



B.Arch. Teaching Scheme for Semester I & II

Semester I

S. No.	Course Code	Course Title	Category	Type	Credits	L-T-P-S	Hours/Week
1	22CET102	Environmental Science and Ecology	Institute Core	Theory	1	1-0-0-0	1
2	22CET109	Architectural Structures (Statics)-I	Program Linked	Theory	3	2-1-0-0	3
3	26ARS102	Architectural Drawing	Program Core	Studio	4	1-0-0-3	4
4	26ARS103	Building Construction & Materials-I	Program Core	Studio	4	1-0-0-3	4
5	26ARS101	Introduction to Architecture and Basic Design	Program Core	Studio	4	1-0-0-3	4
6	26ARP101	Architectural Presentation Technique & Model Making-I	Program Core	Practical	2	0-0-4-0	4
Total Credits & Teaching hours/semester					18		20

Note:

- Educational Tour to be part of Design Studio in either even or odd semester
- The ETE of Arch.Design will include evaluation of sessional works by external examiners @15-20 students per examiner
- External examiner should be a practicing architect of repute or a faculty member from academia having more than 5 Years of experience
- Adjunct/Expert faculty for Arch.Design and Building Construction Studio to be included as per CoA guidelines

Semester II

S. No.	Course Code	Course Title	Category	Type	Credits	L-T-P-S	Hours/Week
1	26ART151	History of Architecture - I	Program Core	Theory	3	2-1-0-0	3
2	22CET193	Architectural Structure - II	Program Linked	Theory	3	2-1-0-0	3
3	22CET191	Surveying and Introduction to GIS	Program Linked	Theory	2	2-0-0-0	2
4	26ARS151	Architectural Design - I	Program Core	Studio	6	0-0-0-6	6
5	26ARS152	Building Construction & Materials - II	Program Core	Studio	4	1-0-0-3	4
6	26ARP151	Architectural Presentation Technique & Model Making- II	Program Core	Practical	2	0-0-4-0	4
7	22CEP192	Surveying and Introduction to GIS Lab	Program Linked	Practical	1	0-0-2-0	2
8	22BMI201	Introduction to Standardization	Institute Core	Audit Course	0	1-0-0-0	—
Total Credits & Teaching hours/semester					21		24

Note:

- Educational Tour to be part of Design Studio in either even or odd semester
- The ETE of Arch.Design will include evaluation of sessional works by external examiners @15-20 students per examiner
- External examiner should be a practicing architect of repute or a faculty member from academia having more than 5 Years of experience
- Adjunct/Expert faculty for Arch.Design and Building Construction Studio to be included as per CoA guidelines



Course Details

Architectural Structures (Statics)-I | 22CET109 | 2 1 0 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To instruct students with principles of structural mechanics and Strength of Materials.

COURSE OUTCOMES:

CO1 : To introduce the basic concepts of structural mechanics and Strength of Materials.

CO2 : Conceptual understanding of compressive and tensile forces, and bending moments.

CO3 : Equilibrium of forces.

SYLLABUS:

UNIT I (6 Lectures): Centroid of an area, moment of inertia, radius of gyration, polar moment of inertia, parallel and perpendicular axes theorems.

UNIT II (7 Lectures): Concept of stress and strain, stress-strain curve, modulus of elasticity, Poisson's ratio. Theory of simple bending, distribution of bending stresses.

UNIT III (7 Lectures): Shear stress distribution in beams. Shear force and bending moment diagrams for simply supported and continuous beams, and cantilevers.

UNIT IV (6 Lectures): Analysis of pin, roller, and fixed joints. Long and short columns, slenderness ratio, buckling load for various end conditions of column.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	30%
Midterm Exam	30%
Endterm Exam	40%

depending on the institute's academic policy.

Textbook(s):

1. B.C. Punmia, Strength of Materials & Mechanics of Structure

Reference book(s):

1. V.S. Prasad, Structural Mechanics & Analysis
2. C.S. Reddy, Basic Structural Analysis
3. R.C. Hibbeler, Mechanics of Materials
4. S. Ramamrutham, Strength of Materials
5. Timoshenko, Strength of Materials

Online/E-Resources:



Course Details

Architectural Drawing | 26ARS102 | 1 0 0 3

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To develop drawing skills as tools for thinking, visualization, and representation of the design.

