10+2, 10+3 Diploma or any such examination, duly recognised by the Central / State Government, which has been declared equivalent to 10+2 examination by Central / State Government or its designated authority. In case of Diploma, Mathematics, Physics and Chemistry shall be the subjects of examination during the course of study.
- (b) *The candidate should have obtained minimum passing marks in Mathematics, Physics and Chemistry in case any of these subjects are taken as additional/ optional subjects at the qualifying examination.
- (2) Admission to 1st year of Architecture course shall be made subject to the candidates passing the specially designed aptitude test in Architecture, as prescribed by the Council, to assess their aptitude.
- (3) The Institutions shall follow the reservation policy of respective Government in granting relaxation in percentage of marks obtained in the qualifying examination for admission in the institutions. However, no relaxation is applicable for qualifying the Aptitude Test in Architecture.
- (4) The Institutions shall give weightage of 50% marks for aptitude test in the matter of admissions.
- *NOTE: The requirement of Physics and Chemistry as subjects of examination in addition to Mathematics shall come into force after three complete academic sessions from the date of notification in the Official Gazette to accommodate prospective students enrolled for 10+2 and 10+3 examinations.

3.0 APTITUDE TEST IN ARCHITECTURE

The Aptitude Test in Architecture shall consist of 2 papers:

- (i) Test I Aesthetic Sensitivity 100 marks duration of test: One hour.
- (ii) Test II Drawing 100 marks duration of test: Two hours.

3.1 Test - I

Aesthetic Sensitivity is to evaluate candidate's perception, imagination and observation; creativity and communication; and Architectural awareness. The test shall comprise of :

- (i) Visualising three dimensional objects from two dimensional drawings.
- (ii) Visualising different sides of three dimensional object.
- (iii) Identifying commonly used materials and objects based on their textural qualities.
- (iv) Analytical Reasoning.
- (v) Mental Ability.
- (vi) Imaginative comprehension and expression.
- (vii) Architectural awareness.

3.2 Test - II

The Drawing aptitude of the candidate shall be judged on the following aspects:

- Ability to sketch a given object proportionately and rendering the same in visually appealing manner.
- (ii) Visualising and drawing the effects of light on the object and shadows cast on the surroundings.
- (iii) Sense of perspective drawing.
- (iv) Combining and composing given three dimensional elements to form a building or structural form.
- (v) Creating interesting two dimensional composition using given shapes or forms.
- (vi) Creating visual harmony using colours in given composition.
- (vii) Understanding of scale and sense of proportion.
- (viii) Drawing from memory through pencil sketch on themes from day to day experiences.

4.0 WEIGHTAGE

The following shall be the weightage for preparing the merit list:

Architectural Aptitude test – 50% Qualifying Examination – 50%

Note: In order to pass an Aptitude Test in Architecture, the candidate must obtain a minimum of 40% marks.

5.0 COMPETENT AUTHORITY FOR ADMISSION

The admissions shall be carried out by the Competent authority duly formulated / recognised by State / Central Government which may include the Government or University, or such authorities / institution concerned [School / College of Architecture] / Association or Federation of Institutions [Schools or Colleges of Architecture], based on the marks obtained in the Aptitude Test in Architecture and the qualifying examinations as mentioned above, in the ratio of 50:50. Admissions shall be made in fair, transparent, non-exploitative and based on merit.

All architectural institutions in the country shall be required to submit a list of students admitted in the B.Arch. degree course, mentioning the total score in an Aptitude Test in Architecture, marks secured and total marks in the qualifying examination, to the Council in prescribed format.

6.0 ADMISSION COUNSELING

The Admission counseling for the candidates who have applied for admission to the 5-year Degree Course in Architecture should be held independent of the counseling for Engineering, Pharmacy and / or Medicine and other disciplines.

The word 'independent' means that the counseling for architecture should not be combined with other courses. The admission/counseling process for architecture degree course may be done first i.e. before all other streams or on the same date(s) as fixed for other streams but independently / separately / simultaneously without mixing with other disciplines.

7.0 FEE STRUCTURE, PERCENTAGE AND RESERVATION OF SEATS

The fee structure and admission of students to architecture course under various categories / admission quota, shall be as determined by the concerned Government/competent authority.

8.0 COMMENCEMENT OF COURSE

Classes for 1St year/Semester of a 5-year B.Arch. Course shall not commence later than the 1St working day in the month of September of a calendar year.

