

## Preface

The Council of Architecture had prescribed the Council of Architecture (Minimum Standards of Architectural Education) Regulations, 1983, in the year 1983. Since then, the architectural education has undergone a significant change. This has necessitated review of these standards with a fresh perspective, keeping in mind the present demands of the architectural education in the country and to introduce them with changes, wherever necessary.

The Council of Architecture is empowered under Section 21 of the Architects Act, 1972 to prescribe the Minimum Standards of Architectural Education required for granting recognized qualifications by colleges or institutions in India. Pursuant to Section 21, the Council has, from time to time, prescribed various Minimum Standards of Architectural Education during its past meetings viz. 47<sup>th</sup> Meeting of the Council held on 26.05.2006 & 27.05.2006; 84<sup>th</sup> & 89<sup>th</sup> Meetings of the Executive Committee held on 24.02.2006 & 21.03.2007 respectively; and 49<sup>th</sup> Meeting of the Council held on 29.06.2007.

These standards are now being prescribed and adopted by the Council as Council of Architecture - Minimum Standards of Architectural Education, 2008, which shall supplement the Regulations of 1983. All institutions imparting architectural education in the country for awarding recognised architectural qualifications under the Architects Act, 1972, shall be required to adhere to these minimum standards of architectural education.

# **COUNCIL OF ARCHITECTURE**

(An statutory body of Govt. of India under the Architects Act, 1972)

## **MINIMUM STANDARDS OF ARCHITECTURAL EDUCATION, 2008 PRESCRIBED UNDER SECTION 21 OF THE ARCHITECTS ACT, 1972**

In exercise of the powers conferred under section 21 of the Architects Act, 1972 (20 of 1972), the Council of Architecture hereby makes the following Minimum Standards of Architectural Education supplementing the Council of Architecture (Minimum Standards of Architectural Education) Regulations, 1983, namely:-

### **1. Short Title and Commencement**

- (1) These standards may be called the Council of Architecture - Minimum Standards of Architectural Education, 2008.

### **2. Duration and Stages of the Course**

- (1) The architecture course shall be of minimum duration of 5 academic years / 10 semesters of approximately 18 working weeks each inclusive of one year of practical training after the first stage in a professional's office.
- (2) The 5 years Bachelor's Degree Course in Architecture may be conducted in two stages.
- (3) The First stage of the course shall be the first 3 academic years or 6 semesters (each of approximately 18 working weeks) of institutional academic studies. The First stage shall be completed within 5 years of admission to the B.Arch. Course.
- (4) The Second stage of the course shall be of 2 academic years/ 4 semesters including one year of practical training.
- (5) Registration under the Architects Act, 1972, is acceptable only after successful completion of both the stages.

### **3. Admission to the Architecture Course**

- (1) The Institutions shall admit only such students who have qualified in an Aptitude Test in Architecture.
- (2) The Institutions/ Competent Admission Authorities dealing with admission of candidates to the 1<sup>st</sup> year of 5-year B.Arch. Degree course are required to follow the admission norms of the Council which is placed at Appendix-A.
- (3) The institutions shall not give weightage of more than 50% marks of Aptitude Test in Architecture in the matter of admissions.

### **4. 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-A1.
- (2) The Guidelines for Conduct of Architectural Thesis/Project and Practical Training are prescribed in Appendix-A2.

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

- (1) The institutions shall maintain a strength of full time-faculty of 15 (including Principal/HOD) for intake of 40. In addition to the full-time, the visiting faculty will take approximately 25% of the teaching load.
- (2) The institution with the maximum intake of 40 in a class may have the faculty pattern as prescribed in Appendix-B1.
- (3) The Career Advancement Scheme for the faculty has been prescribed in Appendix-B2.

- 6. Sanctions:** Any violation of these Minimum Standards by a College/Institution/University may attract reduction in its intake/no intake/withdrawal of intake, No Admission status and in case of continuous failure to maintain the standards, the Council may initiate process for de-recognition of qualification awarded by the particular College/ Institution/University or any such other action as the Council deems necessary in such cases.

Notwithstanding anything contained in these standards, 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.