COURSE OUTCOMES:

CO1 : To understand drafting procedures and graphic codes.

CO2 : To understand interpenetration of solids.

CO3 : To understand Three-Dimensional Graphic Representation.

SYLLABUS:

UNIT I (4 Lectures): Drafting Procedures: Familiarising with drawing materials and equipment. Introduction to drafting procedures, graphic codes, symbols, and architectural lettering. Practice of line-types, line weight, dimension lines, extension lines, centre lines, section lines, etc., and introduction to architectural and construction symbols. Understanding architectural scales and their application to real objects and drawings (plain scale, graphic scale, diagonal scale, and isometric scale). Construction of basic and complex geometrical shapes, platonic shapes and their surface developments.

UNIT II (4 Lectures): Projections in Drawings: Orthographic projections of simple regular two-dimensional shapes, i.e., projection of lines — true length, projection of planes and solids. Complex solids and hollow objects and sections, i.e., cube, prism, pyramid, cylinder, cone and sphere. Study of the interpenetration of solids.

UNIT III (5 Lectures): Introduction to Three-Dimensional Graphic Representation: Isometric, axonometric and oblique projections. Perspective — one-point and two-point perspectives. Exercises in perspective drawing of simple geometrical forms leading to the perspective of buildings. Sciography of simple geometric forms leading to sciography of architectural forms. Exercises: Drawing/drafting exercises based upon the above modules.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. N.D. Bhatt & Venugopal, Engineering Drawing
2. P.S. Gill, Engineering Drawing

Reference book(s):

1. Mulik, Perspective and Sciography
2. Robert W. Gill, Rendering with Pen & Ink
3. Frederick E. Giesecke et al., Technical Drawing with Engineering Graphics
4. Ernest R. Weidhaas, Architectural Drafting and Design
5. Frank Ching, Design Drawing
6. Paul Laseau, Freehand Sketching: An Introduction
7. Rendow Yee, Architectural Drawing: A Visual Compendium of Types and Methods

Online/E-Resources:



Course Details

Building Construction & Materials-I | 26ARS103 | 1 0 0 3

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

The understanding and application of basic building materials and techniques in conventional construction practices. Emphasis to be laid on Load bearing construction.

COURSE OUTCOMES:

CO1 : To understand construction principles of masonry work and bond details.

CO2 : To understand flooring in brick and stone.

SYLLABUS:

UNIT I (3 Lectures): Study of manufacturing process, structural, visual and textural properties, varieties and application of masonry building materials.

UNIT II (4 Lectures): Construction principles of masonry work and bond details in brick and stone in walls, wall junctions and piers. Foundations — simple wall and pier footings.

UNIT III (3 Lectures): Openings — construction details of lintels, arches, sill and jambs, jalis, and cornices in brick and stone. Flooring in brick and stone.

UNIT IV (3 Lectures): Introduction to roof construction such as flat roof, jack arch roof, domes, vaults, etc., in brick and stone. Exterior and interior wall sections. Exercises: Exercises based upon the above modules.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. Francis D.K. Ching, Building Construction
2. W.B. McKay, Mehta, M. Scarborough, Armpriest, Diane, Building Construction: Principles, Materials and Systems, Pearson Prentice Hall
3. Sushil Kumar, Building Construction
4. R. Barry, Construction of Buildings, Vol. 2 — masonry and load-bearing detailing companion volume

Reference book(s):

1. P N Khanna, Indian Practical Civil Engineers Handbook
2. B.C. Punmia, Building Construction
3. Roy Chudley & Roger Green, Building Construction Handbook
4. National Building Code of India 2016 (BIS)

Online/E-Resources:



Course Details

Introduction to Architecture and Basic Design | 26ARS101 | 1 0 0 3

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To understand elements and principles of design and their application in spatial design.

COURSE OUTCOMES:

CO1 : Learning elements of design.

CO2 : Understanding anthropological activities in designing space.

SYLLABUS:

UNIT I (7 Lectures): Perception of Architecture: Learning elements of design — point, line, plane, solid, curve, etc. Understanding principles of design like harmony, rhythm, contrast, balance and proportions, etc., and their application. Composition of forms/shapes using concepts of symmetry, array, translation, mirroring, concentric & grid arrangements, etc., and transformation through intersection, addition, subtraction. Exploring kinaesthetic and sensory qualities of architectural space: size, proportion, scale, degree of enclosure, light and relationship with other spaces. Introduction to architectural vocabulary and architectural appreciation through studying the works of Indian and foreign architects and understanding their design concepts and realization of the same.

