

Faculty of Architecture  
B. Architecture

## Semester – I

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010101	Design Studio – I (DS – I)	01	4	240	160	400	CCT	Viva	2 Day
2	161001010102	Building Material & Construction – I (B.M.C.-I)	02							
		<b>Section – I</b> Building Material – (BM –I)		2	120	80	200	CCT	Theory	2 Hrs.
		<b>Section – II</b> Building Construction – (BC – I)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010103	Humanities –I (HUM –I)	03	2	120	80	200	ICT	Theory	2 Hrs.
4	161001010104	Basic of Design – I (BOD – I)	04	2	120	80	200	ICT	Theory	2 Hrs.
5	161001010105	Structure –I (STR –I)	05	3	180	120	300	CCT	Theory	3 Hrs.
6	161001010106	Architecture Graphic Techniques – I (A.G.T.-I)	06	3	180	120	300	SO	Theory	4.5 Hrs.
7	161001010107	Workshop – I (WS-I)	07	6	600	---	600	SO	Viva	1 Day
<b>TOTAL</b>				24	1680	720	2400			

## Semester – II

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010201	Design Studio – II (DS – II)	01	4	240	160	400	CCT	Viva	2 Day
2	161001010202	Building Material & Construction – II (B.M.C.-II)	02							
		<b>Section – I</b> Building Material - (BM – II)		2	120	80	200	CCT	Theory	2 Hrs.
		<b>Section – II</b> Building Construction - (BC – II)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010203	Humanities –II (HUM –II)	03	2	120	80	200	ICT	Theory	2 Hrs.
4	161001010204	Basic of Design – II (BOD – II)	04	2	120	80	200	ICT	Theory	2 Hrs.
5	161001010205	Structure –II (STR –II)	05	3	180	120	300	CCT	Theory	3 Hrs.
6	161001010206	Architecture Graphic Techniques – II (A.G.T.-II)	06	2	120	80	200	SO	Theory	3 Hrs.
7	161001010207	Workshop – II (WS -II)	07	5	500	---	500	SO	Viva	1 Day
8	161001010208	Senses and Sensibility	08	2	200	---	200	ICT	Viva	1 Day
<b>TOTAL</b>				24	1720	680	2400			

### Semester – III

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010301	Design Studio – III (DS – III)	01	4	240	160	400	CCT	Viva	2 Day
2	161001010302	Building Material & Construction – III (B.M.C.-III)	02							
		<b>Section – I</b> Building Material – (BM – III)		2	120	80	200	CCT	Theory	2 Hrs.
		<b>Section – II</b> Building Construction – (BC – III)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010303	Humanities –III (HUM –III)	03	2	120	80	200	ICT	Theory	2 Hrs.
4	161001010304	Basic of Design – III (BOD – III)	04	2	120	80	200	ICT	Theory	2 Hrs.
5	161001010305	Structure –III (STR –III)	05	3	180	120	300	CCT	Theory	3 Hrs.
6	161001010306	Architecture Graphic Techniques – III (A.G.T.-III)	06	2	120	80	200	SO	Theory	3 Hrs.
7	161001010307	Workshop – III (WS –III)	07	3	300	---	300	SO	Viva	1 Day
8	161001010308	History of Architecture –I (H.O.A.–I)	08	2	120	80	200	CCT	Theory	2 Hrs.
9	161001010309	Environmental Science & Services – I (E.S.S.-I)	09	2	120	80	200	ICT	Theory	2 Hrs.
<b>TOTAL</b>				24	1560	840	2400			

### Semester – IV

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010401	Design Studio – IV (DS – IV)	01	4	240	160	400	CCT	Viva	2 Day
2	161001010402	Building Material & Construction – IV (B.M.C. – IV)	02							
		<b>Section – 1</b> Building Material – (BM – IV)		2	120	80	200	CCT	Theory	2 Hrs
		<b>Section – 2</b> Building Construction – (BC – IV)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010403	Humanities –IV (HUM –IV)	03	2	120	80	200	ICT	Theory	2 Hrs.
4	161001010404	Basic of Design – IV (BOD – IV)	04	2	120	80	200	ICT	Theory	2 Hrs.
5	161001010405	Structure –IV (STR –IV)	05	3	180	120	300	CCT	Theory	3 Hrs.
6	161001010406	Architectural Graphic Techniques – IV (A.G.T.-IV)	06	2	200	---	200	SO	Viva	1 Day.
7	161001010407	Workshop – IV (WS –IV)	07	3	300	---	300	SO	Viva	1 Day
8	161001010408	History of Architecture –II (H.O.A.–II)	08	2	120	80	200	CCT	Theory	2 Hrs.
9	161001010409	Environmental Science & Services – II (E.S.S.-II)	09	2	120	80	200	ICT	Theory	2 Hrs.
<b>TOTAL</b>				24	1640	760	2400			

**Semester – V**

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010501	Design Studio – V (DS – V)	01	8	480	320	800	CCT	Viva	2 Day
2	161001010502	Building Material & Construction – V (B.M.C.-V)	02							
		<b>Section – 1</b> Building Material – V (BM – V)		2	120	80	200	CCT	Theory	2 Hrs
		<b>Section – 2</b> Building Construction -V (BC – V)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010503	Structure –V (STR –V)	03	3	180	120	300	CCT	Theory	3 Hrs.
4	161001010504	Architectural Graphic Techniques – V (A.G.T.-V)	04	2	200	---	200	SO	Viva	1 Day
5	161001010505	History of Architecture –III (H.O.A.–III)	05	2	120	80	200	CCT	Theory	2 Hrs.
6	161001010506	Environmental Science & Services – III (ESS-III)	06							
		<b>Section – I</b> Artificial Lighting & Electrification		1	60	40	100	ICT	Theory	2 Hrs.
		<b>Section – II</b> Mechanical Circulation, Fire Fighting & Protection		1	60	40	100			
7	161001010507	Elective Design – I	07	1.5	150	---	150	ECT	Viva	1 Day
8	161001010508	Elective Craft – I	08	1.5	150	---	150	ECT	Viva	1 Day
<b>TOTAL</b>				<b>24</b>	<b>1640</b>	<b>760</b>	<b>2400</b>			

**Semester – VI**

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010601	Design Studio – VI (DS – VI)	01	8	480	320	800	CCT	Viva	2 Day
2	161001010602	Building Material & Construction – VI (BMC-VI)	02							
		<b>Section – 1</b> Building Material – VI (BM – VI)		2	120	80	200	CCT	Theory	2 Hrs
		<b>Section – 2</b> Building Construction -VI (BC – VI)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010603	Structure –VI (STR –VI)	03	3	180	120	300	CCT	Exam	3 Hrs.
4	161001010604	History of Architecture –IV (H.O.A.–IV)	04	2	120	80	200	CCT	Exam	1 Day
5	161001010605	Environmental Science & Services – IV (ESS-IV)	05							
		<b>Section – 1</b> Heating, Ventilating, Air-Conditioning & Cooling (H.V.A.C.)		2	120	80	200	ICT	Theory	4 Hrs.
		<b>Section – 2</b> Landscape Architecture		2	120	80	200			
6	161001010606	Elective Design – II	06	1.5	150	---	150	ECT	Viva	1 Day
7	161001010607	Elective Craft – II	07	1.5	150	---	150	ECT	Viva	1 Day
<b>TOTAL</b>				<b>24</b>	<b>1640</b>	<b>760</b>	<b>2400</b>			

**Semester – VII**

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010701	Design Studio – VII (DS – VII)	01	24	1200	1200	2400	CCT	Viva	2 Day
<b>TOTAL</b>				24	1200	1200	2400			

**Semester – VIII**

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010801	Design Studio – VIII (DS – VIII)	01	10	600	400	1000	CCT	Viva	2 Day
2	161001010802	Building Material & Construction – VII (B.M.C.-VII)	02							
		<b>Section – 1</b> Building Material – VII (BM – VII)		2	120	80	200	CCT	Theory	2 Hrs
		<b>Section – 2</b> Building Construction - VII (BC – VII)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010803	History of Architecture –V (H.O.A.-V)	03	2	120	80	200	CCT	Theory	2 Hrs.
4	161001010804	Environmental Science & Services – V (E.S.S.-V)	04	2	200	---	200	ICT	Viva	1 Day
5	161001010805	Professional Practice – I (PP-I)	05	3	180	120	300	ICT	Theory	3 Hrs.
6	161001010806	Elective Design – III	06	1.5	150	---	150	ECT	Viva	1 Day
7	161001010807	Elective Craft – III	07	1.5	150	---	150	ECT	Viva	1 Day
<b>TOTAL</b>				24	1640	760	2400			

**Semester – IX**

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001010901	Design Studio – IX (DS – IX)	01	10	600	400	1000	CCT	Viva	2 Day
2	161001010902	Building Material & Construction –VIII (B.M.C.- VIII)	02							
		<b>Section – 1</b> Building Material – VIII (BM – VII)		2	120	80	200	CCT	Theory	2 Hrs
		<b>Section – 2</b> Building Construction - VIII(BC – VII)		2	120	80	200	CCT	Theory	4 Hrs.
3	161001010903	History of Architecture –VI (H.O.A.–VI)	03	2	120	80	200	CCT	Theory	2 Hrs.
4	161001010904	Environmental Science & Services – VI (ESS-VI)	04	2	200	---	200	ICT	Viva	1 Day
5	161001010905	Professional Practice – II (PP-II)	05	3	180	120	300	ICT	Theory	3 Hrs.
6	161001010906	Elective Design – IV	06	1.5	150	---	150	ECT	Viva	1 Day
7	161001010907	Elective Craft – IV	07	1.5	150	---	150	ECT	Viva	1 Day
<b>TOTAL</b>				<b>24</b>	<b>1640</b>	<b>760</b>	<b>2400</b>			

**Semester – X**

No	Course Code	Course Title	Paper No.	credit	Internal Marks	External Marks	Total Marks	Nature of Course	Exam type	Ex. Hrs.
1	161001011001	Design Studio – X (DS – X)	01	18	720	1080	1800	DP	Viva	-
2	161001011002	Professional Practice – III (PP – III)	02	2	120	80	200	ICT	Theory	2 Hrs.
3	161001011003	Research Methodology	03	2	120	80	200	ICT	Theory	2 Hrs.
4	161001011007	Workshop -V	04	2	200	---	200	SO	Viva	1 Day
<b>TOTAL</b>				<b>24</b>	<b>1160</b>	<b>1240</b>	<b>2400</b>			

Faculty of Architecture  
Course : Bachelor of Architecture

Subject Name : DESIGN STUDIO – I (DS – I)

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
Bachelor of Architecture	I	CCT	161001010101	4	240	160	Viva	2 Day

**Course Objective :**

- Exploring human movement through Space,
- Experiencing Space in Time & Motion.