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**REVISED GUIDELINES FOR ADMISSION TO 1<sup>ST</sup> YEAR OF  
5-YEAR DEGREE COURSE IN ARCHITECTURE**

**1.0 ADMISSIONS:**

- 1.1 The candidates admitted to 1st year of a 5-year course without passing an Aptitude Test in Architecture and who have been granted B. Arch. degree or other qualifications 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 Minority Institution/Management/Non-Resident Indian/Person of Indian Origin or any another Quota unless a candidate is subjected to 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**

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 subjects of examination at the 10+2 level.

or

*10+3 Diploma (any stream) recognised by Central/ State Governments with 50% aggregate marks.*

or

*International Baccalaureate Diploma, after 10 years of schooling, with not less than 50% marks in aggregate and with Mathematics as compulsory subject of examination.*

**3.0 NATIONAL APTITUDE TEST IN ARCHITECTURE**

As per the Minimum Standards prescribed by Council of Architecture (CoA) under the Architects Act, 1972, admission of candidates to first year of 5-year B.Arch. degree course shall be subject to their passing an aptitude test in architecture. It is advisable to admit students in the 1<sup>st</sup> year of 5 year B.Arch. degree course on the basis of marks obtained in the National Aptitude Test in Architecture (NATA) administered by CoA

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
- (iv) 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 :

- (i) 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 :

Architectural Aptitude – 50% (Maximum)

Qualifying Examination – 50% (Maximum)

*i.e. 10+2 OR 10+3 years*

Diploma recognised by the  
Central / State governments OR IB Diploma  
and/ or other test.

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

### 5.0 COMPETENT AUTHORITY FOR ADMISSION

The admissions shall be carried out by the Competent authority i.e. the Government or University, or such authorities/ institution concerned [School/ College of Architecture]/ Association or Federation of Institutions [Schools or College 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 CoA.

### 6.0 ADMISSION COUNSELLING

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

The word '*independent*' does not imply that the admission counselling to architecture course is to be done on completion of the admission/counseling process for all other streams. It means that the counselling for architecture should not be combined with engineering courses. The CoA insists that the admission/counseling process for architecture degree course 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 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, in accordance with the Judgement of Supreme Court, dated 14.08.2003 [Writ Petition (C) No.350 of 1993 – Islamic Academy of Education and Anr. V/s State of Karnataka and Ors]. The reservation policy for admission as applicable shall be followed.*

## 8.0 COMMENCEMENT OF COURSE

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

### Appendix-A1

#### COURSES, PERIODS OF STUDY AND SUBJECTS OF EXAMINATION

##### Stage 1

	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 Practices	30
16.	Theory of Design	63
17.	Computer Applications in Architecture (Non-Graphic)	36
	Sub Total	2430
18.	Group Subjects* (only for specialization)	810
	<b>Total</b>	<b>3240</b>

##### Note:

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 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 per semester/term are considered.
3. In order to give freedom to the Institutions to orient the Course as per their own philosophy approximately 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 shall allot the balance approximately 25 percent of the study periods to the subjects of their choice.
4. Minimum total contact periods should be 3240. Thus, 810 periods are to be allotted by the institution to the subjects of their choice.
5. Institutions offering specialisation in fields like interior design, eco-architecture, construction technology, etc. shall offer group of subjects relevant to the subject of specialization to consume the balance 25 percent work load.

##### 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 electronic medium.

## **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 man made 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 in concrete, steel 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 and culture 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

## **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.

## **10. SURVEYING AND LEVELLING**

Understanding 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.

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 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 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. GROUP SUBJECTS OF SPECIALISATION**

The names and topics for elective are suggestive. Institute may add many more elective and alter the list as per local requirements and resources. For Non-specialisation the subjects could be mix from groups below as offered by institute to suite its philosophy.

### **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. Soil studies
3. Theory of Landscape design
4. Landscape construction
5. Street furniture design
6. Ecology
7. Plant Morphology

**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

**B. Architecture****Stage – 2**

	<b>Subjects of Examination</b>	<b>Minimum No. of periods of 50 to 60 minutes duration</b>
1	Project (Thesis)	288
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 Skills and Project introduction	36
	4 Electives	144
i	Housing	
ii	Urban Design	
iii	Interior Design	
iv	Construction Management	
v	Landscape design	
vi	Urban and Regional Planning	
vii	Architectural Conservation	
viii	Disaster Management	
Ix	Architectural Journalism	
x	Theatre/Film Set Design	
xi	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	936

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. 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 eighteen weeks are considered.
3. In order to give freedom to the institutions to orient their course as per their own philosophy, approx. 86.66 per cent of the total periods of study have been taken into account for the whole stage and the institutions may allot the balance approx. 13.33 per cent of the study periods to the subjects/areas of their choice.
4. Minimum total contact period should be 936. Thus 144 periods are to be allotted by the institution to the subjects/areas of their choice.
5. It is expected that entire final year is devoted to practical training.
6. It is suggested that subject of Professional practice and two electives may be offered together with Project work (Thesis).

### **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.

#### **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 SKILLS AND PROJECT INTRODUCTION**

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, Typologies, Finance, Agencies etc. Housing case studies. Post Occupancy Evaluation.