UNIT II (6 Lectures): Human Factors in Architecture: Understanding anthropological activities, anthropometrics, ergonomics, etc., involved in the design of spaces and human responses to them. Typical drawings to study furniture layouts and their relation to human functions & activities. Form-based design of a shelter for a certain activity such as: kiosk design, food vendor s stall, guard house, bus stop, gazebo, etc. Note: Local study tour will be part of the subject. Exercises: Exercises based upon the above modules.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. Francis D.K. Ching, Form, Space & Order

Reference book(s):

1. Jatin Das, Elements of Space Making
2. Victor Papanek, Design for the Real World
3. Debkumar Chakrabarti, Indian Anthropometric Dimensions, National Institute of Design, 1997
4. Rudolf Arnheim, Art and Visual Perception: A Psychology of the Creative Eye
5. Wucius Wong, Principles of Form and Design
6. Julius Panero & Martin Zelnik, Human Dimension & Interior Space
7. Edward T. White, Concept Sourcebook: A Vocabulary of Architectural Forms

Online/E-Resources:



Course Details

Architectural Presentation Technique & Model Making-I | 26ARP101 | 0 0

4 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To instruct students for free-hand sketching, drawing and graphics with colour rendering and its applications.

COURSE OUTCOMES:

CO1 : Learning and practicing various mediums for free-hand sketching, drawing and graphics.

CO2 : Exploring various materials for making three-dimensional models.

SYLLABUS:

EXPERIMENT I (20 Hours): Using various mediums — pencils, crayons, colours, charcoal and ink, etc.: Free hand sketching of objects of daily use, vegetation, human figures, automobiles, etc. Silhouette drawings, line drawings, cross-hatching, stippling, doodling, etc. Understanding the depiction of forms in a minimal way through abstraction. Indoor and outdoor sketching. Exploring various innovative techniques of presentation.

EXPERIMENT II (16 Hours): Colour Rendering and its Application: Understanding the colour wheel and study of primary, secondary, tertiary, complementary, monochromatic, analogous, and triadic colours. Study of shades, tints and tones. Rendering techniques via using various colouring mediums such as water/acrylic/crayons/pastel/pencil colours and sketch pens.

EXPERIMENT III (16 Hours): Model Making and Sculpting: Understanding proportions and scale through models in various mediums. Exploring forms through subtraction, addition and intersection of various forms using Plaster of Paris (POP) and clay modeling.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. Robert W. Gill, Rendering with Pen & Ink

Reference book(s):

1. Sadao Nakamiva, The Color Source Book for Graphic Designers
2. Michael E. Doyle, Color Drawing: Design Drawing Skills and Techniques for Architects, Landscape Architects, and Interior Designers
3. Paul Laseau, Freehand Sketching: An Introduction
4. Nick Dunn, Architectural Modelmaking
5. Wolfgang Knoll & Martin Hechinger, Architectural Models: Construction Techniques
6. Betty Edwards, Drawing on the Right Side of the Brain

Online/E-Resources:



Course Details

History of Architecture - I | 26ART151 | 2 1 0 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To understand the genesis and characteristic features of Indian "Architectural styles" with reference to causative forces such as climate, society, technology, available materials, geo-natural factors and the underlying socio-cultural & religious aspects translating to design theories in the context of Indian architecture.

COURSE OUTCOMES:

CO1 : To describe and analyze the major stylistic and theoretical developments in Indian architecture from ancient to medieval times.

CO2 : To develop the knowledge, skills, and perspectives gained through the study of Indian architecture.

CO3 : To develop a nuanced understanding of the relationships between Indian architecture and other forms of artistic expression, such as sculpture, painting, and literature, and to explore the broader cultural and historical contexts in which Indian architecture is situated.

SYLLABUS:

UNIT I (6 Lectures): Buddhist Architecture: Origin and sources of the style. Rock-cut architecture of the Early Buddhist period. Stupas: concept, types and construction — the great stupa at Sanchi, Sarnath, and Amravati. Stupas in other South Asian countries. Architecture of Chaityas and Viharas.