COURSES, PERIODS OF STUDY AND SUBJECTS OF EXAMINATION

Stage 1

S.No.	Subjects of Examination.	Minimum No. of periods of 50 to 60 minutes duration
1.	Architectural Design	540
2.	Architectural Graphics Skills – Manual and Computer	360
3.	Building Construction Technology	306
4.	Structural Design and Systems	288
5.	Basic Design and Visual Arts	180
6.	History of Architecture, Art and Culture	126
7.	Building Services and Equipments	90
8.	Workshop Practice and Site Exposure	90
9.	Building Materials and Sciences	90
10.	Surveying and Leveling	36
11.	Estimation, Costing and Specifications writing	72
12.	Climatology, Environmental Studies and Landscape	63
13.	Humanities	30
14.	Human Settlements and Vernacular Architecture	30
15.	Building Bye Laws and Codes of Practice	30
16	Theory of Design	63
17.	Computer Applications in Architecture (Non-Graphic)	36
	Sub Total	2430
18.	Elective Subjects / Subjects of Choice of Institution	450 to 810
	Total	2880 to 3240

Note:

- The names given to the subjects of study are suggestive only and institutions may use different nomenclatures. 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 educational philosophy of the institution and context of the region where the institution is located.
- 2. For the purpose of calculating the periods of study, 30 periods per week with Minimum 16 and Maximum 18 weeks per semester / term are considered.
- 3. Minimum total contact periods should be 2880 (16 Weeks per Semester with 30 Hrs / week) for Stage I. In order to give freedom to the Institutions to orient the Course as per their own philosophy 450 to 810* periods are to be allotted by the institutions for the Electives and the subjects of their choice.
 - * Applicable for 18 weeks per Semester.
- 4. While calculating credits all contact hours (lectures / studios) shall have equal weightage.

Brief description of the subjects listed in the First Stage of the Course.

1. ARCHITECTURAL DESIGN

Applying the knowledge gained in other subjects and theory of design methodology to design of buildings of medium complexity e.g. Residences, Schools, Colleges, Public Buildings, Dispensaries, Hospitals, Shops, Offices, Industries, Buildings for Recreation and Entertainment, etc., and present them in graphic form using both manual and/ or electronic medium. In all the assignments, due cognizance must be given to accessibility to differently abled users.

2. ARCHITECTURAL GRAPHICS SKILLS - MANUAL AND COMPUTER

Ability to present in graphic form all elements of building design - study of shades and shadows, textures, tones, colors, geometrical form, perspectives and projections, free hand drawing and rendering in different media, computer aided drafting skills in 2D and 3D, use of rendering, presentation and modeling software packages.

3. BUILDING CONSTRUCTION TECHNOLOGY

Knowledge of various structural systems and methods of construction and detailing of buildings of medium complexity using natural and manmade materials including foundation, walls, roofs, staircase, joinery and finishes, culminating in the capacity to integrate the knowledge acquired to architectural design exercise for making working drawings for a three storied contemporary building and learning the skills of presenting these in the graphic form using both manual and electronic medium.

4. STRUCTURAL DESIGN AND SYSTEMS

Understanding the structural concepts and behavior of structural elements, simple calculations for columns, beams, frames, footings, slabs, walls etc. using various materials and timber and relating the knowledge acquired to architectural design.

5. BASIC DESIGN AND VISUAL ARTS

Developing skills in manual presentation techniques, use of various media for presentation, principles of two dimensional and three dimensional compositions, principles of design etc.

6. HISTORY OF ARCHITECTURE, ART AND CULTURE

Study of evolution of various styles of architecture and methods of construction and influence of art, culture and geography on architecture through the ages in the world, with emphasis on architecture of the Indian Sub continent and the region in which the institution is located, study of Indian culture related to architectural design

7. BUILDING SERVICES AND EQUIPMENTS

Study of and design and detailing for water supply, drainage, sewage disposal, garbage disposal, electrification, illumination, air conditioning, fire hazard protection, acoustical treatment, rainwater harvesting, etc. in buildings and building premises, disaster management systems, intelligent energy conservation systems, electronic security and surveillance systems for buildings, etc.

8. WORKSHOP PRACTICE AND SITE EXPOSURE

Developing skills 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, basic electrical circuits:

Exposure to building construction practices on site of various items of work from foundation to roof and finishes, Market survey for different building materials.

9. BUILDING MATERIALS AND SCIENCES

Knowledge of properties and behavior of both natural and man-made building materials such as bricks, stones, metals, timber, steel and finishing materials in contemporary buildings. Effects of sun, rain, wind and other climatic and environmental conditions on various building materials and built environment and the science of design for creating effective human comfort conditions within the built environment.

10. SURVEYING AND LEVELLING

Understanding principles of surveying and leveling, use of various survey and leveling instruments, carrying out surveys of land of medium complexity and preparation of survey plans.

11. ESTIMATION, COSTING AND SPECIFICATIONS WRITING

Systems of taking out quantities and estimating for all trades involved in construction of medium complexity, Writing specifications for materials and various items of work.