### **ii) URBAN DESIGN**

Historicity, Determinants of urban form, Urban Design vocabulary, Imagability 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 DESIGN**

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 organizations.

### **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.

## **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, Optimizations 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.

## **B. Architecture (Interior Design)**

### **Stage – 2**

	<b>Subjects of Examination</b>	<b>Minimum No. of periods of 50 to 60 minutes duration</b>
1	Project (Thesis)	288
2	Architectural and Interior Design	216
3	Building and Interior Construction and Materials	108
4	Interior Design Theory	36
5	Advanced Building and Interior Services	36
6	Professional practice	72
7	Research Skills and Project introduction	36

	4 Electives	144
I	Housing	
Ii	Urban Design	
Iii	Interior Construction Management	
Iv	Conservation of Buildings and Interiors	
V	Interior Landscape design	
Vi	Architectural Journalism	
Vii	Lighting of interiors	
Viii	Interior accessories design	
Ix	History and theory of interior design	
X	Theatre/Film Set Design	
Xi	Hotel interiors	
Xii	Shops and malls interiors	
Xiii	Marketing Skills	
Xiv	Building and Interior Systems Integration	
Xv	Visual Communication	
Xvi	Advance Furniture design	
Xvii	Art in interior design	
Xviii	Intelligent Buildings Interiors	
Xix	Modular Co-ordination	
Xx	Art in Architecture and Interiors	
	Total	936

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. 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 eighteen weeks are considered.
3. In order to give freedom to the institutions to orient their course as per their own philosophy, approx. 86.66 per cent of the total periods of study have been taken into account for the whole stage and the institutions may allot the balance approx. 13.33 per cent of the study periods to the subjects/areas of their choice.
4. Minimum total contact period should be 936. Thus 144 periods are to be allotted by the institution to the subjects/areas of their choice.

**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 and interior 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 and interior projects involving collection and analysis of relevant data presented as an analytical study report.

**2. ARCHITECTURAL AND INTERIOR DESIGN**

Design of complex buildings and campuses involving analytical studies of building and interior spaces from sociological, economic and cultural points of view. The topics can be universities, industrial estates, housing schemes etc. The exercises may also be oriented with emphasis on design of interior spaces.

### **3. BUILDING AND INTERIOR CONSTRUCTION AND MATERIALS**

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

### **4. INTERIOR DESIGN THEORY**

Elements of Interior Design, Principles of Interior Design, Concepts and Philosophies used in Interior Design, Interior Design methodologies.

### **5. ADVANCED BUILDING AND INTERIOR SERVICES**

Study of advanced building services like HVAC, water supply and disposal, electrical, acoustical, lighting related to complex building and interior situations like high-rise, 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 SKILLS AND PROJECT INTRODUCTION**

Research in Architecture and interiors, Scientific methods with special emphasis on architectural and interior research, Presentation methodologies, Evaluation, Report writing.  
Introduction to the Architectural and Interior Thesis Project and preparation of Synopsis.

### **8. ELECTIVES**

#### **i) HOUSING**

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

#### **ii) URBAN DESIGN**

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

#### **iii) INTERIOR CONSTRUCTION MANAGEMENT**

Managing small and large scale interior projects, project planning, material and labor management and phasing of parallel running interior projects

#### **iv) CONSERVATION OF BUILDINGS AND INTERIORS**

History and theory of conservation, Philosophy of conservation, Values and Ethics, Cultural heritage, Conservation methods, Classifications, Management of historic sites and buildings, Studies of various charters. Role of INTACH, UNESCO, ECOMOS and other organizations. Emphasis on conservation of historic interiors may be given.

#### **v) INTERIOR LANDSCAPE DESIGN**

Principles of interior landscaping, role of plant materials in interiors and their growth, and maintenance, Impact on micro climate of interiors with landscaping

#### **vi) 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.

## **vii) LIGHTING OF INTERIORS**

Artificial and natural lighting systems for interiors, Illumination techniques and types of luminaries used in interiors for different functions and displays, Creating ambience in interiors through lighting controls

## **ix) HISTORY AND THEORY OF INTERIOR DESIGN**

Study of history and theories of interior design in different periods and cultures, Changing trends observed with developing technologies and new materials

## **x) THEATRE/ FILM SET DESIGN**

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

## **xi) HOTEL INTERIORS**

Case studies and analysis of trends in hotel interiors, their typologies, thematic interiors, special services requirements for hotel interiors,

## **xii) SHOPS AND MALL INTERIORS**

Case studies and analysis of interiors of shops and malls, impact and influence of market conditions, display systems and changing social values on these interiors, high volume human traffic in large interiors and role of specification of finishing materials

## **xiii) MARKETING SKILLS**

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

## **xiv) BUILDING AND INTERIOR SYSTEMS INTEGRATION**

System and Sub-systems in buildings and interiors, analysis of sub-systems and relationship in different interior typologies, Optimizations and sub-system.