**Course Contents :**

Unit I : Elements of Composition. ( 2D, 3D, 4D )

Unit II : Anthropometrics & Ergonomics.

Unit III : Mapping of Space. (Ideograms)

**Methodology :** Workshops, Lectures, Model making, ( Real life within events & fictional ones within the body )

**Text Books :** The Nature of Man- Moholi Nagy

Movies : Honey I shrunk the Kids.

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – I (B.M.C.-I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	I	CCT	161001010102	4	240	160	Theory	2 + 4 Hrs.

**Course Objective :**

- Understanding the need for a building component and the various solutions available / possible to address the need.
- Categories of the various building components in terms of Element, Material & Systems.
- The five families of building materials – Rock, Organic, Metals, Families of building components Synthetics and Hybrids

**Course Contents :**

Unit I :The three structural dimensions of materials – linear, planer and solid. Enclosures, Openings, Space connections, Base, Mechanical stabilisers, Service circulations, Surfaces & Finishes, Artefacts & Furnishings, Hardware & Accessories.

Unit II : Construction drawings and Architectural graphic standards.

Unit III : I.S. Specifications. Glossary of technical words

Unit IV : To study the various building components & than categories them into Various Programs & solutions.

Unit V : Understand the considerations of Anthro-pometries, Type of use, Maintenance, Material Science & Physical context.

**Methodology :**Workshops, Building studies, Particular building element case studies, Documentation by sketches & drafting.

**Text Books :** Elements of Architecture – Rob Krier

Forms & Functions of 20th Century Architecture- Talbot & Hamlin, 1952

Columbia University, Volume II.

What is Design – Paul Grillo

Dictionary on Construction - D.K.Ching

**Subject Name : HUMANITIES –I (HUM –I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	I	ICT	161001010103	2	120	80	Theory	2 Hrs.

**Course Objective :**

- The genesis and forces of evolution. The individual and the universal
- “Self” – Their unity and diversities.
- Values of Self and the world around. “I” –The total, the part, the observer, the interpreter, the participant and the designer.
- Formation of values & cultures.

**Course Contents :**

Unit I : Emergence of universe- The formless and its formation in to the physical form of Duals and Plurals. The overlaps of Physics and Metaphysics in appreciation of “ The Mind-Matter” synonyms.

Unit II : Tool making – A natural human evolutionary process, tools for extension of man to reach universal scales: Tools for Mental efficiency extensions, Work efficiency extensions and Management efficiency extensions (Mantra- Yantra- Tantra )

Unit III : The Eco-systems and Eco-cultures, their context and formation of value Judgements at Global, Regional and Local scales. Formation of cultures and civilizations as a process of “ Feel & Thoughts”.

**Methodology:** Workshops, Films, Lectures, Field trips, Group work & Individual studies.

**Text Books :** The Ascent of Man : Jacob Bronwsky.

The Making of Man : David Leakey

Atma Bodh – Chinmaya Mission

Prana Upanishad - Chinmaya Mission

Aittariya Upanishad - Chinmaya Mission

Vedanta and Modern Physics – Ram Krishna Mission

The Turning Point : Kapra Fritjot

The Tao of Physics: Kapra Fritjot

Space, Time & Architecture – Seigfrid Gideon

**Subject Name : BASIC OF DESIGN – I (BOD – I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	I	ICT	161001010104	2	120	80	Theory	2 Hrs.

**Course Objective :**

Introduction to elements & principles of design

**Course Contents :**

**Unit I :** Elements of design – Point and Line, Plane and Shapes, Form and Volume, Light and Shade, pattern & texture.

**Unit II :** Principles of Design – Rhythm; Harmony; Balance.

**Methodology:** Lectures, Field trips, Library ref. This course is read with & is concurrent to workshop-I

**Reading list:** Experiencing Architecture : Rossmassen

PATTERN LANGUAGE : Christopher Alexander

Form, Space & Order : D.K.Ching

What is Design : Paul Grille

Rendering with Pen & Ink.

Landscape Graphics : Grant W. Ried.

**Subject Name : STRUCTURE –I (STR –I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	I	CCT	161001010105	3	180	120	Theory	3 Hrs.

**Course Objective :**

Behaviour of materials and basic structural systems.

**Course Contents :**

**Unit I :** Glossary of technical words, natural structures and intuitive understanding of their behaviour, their relationship with man made structures.

**Unit II :** Functions of structures. Primary and secondary forces acting on structures- gravitational force, live load, wind, temperature variation. Types of supports & their characteristics.

**Unit III :** Analysis & design – Design criteria.

**Unit IV :** Primary elements of structure and their behaviour.

**Unit V :** Factor of safety & factor affecting it. Characteristics of Structural design : strength, stiffness and stability. Discussion on factors affecting them and ways of satisfying these requirements.

**Unit VI :** Study of behaviour of structures through models and testing them for given load.

**Methodology :** Lectures, Presentations, Site visits etc.

**Text Books :**

**Subject Name : ARCHITECTURAL GRAPHIC TECHNIQUES – I (A.G.T.-I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	I	SO	161001010106	3	180	120	Theory	4.5 Hrs.

**Course Objective :**

To develop an understanding of technical drawing as a tool for communication.

**Course Contents :**

To develop control over instruments used for technical drawings. Selection and care of drawing instruments and stationery. Learning basic principles of Geometry and visualization in 3 Dimensions.

( I ) Line exercise : Free hand lettering and lettering with instruments.

( II ) Basic Geometry : Theory & Construction of Polygons.

( III ) Projections : - Projections of Line, Basic Plane & Solid ( Simple & Complex ) - Isometry, Axonometry & Oblique projections.

( IV ) Orthographic : Exercise of complex solids  
Projections

**Methodology :** Exercises based on control over pencil as basic medium  
Principles of Geometry and its construction.

To develop visualization:

Exercises based on Isometric, Axonometric & Orthographic projections.

**Reading list** : Engineering Drawing: N D Bhatt.

**Evaluation**

**Criteria** : Line quality  
Understanding  
Neatness.

**Subject Name : WORKSHOP – I (WS-I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	I	SO	161001010107	6	600	---	Viva	1 Day

**Course Objective :**

- Understanding the nature of Pencil and its disciplined explanation through hand skills.
- Basic model making skills.

**Course Contents :**

**Unit I :** Different types of pencils, Pages, Grips and Postures.

**Unit II:** Theory of Visual perception – Perspective (1pt., 2pt.) & Element of composition

**Unit III :** Qualities of line

**Unit IV :** Board & wire varieties for model making. Techniques & tools for cutting, adding, carving & joining.

**Methodology :** Through lectures, demonstration & exercises.

**Exercises :**

- Line Exercise
- Perspective - Platonic solids and structure
- Sketching - Landscape & Vernacular Settings
  - Life study
  - Rectilinear Buildings
- Model making exercises.

**Subject Name : DESIGN STUDIO – II (DS – II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>II</b>	<b>CCT</b>	<b>161001010201</b>	<b>4</b>	<b>240</b>	<b>160</b>	<b>Viva</b>	<b>2 Day</b>

**Intent :** Understanding of how Man in Space become Place, Elements of place making such as moods, culture, traditions & aspirations.

**Content :** Place making

Psycho – Semiotic Dimensions: The part, participant, observer and creator of instruments and places as his own extension related to specific purpose and specific contents.

Place making through space, surfaces, envelopes, symbols, stage making with colors, textures, symbols, light, shades & darkeners, culture, technology, period & place and people's context.

Man – Nature Interfacing

Theatre, Stage Craft and Architecture: Their similarities and differences.

**Methodology :** Workshops, Lectures, Model making, Slide shows, Library ref.

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – II (B.M.C.-II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	II	CCT	161001010202	4	240	160	Theory	2 + 4 Hrs.

**Intent :** To understand mud & stone through its various categories, compositions, and its applications as building material through direct adaptation, processing. Amalgamating and altering. The various end product materials that have evolved their various adaptations for building and the processes & specifications involved there in. To develop a grasp of what material or material product is appropriate for which context of building construction. Vernacular, Traditional and Historical Materials and construction process as direct human creative responses to local Eco – systems and Geo- bio climatic responses.

**Content :** Tools and Techniques for extracting, manufacturing, transporting, processing and application

- Amalgamation & alteration in clay
- Introduction to mud architecture
- Amalgamations & alternation in clay
- Tools & Techniques for extracting, manufacturing, transporting, processing & application
- Geology, Stone quarrying and stone size / quality
- Objects & decay maintenance
- Stone products & substitutes
- Stone construction principles
- Stone detailing
- Brick composition, its properties and principles of brickwork
- Ornamental & decorative work
- Industrialized material products, industrial study
- Market survey & Trade names for material products
- Types of applications
- Relevant I. S. Specifications
- Genesis of local Architectural Mediums

**Methodology :** Lectures, Field trips ( Material study, Construction study ), Seminars, Slide shows, Market survey, Case studies, Material centric design problems and firsthand experience of brickwork

**Reading list** :- Ornamented brickwork

- Brickwork
- Building materials : Rangwala
- Building construction : Rangwala
- Building construction : WB Mc Kay
- Materials for Architects & Builders : Arthur R Lyens

**Subject Name : HUMANITIES –II (HUM –II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>II</b>	<b>ICT</b>	<b>161001010203</b>	<b>2</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** Man, the integral entity of nature and animal kingdom. The basic human needs and methods devised to fulfill them. Formation of human communes with broader need based purpose of security and sharing.

**Content :-** Global and regional overview of formation of societies and similar design responses on Eco-cultural commonalities.  
 Man – Nature Symbiosis.  
 Varying natures of human communes in different Geo-climatic contexts.  
 Rise of cultural attributes. Regionalism and development of living traditions in time.  
 Migrations and diffusion of cultural motifs and Attributes. Tangible as well as intangible  
 Primitive cultural panorama of Indian tribal/Rural practices with focus on shelter and building craft. Himalayan and Sub-Himalayan, Deserts, The seven sisters ( N E India ), the Islands, the Coastal belt, the Riverine planes, The hinterland Hill ranges and Nomadic.  
 Each to be studied within the framework of

- Geography Exclusivity
- Material base
- Natural and Human Resource Base
- Racial / Cultural make up

**Methodology :** Introductory talks followed by participate group discussions with students Initiative, AV. and short field trips.

**Reading list :** Rudolfsky : Architecture without architects.  
 Paul Oliver : World Encyclopedia of Vernacular Architecture  
 Jakob Bronowsky : Ascent of Man

Social Anthropology elementary references:  
 Bhutanese Cultural Blueprint: Viewing.

**Alternatively :** Indian Cultural evolution : through a serial ‘Bharat Ek Khoj’ based on Pandit Nehru’s Discovery of India.

**Subject Name : BASIC OF DESIGN – II (BOD – II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	II	ICT	161001010204	2	120	80	Theory	2 Hrs.