UNIT II (10 Lectures): Early Hindu Architecture: Concept and origin of Hindu Temple Architecture, typology, and regional styles. Introduction to Nagara, Dravida and Vesara temples, Kutina, Latina, Bhumiya and Shekhari modes. Introduction to the concept and basic principles of Vastu Shastra. Early temples: rock-cut temples of Pallavas and Rashtrakutas, early North Indian temples of Guptas, Proto-Nagara shrines of South Kosala, Maitrakas and Gopadri style, early Chalukyan temples at Badami and Aihole. Genesis of temple architecture. Nagara temples: Pratihara and Solanki temples of western India, Kalinga style temples, temples of Central India, major temple groups in Malwa, Bundelkhand, and Orissa (Khajuraho, Bhuvaneshwar, Jagannath Puri, Konark, Osian, Baroli, etc.). Dravida temples: built-up temples of Pallavas, Cholas, Nayakas, and Pandyas — representative examples of each style and period, temples of Kerala. Vesara temples: Mishraka Vimanas of Chalukyan style, introduction to Hoysala temples, Kalyani Chalukyan architecture, Vijaynagar style, Maru-Gurjara temples of Solankis. Jain Architecture: Jain temples, concept and select examples, comparison with Hindu temples.

UNIT III (10 Lectures): Indo-Islamic Architecture in India: Spatial, structural and aesthetic concepts of Islamic culture. Islamic building typologies. Imperial architecture at Delhi: Slave, Khalji, Tughlaq, and Sayyid/Lodhi tombs and mosques. Provincial/regional architecture: styles of Bengal, Gujarat, Jaunpur, Deccan, Malwa, and Bijapur. Mughal architecture of Delhi and Agra: mosques, forts, tombs, and gardens of the Mughals. Post-Mughal buildings in India: genesis of a hybrid architectural style of Hindu and Islamic traditions in the 18th and 19th centuries. Introduction to Rajput, Bengal, and Maratha architecture.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	20%
Midterm Exam	30%
Endterm Exam	50%

depending on the institute's academic policy.

Textbook(s):

1. Fletcher, S.B., History of Architecture, London: Batsford, 1924
2. George Michell, The Hindu Temple: An Introduction to Its Meaning and Forms

Reference book(s):

1. S.P. Gupta & S. Vijayakumar, Temples in India — Origin & Development Stages, Centre for Research & Training in History, Archaeology & Paleo-Environment & D.K. Printworld Ltd.
2. J.H. Fergusson, History of Indian and Eastern Architecture, DODD Mead and Co., 1891 / John Murray, Albemarle Street, 1910
3. Percy Brown, Indian Architecture (Buddhist and Hindu Periods)
4. Satish Grover, The Architecture of India: Buddhist and Hindu
5. Adam Hardy, Indian Temple Architecture: Form and Transformation
6. Percy Brown, Indian Architecture (Islamic Period)

Online/E-Resources:



Course Details

Architectural Structure - II | 22CET193 | 2 1 0 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To introduce the understanding of statically determinate and indeterminate structures.

COURSE OUTCOMES:

CO1 : To make students aware about slopes and deflections in structures.

CO2 : To gain knowledge about various method of analysis for structural loads.

SYLLABUS:

UNIT I (6 Lectures): Slopes and deflections in statically determinate beams using double integrations method, moment area method and conjugate beam method.

UNIT II (5 Lectures): Equilibrium and stability of structures, static and kinematic indeterminacies of beams and plane frames.

UNIT III (6 Lectures): Analysis of continuous beams and simple portal frame using slope deflection method and M.D. method.

UNIT IV (4 Lectures): Approximate method of analysis for lateral loads— portal and cantilever method.

UNIT V (5 Lectures): Arches: Geometrical properties, basic mechanics, arch action; three hinged arch, and two hinged arches.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	30%
Midterm Exam	30%
Endterm Exam	40%

depending on the institute's academic policy.

Textbook(s):

1. B.C. Punmia, Strength of Materials & Mechanics of Structure

Reference book(s):

1. V.S. Prasad, Structural Mechanics & Analysis
2. C.S. Reddy, Basic Structural Analysis
3. Relevant IS Codes
4. Timoshenko & Young, Theory of Structures
5. L.S. Negi, Structural Analysis

Online/E-Resources:



Course Details

Surveying and Introduction to GIS | 22CET191 | 2 0 0 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To equip students with survey procedures and measurement tools for systematic study of topographic features in reference to planning and design of architecture projects.