## **xv) VISUAL COMMUNICATION**

Visual communication in interiors and environment, Way finding in interior spaces, Role of graphic symbols and universal language

## **xvi) ADVANCE FURNITURE DESIGN**

Use of materials, impact of developing technologies on furniture design, mass production of furniture, incorporating local crafts in furniture design. New materials and production technologies.

## **xvii) ART IN INTERIOR DESIGN**

Role of art in history of interior architecture, Symbiotic relationship of art and interiors, application of different art forms in interior decoration. Works of different artists and sculptors and their contribution to interiors

## **xviii) INTELLIGENT BUILDINGS INTERIOR**

Control systems for various buildings services in interiors of buildings, 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

### **xix) MODULAR COORDINATION**

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

### **xx) ART IN INTERIOR DESIGN**

Role of art in history of interior architecture, Symbiotic relationship of art and interiors, application of different art forms in interior decoration. Works of different artists and sculptors and their contribution to interiors

### **B. Architecture (Eco Architecture)**

#### **Stage – 2**

	<b>Subjects of Examination</b>	<b>Minimum No. of periods of 50 to 60 minutes duration</b>
1	Architecture and Landscape Thesis	288
2	Architectural and Landscape Design	216
3	Building and Landscape Construction and Materials	108
4	Advanced Building and Landscape Services	36
5	Urban Design and Landscape	36
6	Professional practice	72
7	Research Skills and Project introduction	36
	4 Electives	144
i	Housing	
ii	Art in Architecture and Landscape	
iii	Interior Design	
iv	Urban Ecology	
v	Environment Impact assessment	
vi	Geographical Information Systems	
vii	Landscape Construction Management	
viii	Heritage and Conservation of Landscape	
ix	Interior Landscape design	
x	Streetscapes	
xi	Landscape Services	
xii	Experts Systems Advanced Computing	
xiii	Marketing Skills	
xiv	Landscape Systems Integration	
xv	Visual Communication	
xvi	Sustainable Architecture	
xvii	Energy Conscious Architecture	
xviii	Urban landscape design	
xix	Art in Public Spaces	
xx	Water in Urban Landscapes	
	Total Hours	936

#### Note:

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. 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 eighteen weeks are considered.
3. In order to give freedom to the institutions to orient their course as per their own philosophy, approx. 86.66 per cent of the total periods of study have been taken into account for the whole stage and the institutions may allot the balance approx. 13.33 per cent of the study periods to the subjects/areas of their choice.



4. Minimum total contact period should be 936. Thus 144 periods are to be allotted by the institution to the subjects/areas of their choice.
5. It is expected that entire final year is devoted to practical training.
6. It is suggested that subject of Professional practice and two electives may be offered together with Project work (Thesis).

### **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, coordinate all pertinent architectural and landscape 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 and landscape projects involving collection and analysis of relevant data presented as an analytical study report.

#### **2. ARCHITECTURAL AND LANDSCAPE DESIGN**

Design of complex buildings and campuses involving analytical studies of building and open spaces from sociological, economic and cultural points of view. The topics can be universities, industrial estates, housing schemes, parks, gardens, public spaces etc. The exercises may also be oriented with emphasis on design of landscape spaces.

#### **3. BUILDING AND LANDSCAPE CONSTRUCTION AND MATERIALS**

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

#### **4. ADVANCED BUILDING AND LANDSCAPE SERVICES**

Study of advanced building services like HVAC, water supply and disposal, electrical, acoustical, lighting related to complex building and landscape situations like high-rise, parks, open spaces etc.

#### **5. URBAN DESIGN AND LANDSCAPE**

Historicity, Determinants of urban and landscape form, Urban and Landscape Design vocabulary, Imagability concepts, Design principles, Aesthetic legislation, Case studies 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 SKILLS AND PROJECT INTRODUCTION**

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, Typologies, Finance, Agencies etc. Housing case studies. Post Occupancy Evaluation.

## **ii) ART IN ARCHITECTURE AND LANDSCAPE**

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

## **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) URBAN ECOLOGY**

Urban eco systems and its key issues, management of urban ecology, conserving site ecology through design. Concept of sustainable design in urban context. Environment management through eco friendly techniques.

## **v) ENVIRONMENT IMPACT ASSESSMENT**

Predicting of project / development impact on the existing landscape. Correlating use and existing landscape to reduce this impact. Designing with Nature. Using tools of analysis like layering, matrices etc.