**Intent :** Development of architectural perception of space & place.  
Experiencing total built environment.

**Content :** Elements of design : Colour, Time and Motion  
Principles of Design : Scale & Proportion, Emphasis & Focal point  
order Elements of place making.

**Methodology :** Lectures, Field trips, Library reference. This course is read with  
and is concurrent to Workshop II.

**Reading list:** Forms & Functions of 20th Century Architecture  
Volume I : Talbot & Hamlin  
Volume II : Talbot & Hamlin  
Elements of Architecture : Rob Crier  
Visual Dictionary of Architecture : Francis D. K.. Ching  
Pattern Language : Christopher Alexander  
Timeless way of Building : Christopher Alexander

**Subject Name : STRUCTURE –II (STR –II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	II	CCT	161001010205	2	180	120	Theory	3 Hrs.

**Intent :** To develop a grasp of behaviour of materials and basic structural systems.

**Content :** Structural properties of basic materials like masonry, timber, concrete & steel.

- Introduction to basic structural systems such as post beam, bearing wall system, trusses, rigid frames and their structural behaviour. Distribution of loads through the elements of the system. Case studies.
- Effect of simple geometric forms on the overall structural behaviour.
- Forms to be studied include cuboidal and prismatic with symmetrical footprint layouts. Aspect ratio and its effect on the overturn resistance.
- Working out structural systems and their layout for a small building.

**Methodology :** Lectures, Presentations, Site visits etc.

**Reading list:** Understanding the concepts of structures  
Reinforce concrete design - Junarkar  
Analysis of structures - Vajeerani

**Subject Name : ARCHITECTURAL GRAPHIC TECHNIQUES – II (A.G.T.-II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	II	SO	161001010206	2	120	80	Theory	3 Hrs.

**Intent :** To develop an ability to perceive a form in 3 Dimensions and represent it through technical drawings. To enhance the sense of visualization and strengthen it by means of technical representation of Form & Space.

**Content :** Understanding of Planes and Solids in various conditions through development of surfaces, sectional profiles and complexities of transformation of Forms. 3 Dimensional representation of solids using Isometric, Axonometric and Basic Perspective views to visualize various configurations of solids.

( I ) Development of Surface:

- Development of lateral surface of right solids ( Simple ) & section solids, Cube, Prism, Hexagon, Cylinder, Pyramid, Cone, and Sphere.
- Model making.

( II ) Intersection of Solids.

- Introduction, different methods of intersection.
- Intersection between Solids of similar nature;  
i.e. Two prism, Cylinder & Cone etc.
- Intersection between Solids of non-similar nature;  
i.e. Cone & Cylinder, Cylinder & Prism etc
- Model making.

( III ) Perspective:

- Theory of Phenomena of perceiving Form.
- Understanding of Core of Vision, Terminology of perspective
- One point, Two point, Three point, Bird`s eye & Worm`s eye views for simple Solids & complex Forms.

( IV ) Sciography :

- Theory Line, Planes, Solid ( Simple & Complex ), Chajja, Steps.

**Methodology** : Various exercises based on

- Understanding of surface of solid and its intersections.
- Application of understanding of perspective, light & shadow and its behaviour.

**Reading list:** Basic Perspective:

**Subject Name : WORKSHOP – II (WS -II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>II</b>	<b>SO</b>	<b>161001010207</b>	<b>5</b>	<b>500</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** Understanding the nature of wet media and color through disciplined explanation by hand skills. Water / Solvent based materials for model making, artifacts and furniture.

**Content :** Different types of wet medias and varieties there in.

- ink, water, colors and poster colors. When to use what vis-a-vis test at hand.
- The various tools, techniques, surfaces vis-a-vis the media and effect to be generated.
- Corrective techniques
- Different types of clay, P.O.P., rubber solutions and fibre glass. The tools, techniques and preservation methods.

**Methodology:** Through lectures, presentations and demonstration and exercises.

**Subject Name : SENSES AND SENSIBILITY**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	II	ICT	161001010208	2	200	---	Viva	1 Day

**Intent :** Sensory receptors and their extensions and Explorations in Human sensuality. Transmission of the higher sensory awareness on to the spatial arrangements. Further explorations in to spatial harmony through sensory indulgence.

**Content :** Exercises and discourses aimed at heightening the sensory awareness. These to include the visual, Audio, Olfactory, Touch & Tectile as well as taste. Primary discourse on the traditional discourse on the traditional system of the Rasas, Sects and cults that emphasize the concepts of liberation through Sensory indulgence. Extensions in terms of the indigenous developments of the musical systems, the visual arts, traditional Expressions of different scales of social organization and different kinds of social organizations in built form.

Issues of social organization-urban sociology-social anthropology.

Conveyed meanings in terms of societal values, communication patterns, symbols and meanings. Selected examples from vernacular and classical cultures in India and other parts of the world. The course would deal with the topic through lectures and field study.

Creation of a physical envelop/model where all sensory attributes harmonize. Overall aim of the course would be enhance the physical, emotional and spiritual well being of the end user of designed spaces.

Demonstrations / Experiments / Experiences in the realm of induced sensuality between the animal kingdom and nature.

**Subject Name : DESIGN STUDIO – III (DS – III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	III	CCT	161001010301	4	240	160	Viva	2 Day

**Intent :** To develop an attribute towards the interactive processes between Man & Land to given locational Eco-cultural context.

**Content :** Study of Land

- Definition
- Geology
- Geography
- The skies

Elements of Earth, Water, Fire, Air & Space – Their architectural associations.

Studies of Vernacular settlements.

Program preparation & creation of database.

Alternative technologies and Architectural Interventions in the context of change & development, the people participation Act documented in understanding Amendments 73 & 74 / 1991 of the Constitution of India.

Architectural Projects related to the said situations and contexts.

**Methodology:** Simulation of Patron, beneficiary and users. Site documentation.  
Case Studies

**Subject Name : BUIDLING MATERIAL & CONSTRUCTION – III (B.M.C.-III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>III</b>	<b>CCT</b>	<b>161001010302</b>	<b>4</b>	<b>240</b>	<b>160</b>	<b>Theory</b>	<b>2 + 4 Hrs.</b>

**Intent:** Understanding & grasp of Bio-materials through its various categories, compositions, and its applications as building material through direct adaptation, processing, amalgamating & altering. The various end product materials that have evolved, their various adaptations for building and the processes & specifications involved there in. To develop a grasp of what material or material product is appropriate for which context of building construction.

**Content:** Timber in its natural form  
Industrial timber products- Boards, Sheets, and Blocks  
Bamboo and Cane  
Jute and Grass  
Basic joinery, Hardware, Tools and Equipments required  
Application  
Temporary Construction works  
Finishing / protective treatments to various materials  
Specifications  
Relevant I. S. Codes

**Methodology:** Lectures, Fieldtrips, Documentation, Workshops, Seminars, Slide shows.

**Reading list:** Wood and woodjoints  
Building materials : Rangwala  
Building construction: Rangwala  
Building construction: WB Mackey  
Understanding wood  
Carpentry and Joinery  
Bamboo and Cane : NID Publication  
Metirate series . Building construction principles & practices: D. Watten.

**Subject Name : HUMANITIES –III (HUM –III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	III	ICT	161001010303	2	120	80	Theory	2 Hrs.

**Intent :** Secure geography breeds long lasting cultures with far reaching impact. Resulting in to far sighted political, economic and administrative systems and accumulation of wealth. thus, providing way to highly refined and diffused cultural attributes. Pre – Christian Indian Cultural Scenario as the base for absolute flux of later cultural invasions

**Content :** The ancient mother cultures as healthy breeding ground for later cultural panorama.

Indian and Par – Indian Panorama : Pre Vedic, Vedic Epical era.

Pre – Christian, Republician era up to Eclipse of Buddhism in India with focus on Cultural practises, artifacts and Architectural idioms.

- Chinese
- Egyptian
- Meso-american
- Mesopotamian
- Conclusive overview

**Methodology :** Introductory talks followed by participative group discussions with student's initiative, AV and short field trips.

**Reading list :** John Whitney Hall : History of the World  
Percy Brown : History of Indian Architecture  
Sir Benister Fletcher : History of Architecture  
Pearce F G : Outline History of Civilisations  
Bhartiya Vidya Bhavan: History and Culture of the Indian people,  
Oxford Encyclopadia of Arts  
Compulsory viewing of Films : Prince of Egypt, Benhar, The Last Emperor, Cleopatra, etc.

**Subject Name : BASIC OF DESIGN – III (BOD – III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	III	ICT	161001010304	2	120	80	Theory	2 Hrs.

**Intent :** There is an order in this Universe which is manifested into everything To develop an understanding that design issues though perceived as subjective have a deep objectivity about them and nothing in the design of nature is Ad-hoc. Taking the journey of culture to Human interventions in Habitat making.  
Land – Man Resources. Their individual definitions & their interactive Systems & synonyms

**Content :** Patterns in Nature  
Treatises of Aesthetics & Design.  
The Eco cultures  
The three traditions: Perennial, changing & modern.  
Understanding of Vernacular Architecture under different contexts  
Dynamics of Change and Vernacular values..

**Methodology :** Lectures, Field trips, Library ref.

**Reading list:**Genius Loci – Christian Norberg Schulz  
The Nature of order – Christopher Alexander  
Nature and Design  
Vernacular Architecture

**Subject Name : STRUCTURE –III (STR –III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>III</b>	<b>CCT</b>	<b>161001010305</b>	<b>3</b>	<b>180</b>	<b>120</b>	<b>Theory</b>	<b>3 Hrs.</b>

**Intent:** To develop an understanding of basic requirement of stability, strength of material and behaviour of basic structural elements and their importance in structural system.  
To develop a grasp on the fundamental aspects of static analysis – strength of materials and structural analysis of basic elements.

**Content :**

- \* Conditions of equilibrium of concurrent coplanar forces, methods of projections. Funicular polygon Graphical method of determining the resultant of a given system of forces. Method of moments.
- \* Centre of gravity, determining the centroid of simple figures.  
Moments of inertia, its application to sections subjected to bending, determining M.I. of simple and compound sections.
- \* Types of trusses, their uses, suitability and limitations, method of analyzing a truss ( graphical & analytical )
- \* Assumption in strength of materials, basic terminology, brief history of strength of materials.
- \* Bars subjected to change in temperature, bars of non-uniform cross section
- \* Concept of the shear force and the bending moment, S F and B M diagrams in the selection of a structure system – Discussion on case studies.
- \* Pure Bending stress & its importance, derivation of basic equation, solution of simple problems.
- \* Combined direct and bending stresses, Kern and its importance, solution of a few practical problems.
- \* Brief discussion on stability, buckling of columns, short and long columns, Euler`s and buckling load effects of end conditions on the buckling load.  
Solution of a few simple problems, ways of increasing the capacity of a long column.
- \* Deflection and its importance, code provisions, study of the deflected shape of simple structures. Solutions of problems.