COURSE OUTCOMES:

CO1 : To introduce students about Survey of Sloping Landforms.

CO2 : To make students aware about Advanced Survey methods and GIS software.

SYLLABUS:

UNIT I (7 Lectures): Introduction: Understanding of Principles, definitions, symbols and instruments used in Surveying, Reading of Survey maps, understanding of topographic features: contours, slope analysis, grading process, graphic representations of landforms, Identification of common errors in surveying and their corrections.

UNIT II (6 Lectures): Elementary survey methods: Horizontal plane measurements, Type of linear survey— chain survey, tape survey, compass survey, system of entries and record of measurement, setting field boundaries and area estimations.

UNIT III (7 Lectures): Survey of Sloping Landforms: Characteristics of landform, Contouring methods & level instruments, contour intervals, methods of contouring, contour surveys, development of cross sections, and L-section, gradients, plotting contours & profiles, estimating areas & volumes. Measurements along sloping landforms, methods of simple & differential leveling.

UNIT IV (6 Lectures): Advanced Survey methods and GIS: Limitations of traditional survey techniques, Theodolite surveying, Introduction to Remote sensing & GIS— concept and definition, Applications of GIS in surveying, automated & digital surveying, Total station, G.P.S, Aerial Photography, digital levels, auto-levels, drone survey.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	30%
Midterm Exam	30%
Endterm Exam	40%

depending on the institute's academic policy.

Textbook(s):

1. S.K. Duggal, Surveying & Levelling

Reference book(s):

1. B.C. Punmia, Surveying
2. P.K. Garg, Introduction to Remote Sensing and GIS
3. T.P. Kanetkar & S.V. Kulkarni, Surveying and Levelling
4. N.N. Basak, Surveying and Levelling
5. M. Anji Reddy, Remote Sensing and GIS

Online/E-Resources:



Course Details

Architectural Design - I | 26ARS151 | 0 0 0 6

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To understand the process of evolution of architectural form through analysis of simple activities and geometry.

COURSE OUTCOMES:

CO1 : To make students familiar with Architectural form with respect to site, context and aesthetics.

CO2 : To gain knowledge about space, form, function and anthropometrics.

CO3 : To introduce students to basic design methodologies.

SYLLABUS:

UNIT I (0 Lectures): Introduction to determinants of Architectural form with respect to site, context and aesthetics

UNIT II (0 Lectures): Interdependence of space, form, function and anthropometrics.

UNIT III (0 Lectures): Introduction to basic design methodologies involving a relevant case study with due emphasis on development of form, study of mass, void and materials used. Note: 1 practicing Architect has to be part of the design studio as visiting faculty for each section.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. Joseph De Chiara & John Hancock, Neufert Architects Data

Reference book(s):

1. Callender, Time Saver Standards for Building Types
2. Francis D.K. Ching, Architecture: Form, Space, and Order
3. Edward T. White, Concept Sourcebook: A Vocabulary of Architectural Forms
4. Rudolf Arnheim, The Dynamics of Architectural Form
5. Pierre von Meiss, Elements of Architecture: From Form to Place
6. Roger H. Clark & Michael Pause, Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis

Online/E-Resources:



Course Details

Building Construction & Materials-II | 26ARS152 | 1 0 0 3

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

The understanding and application of Timber and its products in building. Emphasis to be laid on timber joinery details in various applications.

COURSE OUTCOMES:

CO1 : To introduce students about Varieties and application of paints and varnishes.

CO2 : To gain knowledge about Timber joinery, details, and their applications.

CO3 : To understand Conceptual and structural applications various materials.

SYLLABUS:

UNIT I (3 Lectures): Study of conversion and preservation process, structural, visual and textural properties, varieties and application of timber, and its different derivatives. Varieties and application of paints and varnishes.

UNIT II (2 Lectures): Timber joinery, details, and their applications.

UNIT III (2 Lectures): Conceptual and structural applications of timber for floors, walls/partitions, roofs, staircases etc.

UNIT IV (2 Lectures): Derivatives of timber such as ply-board, particle boards, MDF, HDF, HPCL, veneers, and laminates.

UNIT V (2 Lectures): Flooring and finishes: timber flooring and timber panelling.