12. CLIMATOLOGY, ENVIRONMENTAL STUDIES AND LANDSCAPE

Understanding of Climate and its impact on architectural design, fundamentals of climatology and environmental studies, Passive climatic control.

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

13. HUMANITIES

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

14. HUMAN SETTLEMENTS AND VERNACULAR ARCHITECTURE

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

Human settlements during ancient, medieval and modern periods in India, Europe and other parts of the world.

Ancient texts and treatises on settlement and area planning in India, characteristics of human settlements built by Buddhist, Muslims and Hindu rulers in India.

15. BUILDING BYE LAWS AND CODES OF PRACTICES

Study of building control Standards, bye laws and codes of practices prevalent in different development authorities and municipalities in India.

16. THEORY OF DESIGN

Understanding and appreciation of principles and percepts of issues related to architectural design in theory and practice. Appreciation of architectural spaces with respect to man and his behavior.

17. COMPUTER APPLICATIONS IN ARCHITECTURE (Non Graphic)

Developing skills in non-graphic applications of computer as required for architectural profession and office management, such as word processing, spreadsheets, power point presentations, databases, etc.

18. ELECTIVES:

The groups, names and topics for electives are only suggestive, Institute may add many more electives and alter the list as per Philosophy of Institution, local requirements and resources, the subjects could be mix from groups below.

A. INTERIOR ARCHITECTURE

- 1. Theory of Interior Design
- 2. Visual Arts.
- 3. Advance basic design.
- 4. Vernacular Interiors
- 5. Traditional crafts.
- 6. Contemporary Crafts.
- 7. Furniture design

B. ECO ARCHITECTURE

- 1. Horticulture.
- 2. Geology
- 3. Theory of Landscape design
- 4. Landscape construction
- 5. Street furniture design
- 6. Ecology
- 7. Green & Sustainable Architecture

C. CONSTRUCTION TECHNOLOGY

- 1. Advance workshop
- 2. Basics of Management
- 3. Site management
- 4. Advance Surveying & Leveling
- 5. PERT / CPM Techniques
- 6. Low cost materials
- 7. Design of services
- 8. Basic accounting

S. No.	Subjects of Examination	Minimum No. of periods of 50 to 60 minutes duration
1	Project (Thesis)	324
2	Architectural Design	216
3	Building Construction and Materials	108
4	Advanced Services	36
5	Advanced Structural Design and Systems	36
6	Professional practice	72
7	Research in Architecture	36
8.	Minimum 4 Electives. (from list below / subjects of	252 to 612
	choice of the Institution)	
i	Housing	
ii	Urban Design	
iii	Interior Design	
iv	Construction Management	
V	Landscape Architecture	
vi	Urban and Regional Planning	
vii	Architectural Conservation	
viii	Disaster Management	
ix	Architectural Journalism	
Х	Theatre/Film Set Design	
хi	Expert Systems Advanced Computing	
xii	Marketing Skills	
xiii	Building Systems Integration	
xiv	Visual Communication	
XV	Sustainable Architecture	
xvi	Energy Conscious Architecture	
xvii	Intelligent Buildings	
xviii	Modular Coordination	
xix	Art in Architecture	
XX	Environmental studies	
	Total	1080 to 1440

Notes:

- 1) The names given to the subjects of study are suggestive only and institutions may use different nomenclatures. 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.
- 2) For the purpose of calculating the periods of study, 30 periods per week with minimum sixteen and maximum eighteen weeks per semester/term are considered.
- 3) In order to give freedom to the institutions to orient their course as per their own philosophy, minimum 252 to maximum 612* periods of study are to be allotted by the institutions for electives and the subjects of their choice.
 - *Applicable for 16 weeks per semester for three semesters in stage 2.
- 4) Minimum total contact period should be 1080 (18 weeks per semester with 30 hours per week for two semesters) for stage 2 and 1440 (16 weeks per semester with 30 hours per week for three semesters) for stage 2.
- 5) Practical training of minimum 100 work days (One semester in case of 16 weeks per semester) or maximum 200 days (Two semesters in case of 18 weeks per semester) is to be completed during stage 2. (See Appendix A2 for further details.)
- 6) While calculating credits all contact hours (lectures / studios) shall have equal weightage.

Brief Description of the Subjects Listed in the Second Stage of the Course

1. PROJECT (THESIS)

A major project selected by the students in the area of their interest and attempted after detailed analytical study of the chosen topic/subject. The project is to be done under faculty guidance and presented in a graphic form, model, computer generated graphics and report. In this project the student is expected to individually synthesize all that is learnt in the previous semesters, conduct investigative research through library and other resources, co-ordinate all pertinent architectural issues with the design concept and objectives to reach a viable solution for the resolution of the selected problem. Thesis may also be on theme-based research on architectural projects involving collection and analysis of relevant data presented as an analytical study report.