- \* Concept of shear stress, average and maximum shear stress. Horizontal shear stress and its variation across the cross section of the beam.
- \* Section made up of more than one material ( composite sections), their uses and their advantages, assumptions made in the theory of composite sections, derivation of basic equations. Solution of simple problems.

**Methodology :** Lectures, Presentations, Site visits etc.

**Reading list :** Understanding the concepts of structures  
Reinforce concrete design - Junarkar  
Analysis of structures - Vajeerani

**Subject Name : ARCHITECTURAL GRAPHIC TECHNIQUES – III (A.G.T.-III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	III	SO	161001010306	2	120	80	Theory	3 Hrs.

**Intent** To develop a grasp of how basic geometrical forms and various permutations, combinations, additions & alteration between them can be used as a tool in the process of evolution of complex built forms.

**Content :** Using Geometry as a tool to experience Space and develop Logical reasoning within the context, to be able to technically represent

To visualize natural Elements and read and transform them in to basic geometry & also to study man made patterns & find their derivatives in nature.

**Methodology :** Exercises based on Curves, & Natural elements  
Conic section : Ellipse, Parabola, Hyperbola.  
Cycloid curves : Involute, Evolute, Spirals, Helix

**Reading list:** Engineering Drawing – N. D. Bhatt

**Subject Name : WORKSHOP – III (WS –III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>III</b>	<b>SO</b>	<b>161001010307</b>	<b>3</b>	<b>300</b>	<b>---</b>	<b>Viva</b>	<b>1-day</b>

**Intent** Understanding the nature of Bio materials i.e. wood, cane and bamboo. Its limitations and possibilities in various application vis-a-vis model making and small artifacts and small furniture.

**Content** Different types of wood, cane and Bamboo, their applications possibilities vis-a-vis task on hand, cutting, carving, stocking and other treatments of materials.

Jointing, bending and carving through various techniques.

Finishes and regular maintenance.

**Methodology** : Lectures, Presentations, Demonstrations and Exercises.

Exercises : Usage of various tools with a view to understand the material Making of an actual artifact.

**Subject Name : HISTORY OF ARCHITECTURE –I (H.O.A.–I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	III	CCT	161001010308	2	120	80	Theory	2 Hrs.

- Intent:**
- \* The triggers in technological evolution through the perspective of representation of material : an understanding
  - \* The resultant built forms
  - \* Variations in material expression peculiar to regions
  - \* Individual exploration by architects in the same direction

- Content:**
- \* The history of ‘spanning’: technological breakthroughs in various materials in chronological order
  - \* Studies of unique built form in different regions: Chinese, Japanese, South Indian, Mesopotamia, Mayan Region
  - \* Works of Hassan Fathy, Laurie Baker, Mies Van de Rohe, Louis Kahn, Frank Lloyd Wright

- Methodology :** \* Lectures, Slideshows, Readings, Documentations, Seminars, Model making Workshops

- Reading list :**
- \* Richard Lannoy, The Speaking Tree
  - \* Christian Noberg Schultz, Genius Loci: Towards a Phenomenology of Architecture
  - \* Christian Noberg Schultz, Existence, Space and Architecture
  - \* Peadro Guidess, Encyclopedia of architecture
  - \* Rudolfsky, Architecture without architects
  - \* Bronovsky, Ascent of man

- Papers:**
- \* Rafael Moneo
  - \* Frank Lloyd Wright
  - \* Louis Kahn
  - \* Laurie Baker

**Subject Name : ENVIRONMENTAL SCIENCE & SERVICES – I (E.S.S.-I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>III</b>	<b>ICT</b>	<b>161001010309</b>	<b>2</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** Basics of environmental climatology and its adaptation by human being in built form (Understanding of climate as modifying factor of built environment) Thermal Design & Natural Ventilation in the building.

**Content:**

**Appr. Hrs. Allocation**

<b>Basics of Climatology</b>	<b>Total 8 hrs</b>
▪ Earth & relation with solar system	0.5
▪ Atmosphere and its stratification, phenomena of seasons	0.5
▪ Understanding of Climate and weather, Elements of climate	1
▪ Classification of climatic zone, sub-zone, their formation and design responses in general and cross culturally	1.5
▪ Site-climate and local responses	1
▪ Organizing climatic data and its interpretation – Mahoney table, Bio-climatic chart etc	1.5
▪ Exercise/ Presentation	2

<b>Thermal Design &amp; Human-comfort Criteria</b>	<b>Total 12 hrs</b>
▪ Understanding of human body's comfort level	0.5
▪ Defining Comfort, Comfort zone & scale	1.5
▪ Thermal factor, its impact on human comfort	1
▪ Different way of heat gain in the building	1
▪ Behaviour of material/s to heat gain	2
▪ Types of thermal design - active & passive methods	4
▪ External shading devices and design	

▪ Exercise/ Presentation	2
<b>Natural Ventilation</b>	<b>Total 6 hrs</b>
▪ Purpose of Ventilation, Methods of Ventilations	1
▪ Issues related to cross ventilation at building level <ul style="list-style-type: none"> <li>○ Form &amp; orientation</li> <li>○ Design and detail of openings</li> <li>○ Shading devices</li> </ul>	3
▪ Exercise/ Presentation	2
▪ Final Design (Overall Integration of lesson learnt) + Internal Test	<b>Total 6 hrs</b>

**Methodology :** Largely lecture based, discussions on case studies of traditional/vernacular surroundings, studio base exercises, application of it in design studio and design demonstration in environmental lab.

**Reading list :**

1. National Building Code Of India [Bureau Of Indian Standards]
2. Manual Of Tropical Housing And Building [Part-1, Climatic Design] [Otto Koenigsberger, Ingersoll and Mayhew }
3. Neufert Architect's Data [Ernst & Peter Neufert-3rd Edition]
4. Design With Climate – Bio-Climatic Approach to Arch. Regionalism [Victor Olgay]
5. Climate & Architecture [Jeffery Ellis Arouhus]
6. The Architecture Of The Well Tempered Environment [Banham & Reyner]
7. Timesaver Standards For Architectural Design Data [Watson, Crosbie-7th Edition]
8. Timesaver Standards For Architectural Design Data [Calendar-6th Edition]
9. Design Primer For Hot Climates [Allan Konya]
10. An Introduction to Building Physics [Narasimhan V.]
11. House Form and Culture [Amos Rapport]
12. Housing, Climate and Comfort [Evans Martin]
13. Building Environment [D Ajitha Simha]

**Subject Name : DESIGN STUDIO – IV (DS – IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IV	CCT	161001010401	4	240	160	Viva	2 Day

**Intent** : Man and Land interactive processes to given locational Eco-cultural context. To develop a grasp on handling various activities with shared elements. Inter-relations of individual within a group / family. Developing clarity of details & architectural expression in functional and acoustical elements.  
Emphasis shall be laid on clarity of details and architectural expression in functional and constructional elements.

**Content** : Families & Habitats : Geographical locations  
Year cycle & Day cycle  
Seasons & Festivals  
Icons & Symbols.

Design of a group of building and ancillary. Introduction to concept of shared open space, clustering, community, arrgragation and economy. Emphasis will also be laid on site planning. This shall be a group exercise with each member handling a different aspect or a different portion of the total problem.

Problems aimed at drafting and presentation skills in the 3-D Format.

Emphasis shall be laid on clarity of details and architectural expression in functional and constructional elements.

**Methodology** : This shall be a group exercise with each member handling a different aspect or a different portion of the total problem.

Hands on

- 1- Site survey / mapping, documentation, representation through models, sketches. photographs at different times / situations.
- 2- Lectures, Slide shows, Library ref.

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – IV (B.M.C.-IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IV	CCT	161001010402	4	240	160	Exam	2 + 4 Hrs.

**Intent :** Advances in the usage of ferrous and non-ferrous metal, Cement as material, initially as mortar & later as concrete has revolutionised the possibilities of building. To develop a grasp of possibilities & limitations of Metals, Cement, Concrete & RCC.

**Content :**

- History of Cement as material from Lime to Cement.
- Cement manufacturing
- Storage and handling of Cement
- Cement physical and chemical properties
- Concrete: its making types and properties
- Quality control of concrete and quality components
- RCC its properties
- Points to observe while supervising RCC works
- Cement based products – Precast concrete
  - Prestressed concrete
- Tests, defects and failure, maintenance & repair
- Applications
- Specifications and I.S. Code
- Metals – Iron, Steel, Aluminium, Copper, Lead, Zink. Their manufacturing ( brief ), applications & properties.

**Methodology :** Lectures, Fieldtrips, Documentations, Workshops, Seminars, Slide shows.

**Reading list:**

- Building materials : Rangwala
- Building construction : Rangwala
- Motivate series – BC Principles and practices- D Watten
- Concrete technology: K.T. Krishna swamy, A Kanasundra Rao, A A Khandekar
- Properties of concrete : A. M. Neville
- Material for architects and builders: Arten R Lyens

**Subject Name : HUMANITIES –IV (HUM –IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IV	ICT	161001010403	2	120	80	Theory	2 Hrs.

**Intent :** Learned patronage and deep-seated percolation leads on to highest pinnacle of cultural refinement.  
Study of the derivative cultures with a view to understand and absorb the reasons, processes and cultural objects including Architecture which leads on to the peak of design expression.

**Content :** Indian up to the British polyglot culture.  
Japanese,  
Java, Sumatra & Combodia  
Greek,  
Roman

**Methodology :** Visits to Neo – Classical (European)  
Indian Architectural Sites through audio visual  
Lectures, discussions with AV  
Library references including Ahemdabad, Vadodara, Mumbai

**Reading list :** Gibben’s : Decline and fall of the Roman empire  
Bannister Fletcher : History of Architecture  
Bannister Fletcher : Architecture of Combodia  
Percy Brown : Indian Architecture  
John Mitchel : Indian Architecture  
Adam Hardy : Indian Architecture  
John Whitney Hall : History of the World  
Hitchcock : History of the World

**Subject Name : BASIC OF DESIGN – IV (BOD – IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IV</b>	<b>ICT</b>	<b>161001010404</b>	<b>2</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** To evolve intelligent appreciation & develop vocabulary for discussing architectural design idea.

**Content :** - Information processing and research methods.

- Design as multivariate problem solving process
- Theories of programming, Thinking techniques, Environmental behavior & psychology, Optimization processes.
- Influences governing information of Attributes as prelude to the Act of Design. Positive group interactive & “ Brain Storm” processes.
- Generating of creativity, design matrices and system integration. Design synthesis process.

**Methodology :** Lectures, Field trips, Library ref.

**Reading list :** 1. Structuring of scientific revolution  
2. Who moved my cheese

**Subject Name : STRUCTURE –IV (STR –IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IV</b>	<b>CCT</b>	<b>161001010405</b>	<b>3</b>	<b>180</b>	<b>120</b>	<b>Theory</b>	<b>3 Hrs.</b>

**Intent :** To understand behavior of advanced elements in structure.

To study Steel as structural material and the role of properties of material and behavior of elements in evolution of structural system is carried out.