## **vi) GEOGRAPHICAL INFORMATION SYSTEMS**

Introduction to Geographical Information System, its importance in environmental management. Aerial and satellite photo interpretation. Study of various GIS packages available in Market.

## **vii) LANDSCAPE CONSTRUCTION MANAGEMENT**

Role of a designer in phasing and scheduling works on site. Time management. Coordinating various agencies, cost analysis, tendering, etc.

## **viii) HERITAGE AND CONSERVATION OF LANDSCAPE**

Concepts of cultural and natural heritage landscapes. Approaches to conserve these sites and also temporally and spatially connecting them to the present day scenario. Decision making regarding interventions in these sites based upon grading of these sites.

## **ix) INTERIOR LANDSCAPE DESIGN**

Significance of interior landscape design in urban areas. Interior environmental factors affecting landscape design. Visual landscapes in interiors.

## **x) STREETSCAPES**

Street vegetation, traffic and design linkages, facades– Landuses – landscape linkage, Signages, etc. Concept of Imageability and legibility through landscapes.

## **xi) LANDSCAPE SERVICES**

Services specific to Landscape design – Introduction and significance. Lighting in Landscape, Storm water management, integrating rainwater harvesting with landscape, irrigation of soft landscapes using drip irrigation, etc.

## **xii) EXPERT SYSTEMS - ADVANCED COMPUTING**

Networking, Web design, 3-D modeling, Rendering through software, Walk through.

### **xiii) MARKETING SKILLS**

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

### **xiv) LANDSCAPE SYSTEMS INTEGRATION**

System and Sub-systems in landscapes and campuses, analysis of sub-systems and relationship between them. Optimizations and sub-system.

### **xv) VISUAL COMMUNICATION**

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

### **xvi) SUSTAINABLE ARCHITECTURE**

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

### **xvii) ENERGY CONSCIENCE ARCHITECTURE**

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

### **xviii) URBAN LANDSCAPE DESIGN**

Study of history of landscape design at urban level in different periods and cultures. Use of Urban landscape in visual, environmental and social context in modern times. Changing trends observed in new global socio-economic scenario.

### **xix) ART IN PUBLIC SPACES**

Types of art in public places – murals, sculpture. Usable art (furniture, water bodies etc.) Concepts of Public Art and Land Art. Evolution of art in landscapes.

### **xx) WATER IN URBAN LANDSCAPES**

Water as important element of urban landscapes. Visual, functional, ecological aspects of water as landscape element.

## **B. Architecture (Construction Technology)**

Stage – 2

	<b>Subjects of Examination</b>	<b>Minimum No. of periods of 50 to 60 minutes duration</b>
1	Project (Thesis)	288
2	Architectural Design and Project Management	216
3	Building Construction and Materials	108
4	Advanced Services	36
5	Project Planning and Management Systems	36
6	Professional practice	72
7	Research Skills and Project introduction	36
	4 Electives	144
i	Housing	
ii	Urban Design	
iii	Landscape Design	
iv	Project Contract System	
v	Construction Equipments and Methods	

vi	Operations Research	
vii	Construction Quality and Cost Controls	
viii	Disaster Management	
ix	Retrofitting of Buildings	
x	Labor Laws and Management	
xi	Building Bye Laws	
xii	Marketing Skills	
xiii	Expert Systems and Advanced Computing	
xiv	Infrastructure Planning and Management	
xv	Building Systems Integration	
xvi	Visual Communication	
xvii	Intelligent Buildings	
xviii	Estate Management	
xix	Modular Coordination	
xx	Building Systems Integration	
	Total	936

Note:

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. 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 eighteen weeks are considered.
3. In order to give freedom to the institutions to orient their course as per their own philosophy, approx. 86.66 per cent of the total periods of study have been taken into account for the whole stage and the institutions may allot the balance approx. 13.33 per cent of the study periods to the subjects/areas of their choice.
4. Minimum total contact period should be 936. Thus 144 periods are to be allotted by the institution to the subjects/areas of their choice.
5. It is expected that entire final year is devoted to practical training.
6. It is suggested that subject of Professional practice and two electives may be offered together with Project work (Thesis).

**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, coordinate all pertinent architectural and landscape 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 and landscape projects involving collection and analysis of relevant data presented as an analytical study report. The thesis may lay emphasis on application of construction technology/systems on the project.

**2. ARCHITECTURAL DESIGN AND PROJECT MANAGEMENT**

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. Application of project management techniques on architectural projects.

**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.

#### **5. PROJECT PLANNING AND MANAGEMENT SYSTEM**

Management system and techniques for various kinds of building projects both one-off and repetitive. Project planning and scheduling, resource management as applicable to building projects.