2. ARCHITECTURAL DESIGN

Design of complex buildings and campuses involving analytical studies of building and spaces from sociological, economic and cultural points of view. The topics can be universities, industrial estates, housing schemes etc.

3. BUILDING CONSTRUCTION AND MATERIALS

Study of advanced building construction methods and innovative architectural detailing with new materials such as plastics, metals, synthetic boards, glass, composite panels etc,

4. ADVANCED SERVICES

Study of advanced building services like HVAC, water supply and disposal, electrical, acoustical, lighting related to complex building situations like high-rise, complexes, cities etc. Building Information Modelling/Management.

5. ADVANCED STRUCTURAL DESIGN AND SYSTEMS

Design of complex building structures like domes, shells, retaining walls, etc. Study of structural systems like Bulk active structures, Form active structures, Vector active structures, Surface active structures, Cable structures, Arches, Vaults and Domes, Shells, Membrane structures, Pneumatic structures, Folded plates, Pre stressed concrete, space frames etc.

6. PROFESSIONAL PRACTICE

Study of office practices, Office administration, Accounting, Building Bye-laws, Tendering, Contracts and Arbitration, Valuation, Professional conduct and ethics, Architects Act 1972, Role of COA, IIA and UIA, Implementing a building contract.

7. RESEARCH IN ARCHITECTURE

Research in Architecture, Scientific methods with special emphasis on architectural research, Presentation methodologies, Evaluation, Report writing.

Introduction to the Architectural Thesis/ Project and preparation of Synopsis.

8. ELECTIVES

i) HOUSING

Housing survey and methodologies. Factors effecting housings. Housing Demand, Policies, Slums, Housing Typologies, Finance, Agencies etc. Housing case studies. Post Occupancy Evaluation.

ii) URBAN DESIGN

Historicity, Determinants of urban form, Urban Design vocabulary, Imageability concepts, Design principles, Aesthetic legislation, Case studies.

iii) INTERIOR DESIGN

Historicity, Principles, Built-in and movable furniture, Interior fittings and furnishings, Color, form, texture and lighting in interiors, Materials used in interiors, Building services related to interiors.

iv) CONSTRUCTION MANAGEMENT

Objectives and functions, management tools, PERT, CPM, Other scientific methods, Line of Balance, Inspection and quality controls, Safety in construction

v) LANDSCAPE ARCHITECTURE

Man and nature, Ecology, Historical background, Environmental impact assessment, National environmental policy, Biodiversity, Contemporary landscape design, Site-structure relationship Case studies.

vi) URBAN AND REGIONAL PLANNING

Evolution of settlement design, Classification of settlements, Planning methodologies, Contribution of prominent planners, Urban planning policies, Urban renewal schemes and methodologies, Regional planning principles and methodologies, Constraints and factors of consideration for regional plans.

vii) ARCHITECTURAL CONSERVATION

History and theory of conservation, Philosophy of conservation, Values and Ethics, Cultural heritage, Conservation methods, Classifications, Management of historic sites, Studies of various charters. Role of INTACH, UNESCO, ECOMOS and other such organisations.

viii) DISASTER MANAGEMENT

Study of building designs to resist, Earthquake, Fire, Flood, Cyclone, Avalanche and other natural disasters. Post disaster problem resolutions.

ix) ARCHITECTURAL JOURNALISM

Structure of Architectural journals, Writing descriptive and analytical reports, Editing write ups, Photo journalism, Books reviews, Page compositions, The public process. Electronic media.

x) THEATRE/ FILM SET DESIGN

History of set and backdrop design for performance, Theme based design strategies, Period and modern sets, Technology applications

xi) EXPERT SYSTEMS - ADVANCED COMPUTING

Networking, Web design, 3-D modeling, Rendering through software, Walk through, Digital Architecture, parametric design, Space design simulation, etc.

xii) MARKETING SKILLS

Building materials market – demand and supply systems, Bulk and retail marketing, Materials promotion and survey.

xiii) BUILDING SYSTEMS INTEGRATION

System and Sub-systems in buildings, analysis of sub-systems and relationship and sub-system. Building systems in different building typologies, Optimisations and sub-system.

xiv) VISUAL COMMUNICATION

Visual communication in architecture, built forms and environment, Way finding in architecture and spaces between built environment.

xv) SUSTAINABLE ARCHITECTURE

Sustainability- Principles and methods, Energy conscious design ecological balance conservation of natural resources, Solar passive architecture, Re-cycling.

xvi) ENERGY CONSCIENCE ARCHITECTURE

Use of energy in buildings, Conserving energy, Solar passive and solar active systems, wind energy, Biomass energy, Re-cycling.

xvii) INTELLIGENT BUILDING

Control systems for various buildings services, Types of controllers. Preparation of necessary drawings for installing control systems, Integrated building management system, Remote monitoring and management, Home automation, Developments in service control systems

xviii) MODULAR COORDINATION

Importance of modular coordination in contemporary design and construction and its application in building industry

xix) ART IN ARCHITECTURE

Role of art in history of world architecture, Symbiotic relationship of art and architecture, application of different art forms in architecture. Works of different artists and architects that reflect the inter relationship.

xx) ENVIRONMENTAL STUDIES

Environmental factors effecting human habitat such as climate, environmental pollutions, environmental degradation, green cover etc. at the micro and macro scales.