**Content :**

- Determinate and indeterminate structures, finding indeterminacy of structures.
- Advantages and disadvantages of intermediate structures
- Analysis of indeterminate structures. Introduction to stiffness and distribution factors, introduction to moment distribution method.
- Indeterminacy of a frame, comparison of post and lintel system and portal frames. Importance of portal frames in resisting horizontal forces.
- Arch as a curved element. Arch in history, Efficiency of an arch. Three hinged arch. Simple problems to illustrate the importance of the shape of an arch. rose end conditions and loading.
- Steel as a structural material, structural systems in steel IS 800 & handbook of steel sections.
- Designing and detailing the bolted connections. Design of simple welded connections.

**Methodology :** Lectures, Presentations, Site visits etc.

**Reading list :** Understanding the concepts of structures  
Reinforce concrete design - Junarkar  
Analysis of structures - Vajeerani

**Subject Name : ARCHITECTURAL GRAPHIC TECHNIQUES – IV (A.G.T.-IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IV</b>	<b>SO</b>	<b>161001010406</b>	<b>2</b>	<b>200</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** To understand the various basic computer bases and need of computer added design as the tool of future

**Content :** Detailed topics of main platform of Auto CAD-2002  
Two-dimensional drawing and representation skill  
Possibilities and limitations of selected mode

**Methodology :** Lecture, practical lab work  
Exercises based to explore new age add

**Subject Name : WORKSHOP – IV (WS –IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IV</b>	<b>SO</b>	<b>161001010407</b>	<b>3</b>	<b>300</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** To create a proactive mind set towards working with various material.  
Design of manufacture and maintenance.

**Content :** Metal, Glass, Cement, Fibreglass.

**Methodology :** Through objective of making phototype market survey.  
Alternative materials of process  
Material process selection  
Shop floor drawings  
Manufacturing and assembling

**Market Survey :** Material and process metal and glass.

**Subject Name : HISTORY OF ARCHITECTURE –II (H.O.A.–II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IV</b>	<b>CCT</b>	<b>161001010408</b>	<b>2</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** Understanding the evolution of architectural character and built form in the ancient civilizations

**Content :** \*Egypt and Near East  
\*Greek Classical architecture  
\*Roman  
\*China, Japan and South east Asia  
\*Indian Architecture upto Islamic invasion  
\*Mesoamerica (Mayan architecture)

**Methodology :** \*Lectures, Slideshows, Readings, Documentations, Seminars, Analytical understandings.

**Reading list :** \* Richard Lannoy, The Speaking Tree  
\* Christian Noberg Schultz, Genius Loci: Towards a Phenomenology of Architecture  
\* Christian Noberg Schultz, Existence, Space and Architecture  
\* Christopher Alexander, A Pattern Language  
\* Christopher Alexander, The timeless way of building  
\* Christian Noberg Schultz, Intensions in Architecture  
\* Henri Sterlin, Architecture of the world, Living Architecture series  
\* Percy brown, History of Indian Architecture

**Subject Name : ENVIRONMENTAL SCIENCE & SERVICES – II (E.S.S.-II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IV	CCT	161001010409	2	120	80	Theory	2 Hrs.

**Intent :** Light & sound, theory and application in building design. Understanding of basic building services & requirement of acoustics, water supply and drainage

**Content : Daylight & Natural lighting**

Sunlight, its principles, radiation spectrum-visible belt & eye's sensitivity- visioning mechanics. Daylight, its source & types, its behavior-transmission, reflection. Daylight factor, its calculation, components & design skylight concept for desired lighting. Various element affecting on external-internal sky component, measuring & designing methods.

**Sound & Acoustics**

Sound waves, its nature, power, transmission & spread pattern. Intensity of sound-output level of various activities & hearing mechanics-ear's sensitivity. Sound properties, its types, noise control & protection methods. Acoustic methods & material, designing for desired hearing

**Water supply & Drainage**

Water related supply systems, its type & categorization as per use. Potable & usable water's supply-storage and sewage, soil & rainwater's collection & clearance system. Components & elements of various systems, its types as per use & material. Water consumption for various activities & criteria for designing the plumbing system

**Methodology:** Mainly lecture base, discussions on case-studies of relative topic, market survey and product analysis, studio base exercises and application of it in design studio

**Reading list:** National building code of India [bureau of Indian standards]  
 Manual of tropical housing and building [part-1, climatic design]  
 Neufert architect's data [Ernst & Peter Neufert-3rd edition]  
 A visual dictionary of architecture [ Francis D K Ching]  
 Textbook of sanitation [R. S. Deshpande]  
 Elements of public health engineering [Duggal]  
 Textbook of sanitary engineering [S. R. Kshirsagar]  
 Timesaver standards for architectural design data [Watson, Crosbie-7th edition]  
 Timesaver standards for architectural design data [Callender-6th edition]

**Subject Name : DESIGN STUDIO – V (DS – V)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>V</b>	<b>CCT</b>	<b>161001010501</b>	<b>8</b>	<b>480</b>	<b>320</b>	<b>Viva</b>	<b>2 Day</b>

**Intent :** To develop a grasp on built and spatial systems of large town / small city scale (population range 5 to 10 lacs) through Interdisciplinary studio guidance exercises.

Understanding of Building bye – laws and Urban Development Plan guidelines on Land-use, densities etc.

**Content :** Design of a multi-functional public building in the urban setting.  
Introduction to urban development controls, codes and bye-laws.  
Exercises in articulation and manipulation of programmed needs,  
Design methodology, criticism and evaluation of alternative concepts.

Study of an urban environment in use. Urban activities, services and construction methods, and phenomena of social utilization, growth and change shall be the focus of the study.

**Methodology:** Hands on...

- 1- Site survey / mapping, documentation, representation through models, sketches. photographs at different times / situations.
- 2- Lectures, Slide shows, Library ref.

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – V (B.M.C.-V)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	V	CCT	161001010502	4	240	160	Theory	2 + 4 Hrs.

**Intent :** To understand various finishing and furnishing materials and techniques used in interiors and exteriors

**Content :** **Glass:** Its history as material and use, manufacturing and types, properties and characteristics  
- Applications  
- Advanced technology and Innovative uses.

**Fabric:** history, man made and natural production, blending, characteristics and use, identification.

**Gypsum, POP :** Their properties and applications

**Lather, Foam, Wax :** Their properties and applications

**Plastic and synthetic material:** Their properties and applications

**Surface finishes :** Wallpaper, painting, rendering, flat roof finishes  
**Material Studies :** Understanding of Interior design with focus on selection and use of materials.

**Methodology :** Lectures, Fieldtrips, Documentations, Workshops, Seminars, Slideshows.

**Reading list :** - Building materials : Rangwala  
- Building construction : Rangwala  
- Building construction : Mackay  
- Motivate series – BC Principles and practices- D Watten  
- Material for architects and builders: Arten R Lyens

**Subject Name : STRUCTURE –V (STR –V)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>V</b>	<b>CCT</b>	<b>161001010503</b>	<b>3</b>	<b>180</b>	<b>120</b>	<b>Theory</b>	<b>3 Hrs.</b>

**Intent :** To study various forms of surface structures and their structural behaviour.

**Content :** - Types of surface structures, detailed classification of stressed skin surfaces, generation of various types. General equations of regular surfaces.

- Introduction to various types of shells. Structural behavior of these shells. Case studies.
- Various types of folded plate structures. General behavior and design of a Simple V type of folded plate roof.
- Introduction to membrane structures, its behaviour in general. Simple form finding method. Development of Simple forms in the laboratory and preparing scaled models. Case studies.
- Introduction to tension structures.
- Introduction to grids, planner and curved types of grids. Their structural behaviour, form finding technique for a curved grid. Development of simple forms and construction of scaled models.
- Case studies.

**Methodology :** Lectures, Presentations, Site visits etc.

**Subject Name : ARCHITECTURAL GRAPHIC TECHNIQUES – V (A.G.T.-V)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>V</b>	<b>SO</b>	<b>161001010504</b>	<b>2</b>	<b>200</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** To understand the representation and rendering technique and ability to create 3-D modelling

**Content :** Advance detailing as 3-D modeling  
Sciography and rendering  
Possibilities and limitations of selected mode

**Methodology:** Lecture, practical lab work  
Exercises based to explore new age add

**Subject Name : HISTORY OF ARCHITECTURE –III (H.O.A.–III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>V</b>	<b>CCT</b>	<b>161001010505</b>	<b>2</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** \* Architectural development during the medieval period  
\* Adaptation and evolution of ancient built forms to the new political, religious, social as well as cultural context

**Content :** \* Byzantinian Architecture  
\* Mediaval Europe  
\* Renaissance and Post Renaissance  
\* Islamic architecture  
\* Islamic India  
\* Precolonial and colonial architecture  
\* Colonial India

**Methodology :** \* Lectures, Slideshows, Readings, Documentations, Seminars, Analytical understandings

**Reading list :** \* Richard Lannoy, The Speaking Tree  
\* Christian Noberg Schultz, Genius Loci: Towards a Phenomenology of Architecture  
\* Christian Noberg Schultz, Existence, Space and Architecture  
\* Christopher Alexander, A Pattern Language  
\* Christopher Alexander, The timeless way of building  
\* Christian Noberg Schultz, Intensions in Architecture  
\* Henri Sterlin, Architecture of the world, Living Architecture series  
\* Percy brown, History of Indian Architecture  
\* Banister Fletcher, History of Architecture  
\* Spiro Kostof, The city Assembled

**Subject Name : ENVIRONMENTAL SCIENCE & SERVICES – III (E.S.S.-III)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	V	ICT	161001010506	2	120	80	Theory	2 Hrs.

**Section – I Artificial Lighting & Electrification :**

**Intent :** To develop a grasp over :

1. The effect of Sun & Moon on the Earth and how by orienting & articulating built form one can optimise benefits and reduce discomforts, electrical inputs of lighting and ventilation.
2. The parameters of Comfort and Discomfort.
3. The sensorial perception / experience which can be environmentally controlled.
4. Electrical & mechanical services in building design.
5. Understanding of basic elements of services & requirements of it

**Content :** \* Artificial lighting & Electrification

Basic electrical supply & distribution to the building, alternate supply & Power connections. Various components & elements of layouts as per use, lifesaving auto-cut circuits & other fixtures. Communication systems like fax, telecom, EPABX, alarm, audio-video monitoring, etc & their layouts. Criteria of designing of various communicating service layouts

**Methodology:** Mainly lecture base, discussions on case-studies of relative topic, market survey and product analysis, field trips and practical derivation, studio base exercises and application of it in design studio.