#### **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 SKILLS AND PROJECT INTRODUCTION**

Research in Architecture and construction technology, Scientific methods with special emphasis on architectural and construction technology 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, Typologies, Finance, Agencies etc. Housing case studies. Post Occupancy Evaluation.

##### **ii) URBAN DESIGN**

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

##### **iii) LANDSCAPE DESIGN**

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

##### **iv) PROJECT CONTRACT SYSTEMS**

Various types of Contract Systems: their suitability for diverse kinds of projects. Merits/Demerits of different systems. Management of contracts.

##### **v) CONSTRUCTION EQUIPMENTS AND METHODS**

Introduction to various construction equipments, their classification and selection keeping in view suitability of each equipment. Factors affecting output of equipments, management aspects of equipments and safety precaution aspects.

##### **vi) OPERATIONS RESEARCH**

Basic concepts of OR and its use in managing large complex projects that require effective use of various elements such as money, materials, equipment and people. Use of OR methods to determine better ways to co-ordinate these elements by applying analytical methods.

## **vii) Construction Quality and Cost Controls**

Factors effecting construction quality. Methods and processes of monitoring projects and compliance with relevant standards. Factors effecting project costs and cost control measures. Cost analysis, re-scheduling, reporting and project evaluation.

## **viii) DISASTER MANAGEMENT**

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

## **ix) RETRO FITTING OF BUILDINGS**

Reasons requiring retrofitting.. Assessment of structures through relevant tests. Various retrofitting solutions

## **x) LABOUR LAWS & MANAGEMENT**

Introduction to Labor Laws in India. Labor disputes and settlement issues. Management aspects relating to Labor Laws.

## **xi) BUILDING BYE LAWS**

Need and significance of Building Byelaws as Development Regulators. Study and application of some typical Byelaws on projects

## **xii) MARKETING SKILLS**

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

## **xiii) EXPERT SYSTEMS - ADVANCED COMPUTING**

Networking, Web design, 3-D modeling, Rendering through software, Walk through.

## **xiv) INFRASTRUCTURE PLANNING & MANAGEMENT**

Need and significance of Infrastructure as related to design of Buildings. Design, planning and application of Management Systems for infrastructure development.

## **xv) BUILDING SYSTEMS INTEGRATION**

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

## **xvi) VISUAL COMMUNICATION**

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

## **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) ESTATE MANAGEMENT**

Estate Management for controlling of budget issues (fixed/variable expenses), safety concerns regarding the structure, hiring, managing & training of staff. Management of services and utilities in existing estates.

**xix) MODULAR COORDINATION**

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

**xx) BUILDING SYSTEMS INTEGRATION**

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

**GUIDELINES FOR CONDUCT OF  
ARCHITECTURAL THESIS/PROJECT AND PRACTICAL TRAINING**

1. The practical training of one year duration shall be carried out in the office of an experienced architect registered with the Council of Architecture or trained professional of the relevant field in stage II.
2. The practical training shall be supervised and evaluated by the institution.
3. The Architectural Thesis/Project will be initiated in the seventh semester and completed in the eighth semester.
4. The candidate shall submit a synopsis of the Thesis Project and the institution will approve this before the candidate is allowed to proceed with the Thesis project.
5. The Architectural Thesis/Project shall be prepared under the guidance of an experienced teacher/qualified professional.
6. The institution shall conduct the internal evaluation stages for the Architectural Thesis/Project with the guide as a co-assessor.
7. A jury comprising of an internal and external examiner and the guide shall conduct the final examination of the Architectural Thesis/Project in the institution at the end of the Tenth semester as a University examination.



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

Sr	Cadre	Educational Qualifications	Work Experience (Excluding time period for acquisition of PG/ Ph.D qualifications)	Experience for candidates from practice
1	Lecturer	First class Bachelor's Degree in Architecture OR Bachelor's Degree in Architecture; AND First Class Master's Degree in Architecture	<b>DESIRABLE</b> One year Teaching Experience as Visiting teacher	<b>DESIRABLE</b> One year Teaching Experience as Visiting teacher
2	Assistant Professor	First class Bachelor's Degree in Architecture; AND Master's Degree in Architecture OR Bachelor's Degree in Architecture; AND First Class Master's Degree in Architecture OR First class Bachelor's Degree in Architecture; AND Ph. D. in Architecture	Eight Years Teaching Experience.	Eight Years Experience in Practice/ Research;  <b>DESIRABLE</b> Three Years Teaching Experience as Visiting teacher
3	Professor	First class Bachelor's Degree in Architecture; AND Master's Degree in Architecture OR Bachelor's Degree in Architecture; AND First Class Master's Degree in Architecture OR First class Bachelor's Degree in Architecture; AND Ph. D. in Architecture  (Desirable – Ph. D. in Architecture OR Published work in referred journals OR significant professional work which can be considered equivalent to Ph. D)	Thirteen Years Teaching Experience out of which Five years of Teaching Experience as Assistant Professor.  (Relaxation of upto three years in teaching experience may be given to candidates having Ph.D or equivalent)	Thirteen Years Experience in Practice/ Research;  <b>DESIRABLE</b> Five Years Teaching Experience as Visiting teacher
4	Professor (Design Chair)	Bachelor's Degree in Architecture	-	Each institution shall have one person appointed on this chair who has at least 20 years of professional experience and having done commendable professional work. Such appointment shall be for a tenure of 3 to 5 years.

5	Principal / Director	First class Bachelor's Degree in Architecture; AND Master's Degree in Architecture	Eighteen years of teaching experience out of which Ten Years Teaching Experience as Assistant Professor.	Eighteen Years Experience in Practice/ Research; <b>INCLUDING</b> Ten Years Teaching Experience as Visiting teacher
		OR	OR	
		Bachelor's Degree in Architecture; AND First Class Master's Degree in Architecture	Eighteen years of teaching experience out of which Five Years Teaching Experience as Professor.	
		OR	(Desirable – Experience in Administration at responsible position)	
		First class Bachelor's Degree in Architecture; AND Ph. D. in Architecture  (Desirable – Ph. D. in Architecture OR Published work in referred journals OR significant professional work which can be considered equivalent to Ph. D)		

**Notes :**

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. All the qualifications appearing in the schedule under section 14 and 15 of the Architects' Act 1972 shall be considered as at par with Bachelor's Degree in Architecture for the purpose of recruitment as teacher.
3. It is advisable that approximately 25% of the teaching load should be allotted to the Visiting faculty.
4. Each Institution shall have minimum staff structure of full time staff for an intake of 40, in addition to the Principal/ Director as following :

Professors – 2, Asst. Professors – 4, Lecturers – 8

For intake more than 40 proportionate increase in the above posts shall be made.

Of these full time teachers 50% may be on permanent posts and rest on tenure basis with tenures of 3, 5, 7 or 10 years depending upon their caliber as teacher.

5. In addition to above full time teachers institute may recruit qualified persons in the field of Engineering/ Planning/Quantity Surveying/Fine Arts/ Humanities, etc. depending on actual requirements, on full time/ part time basis.
6. The institute may recruit persons with post graduate qualifications in the allied field of relevant discipline depending on actual requirements, up to 1/3 of total full time strength of Lecturers and Asst. Professors.
7. The Institutes conducting B. Arch courses with specialization, may recruit persons with post graduate qualifications in the relevant field of specialization on the post of professors in proportionate numbers.
8. If class/ division is not awarded at Master's level, 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

9. To recognize the services rendered by senior teachers who do not fit into above requirements, of approved teachers already in full-time employment for 15 years, the requirement of qualifications may be relaxed.
10. All teachers must be encouraged to actively pursue practice/ research without neglecting their duties towards school/ students and institutes may support teachers in such activities.
11. Institutes shall adopt the provisions made in the Career Advancement Scheme as appended in Appendix–B2. The benefits accruing to teachers from this scheme shall be over and above the existing positions/ vacancies listed above in this section.
12. The post of Professor (Design Chair) will be over and above the approved posts of professors.
13. The procedure to decide on the equivalence of research works in referred journals or significant professional work with Ph.D. will be determined by the Council of Architecture only.

**CAREER ADVANCEMENT SCHEME****Incentives for Ph.D. / M.Arch.**

- A) At the time of recruitment as Lecturers, four and two advance increments will be admissible to those who hold Ph. D. and M. Arch. Degree respectively.
- B) Two increments will be admissible to those lecturers who acquire M. Arch within four years of recruitment.
- C) A teacher will be eligible for two advance increments as and when he acquires Ph D degree in his service.

**Career Advancement**

- a) Minimum length of service for eligibility to move into the grade of Lecturer (senior Scale) would be four years for those with Ph D, five years for those with M Arch and six years for others as lecturer.
- b) For eligibility to move into the grade of Lecturer (Selection Grade)/Assistant Professors, the minimum length of service as Lecturer (Senior Scale) shall be uniformly five years.
- c) For movement into grades of Assistant Professor and above, the minimum eligibility criterion would be M. Arch. Those without M. Arch. can go up to the level of Lecturer (Selection Grade).
- d) An Assistant Professor with a minimum of 5 years of service will be eligible for consideration for appointment as Professor.
- e) The selection committees for career advancement shall be the same as those for direct recruitment for each category.