GUIDELINES FOR CONDUCT OF PRACTICAL TRAINING AND ARCHITECTURAL THESIS / PROJECT

- 1. During stage II the practical training of minimum 100 working days (One semester)* up to maximum 200 working days (two semesters)** duration shall be carried out in the office of an experienced architect or in the allied field / research organization, duly approved by the institution and under supervision of an experienced architect.
 - * Applicable for 16 weeks per Semester.
 - ** Applicable for 18 weeks per Semester.
- 2. The practical training shall be supervised and evaluated as part of curricular studies.
- 3. The Architectural Thesis / Project shall be prepared under the guidance of an experienced Faculty member/ Practicing architect with minimum experience of five years, duly approved by the institution.
- 4. The institution shall conduct the internal evaluation at stages for the Architectural Thesis / Project with the guide as a co-assessor.
- 5. A jury comprising of an internal and external examiner and the guide shall conduct the final examination (Viva-voce) of the Architectural Thesis / Project.
- 6. No candidate shall be eligible for Practical Training unless he/she successfully completes and declared pass in all the studio oriented subjects* of years/ semesters preceding the commencement of Practical Training.
 - * In case the results of preceding semester/ year are not declared prior to commencement of practical training, the concerned head of institution shall certify that the quality of work and progress of the said candidate was satisfactory.

STAFF REQUIREMENT: (Strength of full time-faculty based on sanctioned intake)

FULL TIME TEACHING STAFF:

Year			I II							II			I	V			Total				
Intake	Prin	Prof	Asso	Asst	Prin	Prof	Asso	Asst													
40	1	0	1	2	1	0	2	4	1	1	3	5	1	1	4	7	1	1	4	7	13
80	1	0	2	4	1	1	3	8	1	2	5	11	1	3	7	14	1	3	7	14	25
120*	1	1	2	6	1	2	5	11	1	4	8	15	1	5	10	21	1	5	10	21	37

^{*}These numbers are for institutes where intake of 120 is already granted at commencement. For new institutes where additional intake of 40 is granted after first batch of 80 completes stage 1, faculty requirement shall be calculated separately for intake of 80 at IV year + intake of 40 at I year.

Notes:

- 1) Minimum 50 % Teaching Faculty on cadre wise Regular basis is must. Balance, up to 50% can be Faculty on cadre wise Tenure basis.
- 2) Only candidates registered with Council of Architecture (COA) under the provisions of the Architects Act, 1972 shall be eligible for the above posts subject to minimum qualifications and experience as prescribed by COA.
- 3) In addition to above, approximately 25% of the teaching load should be allotted to the Visiting faculty drawn from profession.
- 4) In addition to above full time faculty institute may recruit qualified faculty in the field of Engineering / Fine Arts / Humanities, etc. depending on actual requirements, on full time / part time basis. The qualifications, pay scales and service conditions of full-time faculty members other than Architects shall be as per UGC Norms.
- 5) For intake exceeding 80, the faculty requirement shall be calculated progressively in the multiples of intake of 40.
- 6) *Maximum One Professor can be appointed as Professor Design chair per intake of 40.
- 7) Professor Design Chair and other faculty members appointed on tenure basis cannot be considered as Head of the Institution / Principal / Director.
- 8) Upto 50% of the faculty members other than professors can be on tenure basis.

NON TEACHING STAFF

Sr	Position				Remarks						
	Intake		40			80			120		
	Year of operation	1	II	III	I	II	III	I	II	III	
1	Librarian	1	1	1	1	1	1	1	1	1	Qualifications As per UGC
2.	Assistant Librarian	-	-	-	_	-	-	-	-	1	Desirable
3	Lab / Workshop Technician	-	1	2	-	1	2	1	2	2	Min one for computer centre
4	Administrative and Accounts personnel	1	2	2	2	3	4	3	3	4	
	·	1	1	2	1	1	2	2	3	4	
5	Class IV employees		As required								