**Reference:** National building code of India [bureau of Indian standards]  
Neufert architect's data [Ernst & Peter Neufert-3rd edition]  
Timesaver standards for architectural design data [Watson, Crosbie-7th edition]  
Timesaver standards for architectural design data [Calendar-6th edition]

## **Section – II Mechanical Circulation, Fire Fighting & Protection :**

**Intent :** To develop a grasp over :

1. The effect of Sun & Moon on the Earth and how by orienting & articulating built form one can optimise benefits and reduce discomforts, electrical inputs of lighting and ventilation.
2. The parameters of Comfort and Discomfort.
3. The sensorial perception / experience which can be environmentally controlled.
4. Electrical & mechanical services in building design.
5. Understanding of basic elements of services & requirements of it

**Content :**

\* Mechanical circulation

Vertical transportation as per demand and distance, their categorization. Lifts, its types, grouping, return travel time, carrying capacity, design of duct and cabin, installation, capsule-passenger-hospital-goods and garbage lifts. Escalators and elevators, their automated systems and maintenance

\* Fire fighting & Protection

Study of fire fighting regulations, fire alarming & extinguishing system, fire hydrants-their types, location, spacing, distance & specifications. Fire resistance of different building materials, designing of fire resistant door, gangway, and stair & lift block for escape. Case studies of service and escape layouts of building for fire protection system & requirement

**Methodology:** Mainly lecture base, discussions on case-studies of relative topic, market survey and product analysis, field trips and practical derivation, studio base exercises and application of it in design studio.

**Reference:** National building code of India [bureau of Indian standards]  
Neufert architect's data [Ernst & Peter Neufert-3rd edition]  
Timesaver standards for architectural design data  
[Watson, Crosbie-7th edition]  
Timesaver standards for architectural design data  
[Calendar-6th edition]

**Subject Name : ELECTIVE DESIGN - I**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>V</b>	<b>ECT</b>	<b>161001010507</b>	<b>1.5</b>	<b>150</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** To develop the Critical thinking ability of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts/ literature.

**Content :** Elective available :

- 1) Appreciation of literature and poetry.
- 2) Appreciation of Art and design.
- 3) Appreciation of Music/ theater/ cinema.
- 4) Vernacular Architecture and settlement.
- 5) Documenting cities
- 6) Urban Economics and Sociology

\* The elective offered in the semester would depend on faculty availability

**Methodology :** Through Lecture, demonstration and excess

**Subject Name : ELECTIVE CRAFT - I**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>V</b>	<b>ECT</b>	<b>161001010508</b>	<b>1.5</b>	<b>150</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** To develop the creative faculties of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts.

**Content :** Elective available :

- 1) Graphic designs, calligraphy etc.
- 2) Architectural Photography
- 3) Media Exploration
- 4) Textile
- 5) Drawing, Painting and printing
- 6) Material Exploration – Mud, Glass, Wood, Metal, Plastics etc.
- 7) Construction Technique

\* The elective offered in the semester would depend on faculty availability

**Methodology:** Through Lecture, demonstration and excess

**Subject Name : DESIGN STUDIO – VI (DS – VI)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
Bachelor of Architecture	VI	CCT	161001010601	8	480	320	Viva	2 Day

**Intent :** Design Resolution & representation of design intent through construction documents ( Architectural Working Drawings & detail drawings ).  
Understanding the parameters of construction documents ( AWD ), prepare drawings for execution, co-relate and co-ordinate inputs from various consultants.

**Content :** Design problems on the design of closed environment, with emphasis on the articulation of interior spaces, detailing and finishing materials, textures, colour and light, acoustics and air-conditioning. Exterior spaces formed by buildings, Elevations, fenestration and built form as a moderator of urban space, site planning and landscaping.

Working drawings related to one or more aspects studied above with a view to understanding structures and services related to buildings of 3 to 5 Stories and the implications of specifications on the quality and cost of the Final architectural product.

Exposure to various system of transferring design intent to technical drawings & specifications .The various coding systems of Construction documents ( AWD )

**Methodology :** Based on the design of earlier semester a portion or a whole is taken for further design resolution.

Lectures, Slide shows, Library ref.

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – VI (B.M.C.-VI)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>VI</b>	<b>CCT</b>	<b>161001010602</b>	<b>4</b>	<b>240</b>	<b>160</b>	<b>Theory</b>	<b>2 + 4 Hrs.</b>

**Intent :** Overview of all construction elements, their specifications, preparation of abstract and quantity surveying.  
Industrial construction systems, critical study of building in terms of construction and quantity survey.

**Content :**

- Large span structures
- High rise structures; modular construction
- Tools, Equipment for such construction
- Critical study of building in terms of material used, techniques followed, structural systems and services.
- Issues of coordination between them during design and construction, causes for failures on performance.
- Estimating and costing of quantity with a full understanding of specifications
- valuation
- Building elements & anatomy

**Methodology :** Lectures, Fieldtrips, Documentations, Workshops, Seminars, Slide shows, Exercises.

**Subject Name : STRUCTURE –VI (STR –VI)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>VI</b>	<b>CCT</b>	<b>161001010603</b>	<b>3</b>	<b>180</b>	<b>120</b>	<b>Theory</b>	<b>3 Hrs.</b>

**Intent:** Understanding of section design in RCC and its implication on design of structures.

**Content :** Theory of composite sections applied to RCC structures. Review of properties of concrete and steel as applicable to RCC fundamental assumptions of RCC structure

- Analysis and design of singly reinforced sections, under reinforced, over reinforced and balanced sections.
- Analysis and design of one way and two way slab using coefficients and standard tables. Effects of continuity, detailing of reinforcement, provisions of IS 456. Derivation of thumb rules.
- Doubly reinforced section, effect of compression, steel on deflection.
- Introduction to and analysis of Tee beams Ell beams, practical examples of both.
- Diagonal tension, its effect and methods of resisting it. Design of shear reinforcement.
- Bond and its significance, types of bond, pull out test, factors affecting bond, local and average bond, design for bond, code provisions.
- Elements subjected to axial compression, types of columns, permissible stresses in concrete and steel, analysis and design of short columns, slenderness and its effect on the bond carrying capacity, analysis and design of long columns. Columns of a multi-storey building, code provisions, derivation of thumb rule.
- Types of foundations and their use, punching shear, analysis and design of spread footings, structural behavior of other types of foundations.
- Principles and Practices of Earthquake Resistant structures.

**Methodology :** Lectures, Presentations, Site visits etc.

**Subject Name : HISTORY OF ARCHITECTURE –IV (H.O.A.–IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>VI</b>	<b>CCT</b>	<b>161001010604</b>	<b>2</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** \* Industrial revolution and its impact on the World architecture  
\* Post industrial revolution movements in art and architecture

**Content :** \* Arts and crafts movement  
\* Classical revivalism  
\* Modern movement  
\* Modern Architects

**Methodology :** \* Lectures, Slideshows, Readings, understandings

**Reading list :** \* Christian Noberg Schultz, Genius Loci: Towards a Phenomenology of Architecture  
\* Christian Noberg Schultz, Existence, Space and Architecture  
\* Christopher Alexander, The timeless way of building  
\* Christian Noberg Schultz, Intensions in Architecture  
\* Banister Fletcher, History of Architecture  
\* Spiro Kostof, The city Assembled  
\* Kenneth Frampton, Modern Architecture, A critical History  
\* Bill Risebero, Modern Architecture and Design, An Alternative History  
\* Robert Ventury, Complexity and Contradiction in Architecture

**Subject Name : ENVIRONMENTAL SCIENCE & SERVICES – IV (E.S.S.-IV)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VI	CCT	161001010605	4	240	160	Theory	3 Hrs.

**SECTION – I (Heating, Ventilating, Air-conditioning & Cooling ( H.V.A.C.)**

**Intent :** Mechanical thermal control & human comfort levels.  
Criteria of fire fighting, protective measures & techniques

**Content :** \* H.V.A.C. [Heating, Ventilating, Air-conditioning and cooling]  
Mechanical thermal controls, its type, effects of it on heating, ventilating, air-conditioning or cooling an enclosed space. Air-conditioning or cooling systems, various types in practice, chilled water cooling system-air handling package-unit & their installation, demand and consumption as per use & volume of space. Supply plants and service layouts, supply and return air's ducting and channelling systems, calculations for consumption and basic sizes of components

**Methodology:** Mainly lecture base, discussions on case-studies of relative topic, market survey and product analysis, field trips and practical derivation, studio base exercises and application of it in design studio

**Reference:** National building code of India [bureau of Indian standards]  
Neufert architect's data [Ernst & Peter Neufert-3rd edition]  
Timesaver standards for architectural design data [Watson, Crosbie-7th edition]  
Timesaver standards for architectural design data [Callender-6th edition]

## **SECTION – II (Landscape Architecture)**

- Intent :**
- \* Understand man & nature relationship.
  - \* Understand land and its element, ecologically and resultant landscape.
  - \* Relationship of landscape in Architecture.

**Content :** - Introduction to landscape Architecture.

- Land & Landforms.
- Elements of land, Ecological cycles.
- Site & Site Analysis.
  - Introduction to plant mat.... & Planting Design.
  - Landscape construction & Landscape Design.

**Methodology :** Mainly lecture base, discussion on case-studies of relation topic, field trips, studio base exercise and application of it in design studio, nursery visit.

**Reference:**

The Landscape of man	( Geoffery Jellico)
Tropical Garden Plant	(Bose & chaudhry)
Trees of Delhi	(Pradeep Krishen)
Planting Design	(Brjan Hackett)
Design with nature	(Lan Machaig)
Introduction to landscape architecture	– Micheal Laurie
Design with landscape	– Simon Bell

**Subject Name : ELECTIVE DESIGN - II**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VI	ECT	161001010606	1.5	150	---	Viva	1 Day

**Intent :** To develop the Critical thinking ability of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts/ literature.

**Content :** Elective available :

- 1) Appreciation of literature and poetry.
- 2) Appreciation of Art and design.
- 3) Appreciation of Music/ theater/ cinema.
- 4) Vernacular Architecture and settlement.
- 5) Documenting cities
- 6) Urban Economics and Sociology

\* The elective offered in the semester would depend on faculty availability

**Methodology :** Through Lecture, demonstration and excess

**Subject Name : ELECTIVE CRAFT - II**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
Bachelor of Architecture	VI	ECT	161001010607	1.5	150	---	Viva	1 Day

**Intent :** To develop the creative faculties of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts.

**Content:** Elective available :

- 1) Graphic designs, calligraphy etc.
- 2) Architectural Photography
- 3) Media Exploration
- 4) Textile
- 5) Drawing, Painting and printing
- 6) Material Exploration – Mud, Glass, Wood, Metal, Plastics etc.
- 7) Construction Technique

\* The elective offered in the semester would depend on faculty availability

**Methodology:** Through Lecture, demonstration and excess

**Subject Name : DESIGN STUDIO – VII (DS – VII)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VII	CCT	161001010701	24	1200	1200	Viva	2 Day

**Intent :** Professional training.

**Content :** Office organization, client contact, exposure to brief formulation, site analysis, processes of design development, working drawings, contracts, exposure to consultants, understanding of impact costs on building design, site supervision.

Exposure to Practice.

**Subject Name : DESIGN STUDIO – VIII (DS – VIII)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VIII	CCT	161001010801	10	600	400	Viva	2 Day

**Intent :** Engage the students into the issues of settlements, or architecture larger than that designed for an individual household or small community. An exposure to the socio cultural issues at an urban level wherein both the common concerns of the population and other additional aspects of their interrelations come into focus. One would also attempt to understand the basic notions of coherence, identity, sense of place and sustainability of a larger urban issue.

**Content :** The studio would involve a set of design exercises, to achieve the above intent tailored to the particular batch of students, their previous design exercises, and abilities to be developed.

An exercise in which all the students partake, which is broadly an Urban Design / Mass Housing problem. This would involve around 50,000 sq. mts. to 1 sq.km. of designed space, depending on the context and the targeted students abilities. This is to broadly enable all the students to deal with a larger social project and understand its implications and impacts.

There may be another set of exercises, given as a choice to students to choose from, as per their specific inclinations and skills. These would attempt to achieve a further understanding of civic issues, ecological & environmental sustainability and urban & regional planning. The attitudes to context and landscape are again looked at a larger scale.

These design problems could include:

- A. A large Urban Insert (in the form of a campus, factory/workshop or infrastructure/amenities project) involving 10,000 to 25,000 sq. mts. of intervention in a specifically urban/semi urban context.
- B. A problem of Adaptive Reuse (in the form of an older unused /partially used building, or ruins converted to another more viable usage). This would involve around 5,000 to 10,000 sq.mts. of designed space, but necessarily partially in a preexisting built environment, and partially to be allowed new.

- C. Mass housing/township: This would include the designing of a large number of habitation units and their ancillary requirements, as per the size of the whole and laws of the place. It is suggested that the project deal with no less than 500 units, and include different socio economic categories to enable an understanding of inter realities and inter relations in habitations.
- D. Any other project of comparable breadth & depth as felt required.

**Methodology :** Input lectures & Studio discussions with faculty.

**Reading list:** Architecture of the City - Aldo Rossi.  
History of the City - Leonardo Benevolo.  
The Image of the City - Kevin Lynch.  
The City in History - Lewis Mumford.  
The City Assembled – Spiro Kostof  
The City Shaped – Spiro Kostof

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – VII (B.M.C.-VII)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VIII	CCT	161001010802	4	240	160	Theory	2 + 4 Hrs.

**Intent :** To introduce the student to advanced concepts in structural actions and detailing. It also will serve to introduce the student to the different types of structural systems available like space frames, geodesics and tensile structures. With the aid of these and other previously imbibed concepts, the student will also engage in designing some complex built environments sensitive to structural, material, technical and environmental issues.

**Content :** To introduce arches, their qualitative analysis, and understand how they react with different foundation systems.

Outline of different joineries existing in steel structures, with their relative merits.

Introduction of systems like pre-stressing and post tensioning to improve the structural response of materials.

Overview of space frames, tensile and geodesic structures.

Using a few examples of built environments to illustrate the amalgamation of structures, material choices, environmental issues and technology.

**Methodology :** Lectures, presentations, projects and assignments.

**Reading material I:** Theory of structures by S. Timoshenko  
Prestressed concrete by Krishna Raju  
Tensile structures Vol. 1 and Vol. 2 by Frei Otto  
Synergetics by R. Buckminster Fuller

**Subject Name : HISTORY OF ARCHITECTURE –V (H.O.A.–V)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>VIII</b>	<b>CCT</b>	<b>161001010803</b>	<b>4</b>	<b>120</b>	<b>80</b>	<b>Theory</b>	<b>2 Hrs.</b>

**Intent :** Understanding ideas of Urbanism (to support Design Studio VIII) and the works of Late-Modernist architects in India and abroad.

**Content :** This course would set out the basic notion, history and theories of Urbanism, seen through examples from Urban History (both World & Indian). It would also include the study & analysis of various settlement patterns & the cities-towns that manifest them, both traditional / accretive and modern / freshly planned. The course would also cover some examples of urban projects of various architects & thinkers. This is meant as a History + Theory backing for the parallel Design Studio, that is an urban level project.

History of Architecture would then continue its chronological path with the study of ideas & works of several important architects. The focus period would be the Late-Modernist (roughly 1960's to 1980's), both abroad and in India. Importance will be given to specific trends like Regionalism & Phenomenology and their proponents in various parts of the world.

**Methodology :** Lectures, Slideshows, Readings, Assignments.

**Reading :**

- 1.Design of Cities – Edmond Bacon
2. Cities in Space – Kulbhushan & Minakshi Jain
3. The City shaped – Spiro Kostof
4. The City Essembled - Spiro Kostof
5. Urban Structure – David Lewis
6. Genius Loci – Towards Phenomenology in Architecture: Christian Noberg Schultz
7. Modern Architecture and Design: An alternative history – Bill Risebero
8. The Medieval Town – Pritz Rovig
9. The Idea of Town – Joseph Rykwert
10. Hassan Fathy
11. Geoffry Bawa
12. Louis Kahn
13. Herman Hertzberger
14. Aldo Van Eyk
15. After The Master – Indian Architects

**Subject Name : ENVIRONMENTAL SCIENCE & SERVICES – V (E.S.S.-V)**

<b>Name of Course</b>	<b>Semester</b>	<b>Core / Elective/ Allied/ practical/project</b>	<b>Course /Paper Code</b>	<b>Credit</b>	<b>Internal Marks</b>	<b>External Marks</b>	<b>Practical / viva Exam</b>	<b>External Exam Time Durations</b>
<b>Bachelor of Architecture</b>	<b>VIII</b>	<b>ICT</b>	<b>161001010804</b>	<b>2</b>	<b>200</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** Approaching a seamless integration of various knowledge bases pertaining to building services and environmental issues with built environment design.

**Content :** Design exercises that shall bring about an amalgamation of various building services and environmental sensitivities with basic design practices.

**Methodology :** Input sessions, discussions, formatting of knowledge base, case studies and working on studio projects.

**Reading list :** Magazine – Down to Earth  
Engineers Handbook by R. Khanna  
Other CSE publications

**Subject Name : PROFESSIONAL PRACTICE – I (PP-I)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VIII	ICT	161001010805	2	180	120	Theory	3 Hrs.

**Intent :** To equip students with practical aspects of the field architecture and various category of people and situations they would come across and may have to deal with, during their private practice. This would help them in getting mentally prepared to face many odds and practice more professionally and sincerely.

**Content :**

Section - 1: Architect as a Professional Designer.

- Architecture as a profession: short history and future directions of the profession especially in India, various avenues open after education.
- Social obligations and role of an architect and how to start the practice of architecture.
- Clientele and related roles of an architect.
- Relationship with client and professional services to be offered.

Section – 2: Quantities and Estimation:

- Importance of the subject in practice.
- Methods of Estimation as per the purpose.
- Measurements and methods of quantities.
- Preparing schedule of quantities.
- Factors affecting rates of items.
- Estimation of a small portion of a building.

Section – 3: Specifications and Tenders:

- Nature and types of specifications and their importance.
- Constituents of specifications.
- Brief specifications and application of tenders.

**Methodology :** The course has very diverse dimensions. Therefore though one faculty may coordinate the whole program, but various experts for different topics would be invited and their input and expertise with their practical experience would be given to the students. Some literature from various books would be suggested only as reference.

- Reading list:**
1. Architectural Practice in India - Madhav Deobhakta.
  2. Hand book of Professional Documents – Council of Architecture
  3. News letters from C.O.A.
  4. Journals of I.I.A.
  5. News – letters from I.I.A. and its chapters / centers.
  6. Souvenirs published by I.I.A. and its chapters / centers.
  7. Professional Practice – Roshan Nanavati.

**Subject Name : ELECTIVE DESIGN**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VIII	ECT	161001010806	1.5	150	---	Viva	1 Day

**Intent:** To develop the Critical thinking ability of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts/ literature.

**Content:** Elective available :

- 1) Appreciation of literature and poetry.
- 2) Appreciation of Art and design.
- 3) Appreciation of Music/ theater/ cinema.
- 4) Urban Design
- 5) Urban Economics and Sociology
- 6) Interior Design,
- 7) Advance Computer Application
- 8) Project Management
- 9) Housing
- 10) Architectural Journalism
- 11) Sustainable Architecture

\* The elective offered in the semester would depend on faculty availability.

**Methodology:** Through Lecture, demonstration and excess

**Subject Name : ELECTIVE CRAFT**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	VIII	ECT	161001010807	1.5	150	---	Viva	1 Day

**Intent:** To develop the creative faculties of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts.

**Content:** Elective available :

- 1) Graphic designs, Calligraphy, Serigraphy etc.
- 2) Architectural Photography
- 3) Media Exploration
- 4) Textile
- 5) Drawing, Painting and printing
- 6) Material Exploration – Mud, Ceramics, Glass, Wood, Metal, Plastics etc.
- 7) Construction Technique

\* The elective offered in the semester would depend on faculty availability.

**Methodology:** Through Lecture, demonstration and excess

**Subject Name : DESIGN STUDIO – IX (DS – IX)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IX	CCT	161001010901	10	600	400	Viva	2 Day

**Intent:** To amalgamate the lessons learnt in the previous studios. To engage with design issues of a larger institution along with its external social ramifications. It also entails a student understanding and expanding a requirement brief into a valid and detailed building program and developing ones own conceptual stand and design there from. The proposal will be no less than 2500 sq. mts. of built space and no more than 5000 sq. mts., depending upon the nature of the project and its location.

**Content:** Design of a large institution, infrastructure/amenities project proposed by the student, either from an actual/live project, that one has come across or by proposing a new project, that is both required and viable. The student is therefore required to come prepared at the beginning with a design brief or project requirement along with an identified site. The student would spend a suggested 2 weeks on relevant case studies, site analysis and site model, and 2 weeks on program building.

During the course of the term, the student would develop the brief into a detailed building program with all relevant requirements with inputs from the faculty as well as respect the byelaws and standards applicable to the chosen site.

The student is expected to be able to draw from his/her entire design and other subject inputs over the previous years, evolve the conceptual premise and develop the design thereupon.

The main issues will be strength of the building program, clarity of conception, development of the character of institution along with the architectural feature like forms, volumes, transitional spaces, elements and building detailing. Attitudes to context and landscape are also expected to be developed to a level require by the project and the location.