**Lecturer (Senior Scale)**

A Lecturer will be eligible for placement in a senior scale through a procedure of selection, if she/he has:

- i Completed 6 years of service after regular appointment with relaxation of one year and two years, respectively, for those with M.Arch. and Ph.D.
- ii Participated in Quality Improvement Programs of total duration of 4 weeks or engaged in other appropriate continuing education programs of comparable quality as may be specified or approved by the Council of Architecture. OR accrued 20 credit points through attending or conducting QIP/ Teacher's Training Programs approved by Council of Architecture.
- iii Consistently satisfactory performance appraisal reports.
- iv Shows evidence of serious academic inputs like improved teaching plans, improved teaching methodologies, created innovative teaching aids etc.

**Lecturer (Selection Grade)**

Lecturers in the Senior Scale who do not have a M. Arch. degree or equivalent published work and who do not meet the scholarship and research standards, but fulfils the other criteria given below for the post of Assistant Professor and have a good record in teaching and preferably have contributed in various ways such as to the corporate life of the institution, examination work or through Research & Extension activities, will be placed in the selection grade subject to the recommendation of the selection committee which is the same as for promotion to the post of Assistant Professor. They will be designated as Lecturers in the Selection Grade. They could offer themselves for fresh assessment after obtaining M. Arch. and/or fulfilling other requirements for promotion as Assistant Professor and if found suitable could be given the designation of Assistant Professor.

**Assistant Professor**

A Lecturer in the Senior Scale will be eligible for promotion to the post of Assistant Professor if she/he has:

- i Completed 5 years of service in the Senior Scale.
- ii In addition to the sanctioned position of Professors, which must be filled in through direct recruitment through all India advertisements, promotions may be made from the post of Assistant Professor after 5 years of service as Assistant Professor.
- iii Participated in Quality Improvement Programs of total duration of 8 weeks or engaged in other appropriate continuing education programs of comparable quality as may be specified or approved by the Council of

Architecture. OR accrued 40 credit points through attending or conducting QIP/ Teacher's Training Programs approved by Council of Architecture.

### **Professor**

The Selection Committee for promotion to the post of Professor should be the same as that for direct recruitment. For the promotion from Assistant Professor to Professor, the following method of promotion may be followed.

The candidate should present herself/himself before the Selection Committee with the first two and any two of the remaining in the following:

- a. Self-appraisal reports (essential)
- b. Seminars/Conferences attended. Must have attended at least 4 seminars/ conference at national or international level OR must have attended Q.I.P.s (short-term courses) of total duration of 4 weeks.
- c. Research contribution, books, articles, etc. published (At least four papers in Journals are essential). The best three written contributions of the teacher (as defined by her/him) may be sent in advance to the Experts to review before coming for the selection. The candidate should be asked to submit these in 3 sets with the application.
- d. Significant contribution to teaching/academic environment /institutional corporate life.
- e. Adequate Extension and field outreach activities.
- f. Development of course material/Monographs.
- g. Participation in Continuing Education Program.
- h. Any other academic contributions.

The requirement of consistently satisfactory performance appraisal reports, shall be the mandatory requirement for Career Advancement from Lecturer to Lecturer (Senior Scale) and from Lecturer (Senior Scale) to Lecturer (Selection Grade)/Assistant Professor.

### **Selection Committee**

For Lecturer/ Assistant Professor/ Professor

The following committee is recommended for all the levels of promotions/direct recruitment:

1. Chairman, Board of Governors
2. The Principal of the concerned College
3. Head/ chairperson of the Department not below the rank of Professor.
4. a) Vice Chancellor or his nominee- not below the rank of Professor in Technical Institute.  
b) Nominee of COA not below the rank of Professor
5. Experts
  - i) For Lecturers two subject experts, out of which one must be present
  - ii) Three subject Experts for Assistant Professor/ Professor, out of which two must be present.

### **Note:**

- i) In case of University Department, Vice Chancellor will be the Chairman of the Selection Committee as well as Dean of the concerned Faculty will be the member of the Selection Committee.
- ii) In case of Government Colleges, where selections are made through Public Service Commission. The Commission must have three subject Experts for which the Public Service Commission must involve University in the selection. The Principal of the college should necessarily be included in the Selection Committee. The Commission may decide the Chairman of the Selection Committee.
- iii) At least four members including two outside Experts must constitute the quorum.

The process of selection should include involve the following in addition to other promoters decided by the Selection Committee:

- a) Assessment of aptitude for teaching and Research
- b) Ability to communicate clearly and effectively
- c) Ability to analyze and discuss.

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