MINIMUM QUALIFICATIONS, EXPERIENCE AND STRUCTURE FOR TEACHING POSTS IN DEGREE LEVEL ARCHITECTURAL INSTITUTIONS

Sr	Cadre	Educational Qualifications	Experience* (Excluding time period for acquisition of PG/Ph.D. qualifications)
1	Assistant Professor	First class Bachelor's Degree in Architecture OR Bachelor's Degree in Architecture AND First class M.Arch. or equivalent.	One year experience. (Relaxation in experience may be given to candidates having M.Arch. degree (or equivalent) from University recognised by UGC or other competent authority)
2	Associate Professor	First class Bachelor's Degree in Architecture AND M.Arch. or equivalent OR Bachelor's Degree in Architecture AND First class M.Arch. or Equivalent OR First class Bachelor's Degree in Architecture AND Ph.D. in Architecture.	Eight years experience out of which - Minimum Three years Teaching experience as full time** Faculty / Five years Teaching experience as Visiting Faculty. OR Ten years Practice experience. (Relaxation up to three years in teaching experience may be given to candidates having M.Arch. degree (or equivalent) and Ph.D. in Architecture from University recognised by UGC or other competent authority)
3	Professor	First class Bachelor's Degree in Architecture AND M.Arch. or equivalent OR Bachelor's Degree in Architecture AND First class M.Arch., or equivalent OR First class Bachelor's Degree in Architecture AND Ph.D. in Architecture.	Thirteen years experience out of which - Minimum Five years Teaching experience as Associate Professor. OR Fifteen years Practice experience out of which - Five years Teaching experience as Visiting Faculty. (Relaxation up to three years in teaching experience may be given to candidates having M.Arch. degree (or equivalent) and Ph.D. in Architecture from University recognised by UGC or other competent authority)

Sr	Cadre	Educational Qualifications	Experience* (Excluding time period for acquisition of PG/Ph.D. qualifications)
4	Principal / Director	First class Bachelor's Degree in Architecture AND M.Arch., or Equivalent OR Bachelor's Degree in Architecture AND First class M.Arch., or Equivalent OR First class Bachelor's Degree in Architecture AND Ph.D. in Architecture.	Eighteen years experience out of which - Minimum Eight years as Associate Professor. OR Twenty years Practice experience out of which - Ten years teaching experience as Visiting Faculty. (Relaxation up to three years in teaching experience may be given to candidates having M.Arch. degree (or equivalent) and Ph.D. in Architecture from University recognised by UGC or other competent authority) Desirable 1. Five years experience as Professor. 2. Experience in Administration at responsible position.
5	Professor (Design Chair) Each institution may have one position per intake of 40 on this chair.	Bachelor's Degree in Architecture or Equivalent.	Twenty years of experience with commendable and acknowledged work/experience in Practice/ Teaching.

1.0 Explanations:

- **1.1** *Experience shall mean experience in Practice and/or Teaching and/or Research in the field of Architecture. Experience in Practice may be substantiated by Experience certificates from employers, Work orders, Completion certificates & Sample Drawings of the projects undertaken as the case may be.
- **1.2** **Full time faculty means a registered architect, who has put up full time service as a faculty member with the institutions approved by COA, either on regular (Permanent) or tenure basis.
- 1.3 The equivalent PG programmes to that of M. Arch. degree shall be notified by Council of Architecture from time to time. The existing List of Post graduate programmes considered equivalent to M.Arch. degree for the purpose of employment in the Institutions imparting Architectural education shall be as per Table No. 1.4.
- 1.4 Undergraduate qualifications acquired through self study / non-formal mode though acceptable for purpose of Registration shall not be considered as equivalent Qualification for recruitment as Teacher. However, such candidates with Post Graduate qualification in Architecture through formal mode are acceptable for Teaching.
- 1.5 Ph.D. in Architecture shall be Ph.D. degrees conferred by recognised Indian Universities on any topic related to various subjects taught in Architecture. Ph.D. in Architecture awarded by universities outside India shall be considered equivalent only after such certification from Association of Indian Universities and/or any other competent authority of the Central/State Government.

2.0 Notes :

2.1 Only candidates registered with Council of Architecture (COA) under the provisions of the Architects Act, 1972 shall be eligible for the above posts.

- 2.2 All the qualifications appearing in the schedule of qualifications under section 14 or notified under 15 of the Architects' Act 1972 shall be considered at par with Bachelor's Degree in Architecture for the purpose of recruitment as faculty member.
- 2.3 Each Institution shall have minimum staff structure of 12 full time faculty members for an intake of 40, in addition to the Principal / Director / Head of Department in the cadre ratio of: Professors 1: Associate Professors 2: Assistant Professors 4
 For intake more than 40, proportionate increase in the above posts shall be made.

Of these full time faculty members, minimum 50% must be on permanent posts and rest may be on tenure basis. However, Principal / Head of Institution has to be a regular (permanent) Employee.

- **2.4** Approximately 25% of the teaching load should be allotted to the Visiting faculty drawn from the Profession.
- 2.5 In addition to above full time faculty members institutions may recruit qualified persons in the field of Engineering / Quantity Surveying / Fine Arts / Humanities, etc. depending on actual requirements, on full time / part time / clock hour basis. For such full-time faculty members the qualifications and service conditions shall be as prescribed by UGC/ University / Central or State Government as the case may be.
- 2.6 If class / division are not awarded, a minimum of 60% marks in aggregate shall be considered equivalent to first class / division. If a grade point system is adopted the CGPA will be converted into equivalent marks as given in the table E-6 of the notification no. 1-65/NEC/98-99, March 15, 2000 (Degree level Government institutions) and May 3, 2000 (Degree level Self financing institutions)

Grade point	Percentage of Marks
6.25	55
6.75	60
7.25	65
7.75	70
8.25	75

- 2.7 All full time, regular faculty members must be paid the remuneration/ salary prescribed by University Grants Commission or such other Government body, in force at the time of appointment and duly revised from time to time till further notification from Council of Architecture.
- 2.8 To recognize the services rendered by senior faculty members who do not fit into above requirements, and are already in full-time employment at the same Institution for 15 years, the requirement of qualifications may be relaxed only once in the career for promotion to higher post, except for the post of Principal / Head of Institution.
- **2.9** The norm of First class at B.Arch. level may be relaxed for recruitment at Assistant Professor level for deserving candidates having minimum TEN years of experience. Such appointments shall be Tenure basis only.
- 2.10 All faculty members must be encouraged to actively pursue practice / research without neglecting their duties towards Institution / students and institutes may support faculty members in such activities.
- **2.11** The post of Professor (Design Chair) will be considered under the posts of professors on Tenure basis.
- 2.12 The procedure to decide on the equivalence of Ph.D. awarded by faculties other than Architecture, research works in referred journals or significant professional work with Ph.D. in Architecture will be determined by the Council of Architecture only. In case the institution or University wishes to decide such equivalence, it will be mandatory to have one nominee from the Council of Architecture on the committee deciding such equivalence.
- **2.13** Service conditions of affiliating university and respective government for faculty members shall be applicable to all full time permanent faculty members.

LIST OF POST GRADUATE PROGRAMMES TO BE CONSIDERED EQUIVALENT TO M.ARCH. FOR THE PURPOSE OF RECRUITMENT/EMPLOYMENT AS FACULTY MEMBERS IN ARCHITECTURAL INSTITUTIONS

The Post Graduate degree or diploma programmes in the following areas of specialization having duration of Two year/Four Semester (Full-Time) or Three years/Six Semester (Part-Time), granted by Indian Universities/competent Authorities recognised by Central/State government shall be considered equivalent to M.Arch. for the purpose of employment in the Institutions imparting Architectural education:

- 1. Architectural/ Heritage/ Building Conservation
- 2. Urban Design
- 3. Interior Design
- 4. Landscape Architecture
- 5. Product Design
- 6. Visual Communication
- 7. Sustainable Design
- 8. Housing
- 9. Urban Planning
- 10. Urban and Regional Planning
- 11. City Planning
- 12. Town and country planning
- 13. Urban Development
- 14. Transportation Planning
- 15. Environmental Planning
- 16. Infrastructural / International / Construction / Project Management
- 17. Building Technology
- 18. Structural Design
- 19. Appropriate Technology
- 20. HVAC Design
- 21. Building Services
- 22. Building Automation
- 23. Computer Aided Design
- 24. Digital Architecture
- 25. Urban Infrastructure
- 26. Valuation
- 27. Construction Engineering
- 28. Architecture Technology

Note: 1. All architects possessing Post Graduate Degree/ Diploma awarded by Authorities outside India shall be required to produce certificate of equivalence to that of M. Arch. degree awarded by Indian Universities from Association of Indian Universities and/or any other competent authority of the Central/State Government, in order to be considered for employment as faculty members.

- 2. In case specializations of any Post Graduate degree or diploma programmes are not listed above, the same shall be considered on case-to-case basis by the Council for ascertaining their equivalence.
- 3. During certain period in the past, the post graduate courses offered in India were of one and half years (Three semesters) Full-Time duration. Such courses shall be considered equivalent to two years (Four semesters) course.

INFRASTRUCTURE REQUIREMENTS

A: SPACE

S.	Year of Operation →		1 st Ye	ar	2	2 nd Ye	ear	;	3 rd Ye	ear	2	1 th Ye	ar	5	5 th Ye	ar	Remarks
N.o.	Sanctioned Intake>	40	80	120	40	80	120	40	80	120	40	80	120	40	80	120	
	Activity Spaces (Carpet Area)																
1.	Studio - 120 sq. m each	1	2	3	2	4	6	3	6	9	4	8	12	4	8	12	Flexibilty in terms of studio spaces can be based on local conditions, provided that area of 3 Sq. M. per student of sanctioned intake is made available.
2.	Class room - 60* sq. m each	1	2	3	1	2	3	2	3	4	2	3	4	2	3	4	*- Maximum 2 class rooms can be combined together to cater to theory class of maximum 80 students i.e. 120 sq.m. Provided with digital projection facilities and sound amplifier system.
3.	Labs and Workshops - 40 sq.m each	1	1	1	2	2	2	2	3	3	2	3	3	2	3	3	Workshop, Material Museum etc.,
4.	Computer Centre - 60 sq. m	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	
5	Library	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Library should have 0.6 Sq.M. per Student upto total sanctioned strength of 200 and 0.3 Sq.M. for every additional Student beyond Sanctioned strength of 200.
6.	Principal's Cabin - 30 sq.m	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	with waiting lobby
7.	Administrative Office - 30 sq. m 60 sq.m	1 -	- 1	- 1	1	- 1	- 1	1	- 1	- 1	1 -	- 1	- 1	1 -	- 1	- 1	
8.	Staff Rooms / Cabins - Professor- 12 sq. m each Associate Professor- 8 sq. m each Assistant Professor- 6 sq. m each																As per the COA faculty norms in the yearly progressive fashion

9.	Staff Lounge														
	30 sq. m		1	-	-	1	-	-	1	-	-	1	-	-	
	60 sq.m		-	1	1	-	1	1	-	1	1	-	1	1	
10.	Construction Yard - 200 sq. m														Open space activity from second year onwards

Note: Depending on local conditions, the areas mentioned above may vary by upto 20%.

Desirable Activity Spaces:

- 1. Canteen
- 2. Stationary Shop
- 3. Reprography Section
- 4. Open air theatre with stage
- 5. Permanent Exhibition space
- 6. Provision for outdoor sports facility
- 7. Girls Common Room.
- 8. Resource Center.
- 9. Submission and Exam Room.

Desirable Labs:

- 1. Climatology / Environment*
- 2. Surveying*
- 3. Materials Testing
- 4. Electrical / Lighting / Illumination

- 5. Plumbing and Sanitation
- 6. Acoustics
- 7. Material Museum.*

Recommended Workshops

- Model making*
- 2. Carpentry*
- 3. Metal craft

Note: Labs / workshops with * are mandatory.

B: LIBRARY FACILITIES

- 1. Minimum 300 books on subjects of Architecture shall be available in the library for the intake of 40 (including minimum 100 titles) at the time of 1st Inspection.
- 2. Add 150 books on subjects of Architecture (including minimum 50 titles) for every additional intake of 40.
- 3. From second year onwards, minimum 120 books on subjects of Architecture (including minimum 40 titles) for every year per intake of 40.
- 4. Library of old schools, having more than 5000 Titles; should acquire minimum 30 titles on subjects of Architecture per intake of 40 every year.
- 5. Journals and Periodicals of architectural relevance as below -

Intake/ Year	I		II	Ш		IV		V		
	International National (INT) (NAT)		(INT)	(NAT)	(INT)	(NAT)	(INT)	(NAT)	(INT)	(NAT)
40	1	4	1	4	2	6	2	8	2	8
80 and above	1	4	2	5	2	8	4	10	4	10

Desirable: e-books and e-journals along with computer terminal with net facility for reference.

At least 2 Refereed journals (Min. 1 international) per intake of 40 shall be subscribed.

C: COMPUTER CENTER

Intake/ Year	I	II	III	IV	V
40/ 80/ 120	10	20	40	40	40

Requisite licensed software and peripherals such as printers, plotters, scanners, etc. shall be available at the computer center.

Upgrading of systems (hardware and software) shall be done every three years. Computers more than three years old shall not be counted as part of lab.

Broadband internet connectivity of appropriate bandwidth shall be available to all computers.

Desirable:

All faculty and staff shall be provided with individual/ personal computers in addition to above the computer center requirements.

Wifi connectivity throughout the campus freely accessible to faculty and students.

LAND REQUIREMENTS:

Minimum 8000 Sq. M. or Independent or undivided and contiguous share of land adequate enough to provide for built floor space of 2,000 Sq.M. for Intake of 40, 3,000 Sq.M. for intake of 80 and 4,000 Sq.M. for intake of 120 in B.Arch. course; provided further that the built space should be contiguous. Further, the Institution should also have sufficient space for sports, co-curricular activities and hostel, canteen and other facilities.

The land where the building of the institution is located/built must be institutional land and must be owned or availed on long lease (more than 33 years with provision of renewal) by the trust / society / company.