**Methodology:** Studio discussions with the faculty.

**Subject Name : BUILDING MATERIAL & CONSTRUCTION – VIII (B.M.C.- VIII)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
Bachelor of Architecture	IX	CCT	161001010902	4	240	160	Exam	2 + 4 Hrs.

**Intent :** To create an awareness of the efficiency of shell structures and their building techniques.

To create an awareness of the latest construction techniques, material choices and technology options available.

**Content :** Introduction to shells, their various types and individual merits.

Construction details of various types of membranes and shells and the material choices and structural actions governing them.

To take up and critically analyze a few structures from a structural, construction and technology perspective, and through this exercise, to create an awareness in the students of the various kinds of options open to them. This approach will also instill an idea in the student about the reasons for making different choices, and what the merit of each action is.

**Methodology :** Lectures, assignments, slide shows, presentations and self study projects.

**Reading material :** Plates and Shells by S. Timoshenko and Woinowsky Krieger.

Roark's Formulae for Stress and Strain

Concrete Technology by Neville

Advanced Strength of materials by Seely and Smith.

**Subject Name : HISTORY OF ARCHITECTURE –VI (H.O.A.–VI)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
Bachelor of Architecture	IX	CCT	161001010903	2	120	80	Theory	2 Hrs.

**Intent :** Understanding Contemporary Architecture.

**Content :** The final History of Architecture course takes up the immediate past (roughly 1980's to 1990's) leading up to the present time. The course will also extend to social, political and literary theory developments to understand the cause, and the thoughts, ideas and works of several contemporary architects. Several trends like Post-Modernism, Deconstruction, Hi-Tech Architecture, etc. would be touched on.

Also, significant examples of Indian architecture of the last 10-15 years would also be re-viewed and analyzed in order to take it forward; which would be a fulfillment of a study of the history of architecture.

**Methodology :** Lectures, Slideshows, Readings, Assignments.

**Reading :**

1. Meaning in Architecture – Charls Jenks.
2. Intentions in Architecture – Christian Noberg Schultz
3. What time is this space – Kevin Lynch
4. Complexity and contradiction in Architecture – Robert Ventury
5. Tadao Ando
6. Peter Eisenmann
7. After the Masters – Indian Architects

**Subject Name : ENVIRONMENTAL SCIENCE & SERVICES – VI (E.S.S.-VI)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam Marks	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IX</b>	<b>ICT</b>	<b>161001010904</b>	<b>2</b>	<b>200</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent :** Further approaching a seamless integration of various knowledge bases pertaining to building services and environmental issues with built environment design.

**Content :** Design exercises that shall bring about an amalgamation of various building services and environmental sensitivities with basic design practices.

**Methodology :** Input sessions, discussions, formatting of knowledge base, case studies and working on studio projects.

**Reading list :** Magazine – Down to Earth  
Engineers Handbook by R. Khanna  
Other CSE publications

**Subject Name : PROFESSIONAL PRACTICE – II (PP-II)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IX	ICT	161001010905	3	180	120	Theory	3 Hrs.

**Intent** : To equip students with practical aspects of the field architecture and various category of people and situations they would come across and may have to deal with, during their private practice. This would help them in getting mentally prepared to face many odds and practice more professionally and sincerely.

**Content** : - Section – 1: Architect as a Professional practitioner.

- Contract between an architect and the client.
- Management of the contract and roles of an architect and the client.
- Types of architect's offices and roles of various staff.
- Employer – Employee relationship.
- Responsibility towards education.
- Professional associations, their types, purpose, role, responsibilities, activities, etc.

Section – 2: Quantities and Estimates:

- Detailed estimation and factors involved.
- Summarizing estimate and recapitulation.
- Principal material requirements related to the estimates.
- Rate analysis.

Section – 3: Specifications and tenders:

- Quality of materials and proportions.
- Quality of technical labour.
- Tests of materials and products and their acceptance.
- Structuring and writing specification.
- Tendering systems and constituents of the tender documents.

**Methodology**: The course has very diverse dimensions. Therefore though one faculty may coordinate the whole program, but various experts for different topics would be invited and their input and expertise with their practical experience would be given to the students. Some literature from various books would be suggested only as reference.

**Reading list**: 1. Architectural Practice in India - Madhav Deobhakta.

2. Hand book of Professional Documents – Council of Architecture

3. News letters from C.O.A.

4. Journals of I.I.A.

5. News – letters from I.I.A. and its chapters / centers.

6. Souvenirs published by I.I.A. and its chapters / centers.

7. Professional Practice – Roshan Nanavati.

**Subject Name : ELECTIVE DESIGN –IV**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	IX	ECT	1161001010906	1.5	150	---	Viva	1 Day

**Intent:** To develop the Critical thinking ability of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts/ literature.

**Content:** Elective available :

- 1) Appreciation of literature and poetry.
- 2) Appreciation of Art and design.
- 3) Appreciation of Music/ theatre/ cinema.
- 4) Urban Design
- 5) Urban Economics and Sociology
- 6) Interior Design,
- 7) Advance Computer Application
- 8) Project Management
- 9) Housing
- 10) Architectural Journalism
- 11) Sustainable Architecture

\* The elective offered in the semester would depend on faculty availability.

**Methodology:** Through Lecture, demonstration and excess

**Subject Name : ELECTIVE CRAFT - IV**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
<b>Bachelor of Architecture</b>	<b>IX</b>	<b>ECT</b>	<b>161001010907</b>	<b>1.5</b>	<b>150</b>	<b>---</b>	<b>Viva</b>	<b>1 Day</b>

**Intent:** To develop the creative faculties of the students and equip them to understand the acts/ process of ‘making ‘ in the various field of arts.

**Content:** Elective available :

- 1) Graphic designs, Calligraphy, Serigraphy etc.
- 2) Architectural Photography
- 3) Media Exploration
- 4) Textile
- 5) Drawing, Painting and printing
- 6) Material Exploration – Mud, Ceramics, Glass, Wood, Metal, Plastics etc.
- 7) Construction Technique

\* The elective offered in the semester would depend on faculty availability

**Methodology:** Through Lecture, demonstration and excess

**Subject Name : DESIGN STUDIO – X (DS – X)**

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	X	DP	161001011001	18	720	1080	Viva	-

**Intent :** It is intended throughout the course, that in addition to the technical, design & communication abilities; the student also develop a critical thinking attitude based on valid inquiry & logical structure. The tenth semester, being the final stage of the student's course, calls upon the student to engage in and present a research work that exemplifies his critical abilities & structured thought.

**Content:** A research thesis on a subject chosen by the student and approved by the thesis committee, of no less than 10,000 words alongwith requisite & suitable illustrations & drawings. The student comes with a proposal at the beginning of the term, and chooses a research guide either form within IPSA or with the committee agreement an external person better qualified in the subject. With the help of the guide and lessons learnt through the Research Methods element & other theoretical work during the course, the student develops the proposal into a research work of undergraduate caliber. The main issues will be validity of the hypothesis, strength of analytical structure, depth & efficacy of chapterisation points, sufficient external references, quality of illustrations requisite to the research work.

**Methodology :** Library research, site studies & discussions with guide  
1<sup>st</sup> week – Typed proposal (500 words length)  
1<sup>st</sup> Monthly review – Hypothesis & basic structure / chapterisation  
Mid-term review – Full Chapterisation with One point / chapter expanded.  
3<sup>rd</sup> Monthly review – Bulk of the research work (including expanded chapters, illustrations-drawings)  
Final review (pre-Viva) – Complete work (including Introduction, Conclusion, Credits, Captions & Bibliography in presentation format)

**Reading list:** To be decided by the student with the advice of the Guide depending on subject matter.

## Subject Name : PROFESSIONAL PRACTICE – III (PP – III)

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	X	ICT	161001011002	2	120	80	Theory	2 Hrs.

**Intent :** To equip students with practical aspects of the field architecture and various category of people and situations they would come across and may have to deal with, during their private practice. This would help them in getting mentally prepared to face many odds and practice more professionally and sincerely.

**Content : -**

### Section – 1: Architect as a professional:

- Professional role, responsibilities and liabilities of an architect.
- Ethics in profession.
- Architects' indemnity (Security against damages.)
- Management of contract between client and contractor.
- Roles of a) Client, b) Consultants, c) Contractor / subcontractors. and their coordination by the architect.
- Site supervision and roles and responsibilities of a) Architect, b) Contractor, c) Clerk of works, d) Client.
- Professional fees and expense structure.
- Tax planning.
- Development controls

### Section – 2: Specifications and Contracts:

- Role of specifications in set of contract.
- Types of contracts.
- Financial and quality implications of specifications.
- Ideal and real specifications.
- Contents of contract.
- Conditions of contract.
- Obligations and responsibilities of a) Client, b) Contractor, c) Architect.
- Labour laws and obligations, insurance, deposits etc.

**Methodology:** The course has very diverse dimensions. Therefore though one faculty may coordinate the whole program, but various experts for different topics would be invited and their input and expertise with their practical experience would be given to the students. Some literature from various books would be suggested only as reference.

**Reading list:**

1. Architectural Practice in India - Madhav Deobhakta.
2. Hand book of Professional Documents – Council of Architecture
3. News letters from C.O.A.
4. Journals of I.I.A.
5. News – letters from I.I.A. and its chapters / centers.
6. Souvenirs published by I.I.A. and its chapters / centers.
7. Professional Practice – Roshan Nanavati.

## Subject Name : RESEARCH METHODOLOGY

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	X	ICT	161001011003	2	120	80	Theory	2 Hrs.

**Intent :** Understanding basic principles of any research task with specific reference to architectural research and its application to the undergraduate level.

**Content :** The nature and function of research, scientific research, meaning of research, traditional and potential areas/types, the three stages of research, research methodology, various techniques of data collection in general, specific techniques in architectural research, methods of analysis stage, communication of research reporting, the structure of a report, the necessity for the development of writing skills, technical data about formal writing the use of visuals, the qualities of research, the use of primary and secondary references, bibliography, notation, cross reference etc. Issues of selective reference. Methods of writing draft reports before finalization.

The nature of an undergraduate thesis, its structure and other requirements, research in the fields of environment, community structure, architectural history and theory, urban structure, building type studies, etc. Behavioral studies and user evaluation.

**Methodology: -** Input sessions and assignments.

## Subject Name : WORKSHOP -V

Name of Course	Semester	Core / Elective/ Allied/ practical/project	Course /Paper Code	Credit	Internal Marks	External Marks	Practical / viva Exam	External Exam Time Durations
Bachelor of Architecture	X	SO	161001011004	2	200	---	Viva	1 Day

**Intent: -** To facilitate students present their studio X works in a comprehensible manner encompassing the basic design skills of representation.

**Content: -** Hand skills - mixing  
Digital skills - Print Media, Digital Media  
Material understanding – Upkeep, reproducibility and life.

**Methodology: -** Lectures, demonstrations and tutorials related to studio X works representation.