UNIT VI (2 Lectures): Openings: different types of doors and windows in timber. NOTE: Professional expert may be called from time to time.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. Francis D.K. Ching, Building Construction
2. W.B. McKay, Mehta, M. Scarborough, Armpriest, Diane, Building Construction: Principles, Materials and Systems, Pearson Prentice Hall

Reference book(s):

1. R. Barry, Construction of Buildings
2. P N Khanna, Indian Practical Civil Engineers Handbook
3. Roy Chudley & Roger Green, Building Construction Handbook
4. Mitchell s Building Construction Series (relevant timber/joinery volume)
5. B.C. Punmia, Building Construction
6. Sushil Kumar, Building Construction
7. National Building Code of India 2016 (BIS)

Online/E-Resources:



Course Details

Architectural Presentation Technique & Model Making-II | 26ARP151 | 0

0 4 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

Advance learning and practicing of different mediums for sketching, drawing and rendering for presenting architectural plans, sections, elevations and 3D views.

COURSE OUTCOMES:

CO1 : To make students aware about various different rendering methods and mediums.

CO2 : To introduce various types of architectural models and their application.

CO3 : To gain knowledge about architectural photography and digital processing for documentation and presentation.

SYLLABUS:

EXPERIMENT I (20 Hours): Architectural Rendering: Rendering of architectural drawings and applying methods such as hatching, cross hatching, stippling, doodling in black & white or colour. Rendering of architectural drawings using different mediums such as water, acrylic, crayons, pastel, pencil colours and sketch pens.

EXPERIMENT II (20 Hours): Architectural Model Making: Types of architectural models and their application at various stages of design development. Volumetric translation of architectural concepts through model making. Application of laser cutting and 3D printing for rapid prototyping.

EXPERIMENT III (12 Hours): Architectural Photography: Learning photographic composition, frames and viewing angles. Digital processing of photographs using graphic softwares.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	50%
Midterm Exam	20%
Endterm Exam	30%

depending on the institute's academic policy.

Textbook(s):

1. Robert W. Gill, Rendering with Pen & Ink
2. Megan Werner, Model Making, Princeton Architectural Press, New York

Reference book(s):

1. Sadao Nakamiva, The Color Source Book for Graphic Designers
2. Grant Reid, Landscape Graphics: Plan, Section and Perspective Drawing of Landscape Spaces
3. Architectural Modelmaking, Laurence King Publishing Ltd, London, 2014
4. Nick Dunn, Architectural Modelmaking (Laurence King, 2nd Ed.)
5. Frank Ching, Design Drawing
6. Paul Laseau, Graphic Thinking for Architects and Designers
7. Michael E. Doyle, Color Drawing: Design Drawing Skills and Techniques for Architects, Landscape Architects, and Interior Designers
8. Wolfgang Knoll & Martin Hechinger, Architectural Models: Construction Techniques

Online/E-Resources:



Course Details

Surveying and Introduction to GIS Lab | 22CEP192 | 0 0 2 0

PREREQUISITE:

NIL

COURSE OBJECTIVE(S):

To provide hands-on training in survey field procedures, instruments, and application of GIS tools for architectural site documentation and planning.

COURSE OUTCOMES:

CO1 : To gain practical proficiency in elementary and advanced surveying techniques.

CO2 : To apply GIS and modern survey technologies for site documentation.

SYLLABUS:

EXPERIMENT I (10 Hours): Elementary Field Surveying: Chain survey, tape survey, and compass survey fieldwork; setting field boundaries and area estimation exercises.

EXPERIMENT II (10 Hours): Leveling and Contour Surveying: Dumpy level/auto-level practice, differential leveling exercises, contour survey and plotting, cross-section and L-section plotting.

EXPERIMENT III (6 Hours): Advanced Survey Methods and GIS: Theodolite/total station practical, GPS field exercise, introduction to GIS software for mapping survey data.

EVALUATION

Final grades will be weighted average of performance in

Continuous Assessment	30%
Midterm Exam	30%
Endterm Exam	40%

depending on the institute's academic policy.

Textbook(s):

1. S.K. Duggal, Surveying & Levelling

Reference book(s):

1. B.C. Punmia, Surveying
2. P.K. Garg, Introduction to Remote Sensing and GIS
3. T.P. Kanetkar & S.V. Kulkarni, Surveying and Levelling
4. N.N. Basak, Surveying and Levelling
5. M. Anji Reddy, Remote Sensing and GIS

Online/E-Resources: