No.of Teaching Weeks: 16	**Course Title: Architectural Drawing**
Contact Hours: per week : L : 0 S: 3	**Course Code: AP-105**
Contact Hours: per sem : L : 0 S: 45	**Ist YEAR – 2025-2026, Semester I**
Credit: 03	**Course Coordinator : Binita Tamboli**
Total Marks:100 (E=60 I=40)	**Studio Team: Binita Tamboli ,Shoeb Alam**

Objectives:

To introduce students to the techniques of Architectural Drawing ,its vocabulary and grammar such as scale , annotations , labeling and dimensioning. To enable students to express simple 2 & 3 dimensional objects and building components through technical drawings, using various graphical projection system with technical understanding of the same.

Pedagogy:

LECTURE ON THE SPECIFIED TOPICS. Hands on experience with all
tools of drafting and integrated exercise with design and workshop studio.
Audio Visual Presentation and discussions via different audio-video platforms.
Working on an Interactive manner to present and enable the students to deliver the submissions.

Expected Outcomes:

At the end of the semester the students are expected to have understanding of technical architectural drawings and its standard components. Also the students will be clearing the semester with understanding of types of projections , development of surfaces and section of solids. Creating understanding for visual communication with technical details.

S NO.	WEEK/	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED OUTCOME
1	**WEEK 01**	**Introduction to subject**		Warm up exercise (FREE HAND) same intensity horizontal lines in 4 pages of news papers	3 Same Intensity In Blank paper(A4) Front-Horizontal lines Back-Vertical line	10	To built understanding for visual and technical commination language.
	Studio 1	**Lecture-1**	Discussing the difference between drwaing, sketching and drafting. Lecture on types of drawing and details required for the same. Understanding the components of drafted drawings and its importance.				
2	**WEEK 02**	**Introduction to drafting tools and method line Intensity**		Board setting	**SHT 2_**Vertical line (light, medium, dark) 3 different height 3.5.8 mm lettering in blank A4 page		To built understanding for hand made drawings. Use of penciled and different pressure that cerates different visual effect
	Studio 1	**Lecture-1**	To set a drafting board and use of all tools Parallel bar,set square and triangular. **Introduction of line intensity**, line type and lettering along with the use off all tools for drafting.	**SHT 1_** Horizontal lines (light, medium, dark) Checking the previous submission and giving comments for correction and discussing the drafting method to use with tools		20	
3	**WEEK 03**	**Inclined line**		**SHT 3_**Angular lines grid (same intensity)	**Redo of any sheets to be submitted.**	10	To built hand and eye coordination for visual effects of different intensity drawings.
	Studio 1	**Lecture-1**	Introduction of line type along with the use off all tools for drafting.				
4	**WEEK 04**	**Typography**		**SHT4_**10 x 5 meter rectangle in different scale	**SHT 5_**Writing letters and numbers in 3 different size (3 mm, 5 mm, 8mm)	20	To built the understanding for textual visual proportion and its effect on graphical presentation
	Studio 1	**Lecture-1**	Introduction to typography and hierarchy of lettering in drafted drawing.				
5	**WEEK 05**	**Geometrical construction**		**SHT 6_**Geometrical construction of line (Line and interaction of line)	**SHT 7_**Geometrical construction of shape 1 (Cube, triangle (equilateral and obtuse)), pentagon, hexagon (inscribing , circumscribing)	20	To built understanding for technical geometrical construction
	Studio 1	**Lecture-1**	Introduction of relationship between types of line with respect to its technical and design requirement.				
6	**WEEK 06**	**Geometrical construction**		**SHT 8_**Geometrical construction of shape 2 (Progressive polygons, Golden rectangle & curve)	**Redo of any sheets to be submitted.**	10	To built understanding of relationship design, basic geometry and portioning system
	Studio 1	**Lecture-1**	Introduction of relationship between types shapes with respect to its technical and design requirement.				
7	**WEEK 07**	**Midterm portfolio submission**				20	Clearing all doubts and completing sheets with all aspects

8	**WEEK 08**	**Descriptive geometry**		solving multiple example with respect to orthographic projection	Test week No submission	NA	
	Studio 1	**Lecture-1**	Introduction to descriptive geometry, parallel projection of point and line in 1st and 3rd quadrants.				
9	**WEEK 9**	**Orthographic projection**		**SHT 9_**PROJECTION OF LINE AND PLANE	**A4_**Types of line (DASH, DASH DOT)	40	To built understanding for 2D technical drafting
	Studio 1	**Lecture-1**	Orthographic projection of line and plane with respect to respect to HP & VP				
10	**WEEK 10**	**Orthographic projection**		**SHT 10_**PROJECTION OF SOLIDS (CUBE,PRISAM)	**SHT 11**_PROJECTION OF SOLIDS (INCLINED CUBE, SPHERE)	40	
	Studio 1	**Lecture-1**	ORTHOGRAPHIC PROJECTION OF SOLIDS				
11	**WEEK 11**	**Section of solids**		**SHT 12_**CYLINDER AND CONE	Completion of sheets with nomenclature be submitted.	20	To built understanding for sectional view and drawing
	Studio 1	**Lecture-1**	Orthographic projection of sectional solids				
12	**WEEK 11**	**Section of solids**		**SHT 13_**Section of solids COMPLEX OBJECT	Redo of any sheets to be submitted.	20	
	Studio 1	**Lecture-1**	Orthographic projection of sectional solids				
13	**WEEK 11**	**Surface development**		**SHT 14_** Surface development (CUBE,PYRAMID,PRISAM, CONE,CYLINDER) Checking the previous submission and giving comments for correction.	Redo or remaining of any sheets to be submitted.	25	To built understanding for surface observation from discriptive geometry
	Studio 1	**Lecture-1**	Drawing a surface development of 4 different solids				
14	**WEEK 11**	**Measure drawing**		**SHT 15_** Measure drawing	Any remaining sheets to be completed.	25	To use all the understanding of above exercies.
	Studio 1	**Lecture-1**	Drafting of their own room at 1:50 Plan & section with all material detials				
15/16	**WEEK 11**	**Final portfolio**		**Final portfolio grading and Viva**	NA	80	Final grading
	Studio 1	**Lecture-1**	Discussion on viva questions and grading				

Suggested Readings:-

Ching Francis D.K : Architectural Graphics

Kelsey W.E : Geometrical & Building Drawing

No.of Teaching Weeks: 16
Contact Hours: per week : L : 2 S: 0
Contact Hours: per sem : L : 32 S: 0
Credit: 02
Total Marks:100 (E=60 I=40)

Course Title: Theory of Structures
Course Code: AP-121
Ist YEAR – 2025-26, Semester I
Course Cordinator :Kavita Revo

Objectives:

This course is designed to provide students with a strong foundation in the fundamentals required to understand, analyse, and solve problems related to mechanics. It is structured to explain the significance of the centre of gravity and the moment of inertia of various shapes, along with their methods of calculation. The course emphasizes the relevance of these parameters in ensuring structural stability. Students will learn to evaluate the stresses and forces developed in structural members under different loading conditions, thereby developing an aptitude for structural analysis and design.

Pedagogy:

The course is delivered through PowerPoint presentations, supported by problem-solving sessions, assignments, discussions, site visits, and group model-making exercises to strengthen conceptual understanding. Students are introduced to relevant Indian Standards at an early stage to familiarize them with applicable codes and clauses used in structural analysis and design.

Expected Outcomes:

On successful completion of the course, students will understand the relationship between loads, member forces, and deformations. They will apply centre of gravity and moment of inertia concepts in design, interpret Indian Standard codes, analyse basic structural systems, evaluate stresses under various loading conditions, and develop sound analytical skills for structural design.

S NO.	WEEK/D	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED
1	**WEEK 01**	**Sketchfile/Research**		Identifying the centroid of regular shapes . The exercise mainly deals with 2D shapes. Simple model based exercise to understand stability of common shapes like rectangles, trianges, trepezium, circle etc. Introduction to composite shapes	NA		Students understand shape stability and its relationship with centre of gravity.
	Studio 1	**Lecture-1**	Introduction to course plan, evaluation system and grading system.Discussion on Centroid and its significance				
	Studio 2	**Lecture-2**					
2	**WEEK 02**	**Sketchfile/Research**		Case Study: Guggenheim Museum, Bilbao—an iconic building with complex curved geometry Solving numericals . Introducing first moment of area. Finding out centroid of composite shapes like L, T,O, Z and their combination.	NA		Students can calculate the centroid of simple and composite shapes.
	Studio 1	**Lecture-1**	To find centroid of complex shapes and shapes with cutouts				
	Studio 2	**Lecture-2**					
3	**WEEK 03**	**Sketchfile/Research**		Deriving expression for MOI of shapes like rectangle, circle and Triangles about various centroidal axes. Model demonstration to understand the relation between MOI and the deflection	NA		Students learn about the significance of MOI and its relevance to deflection
	Studio 1	**Lecture-1**	Introduction to Moment Of Inertia. Its application and relevance in selecting cross sections and deflection control.				
	Studio 2	**Lecture-2**	NA				
4	**WEEK 04**	**Sketchfile/Research**		Numerical problems on MOI calculation of composite shapes. Application of theorems .	Assignment No.1 Centroid and MOI based	10	Students can work out MOI of given shapes using formulae & apply theorems
	Studio 1	**Lecture-1**	Parallel axes theorem Perpendicular axes theorem				
	Studio 2	**Lecture-2**					
5	**WEEK 05**	**Topic of Study**		Application of law of Forces. Numericals on equilibrium equation	NA		Students learn application of equilibrium conditions & can work out resultant for a given force system
	Studio 1	**Lecture-1**	Introduction to Statics. Conditions of Equilibrium Resolution of Forces				
	Studio 2	**Lecture-2**					
6	**WEEK 06**	**Topic of Study**		Application of Polygon law, Parallelogram law of forces. Finding resultant of a system of forces.	Assignment 2 on Resolution of forces	10	Students can apply laws & principles to find resultant of forces
	Studio 1	**Lecture-1**	Forces and Resolution continued. Theorems on couples.				
	Studio 2	**Lecture-2**					
7	**WEEK 07**	**Topic of Study**		Calculating support reactions for simply supported beams.	NA		Students get introduced to different types of beams & supports & the reactions offered by diff supports. They learn to
	Studio 1	**Lecture-1**	Types Of Beams and support conditions. Shear force and Bending Moment calculation for diff loading conditions.				

	Studio 2	**Lecture-2**					calculate reactions
8	**WEEK 08**	**Topic of Study**		"SF and BM calculations. Drawing SFD and BMD for Simply supported beams Analysing SF and BM diagrams Finding point of contraflexure. Drawing SFD and BMD for Cantilever beams			Students can understand SF & BM due to loads can calculate them. Also can draw SFD/BMD & analyse results
	Studio 1	**Lecture-1**	Shear Force and Bending Moment Diagram				
	Studio 2	**Lecture-2**					
9	**WEEK 09**	**Test Week**					
	Studio 1	**Lecture-1**	MINOR TEST				
	Studio 2	**Lecture-2**					
10	**WEEK 10**	**Topic of Study**		Identifying Elastic, Plastic, brittle materials. Demonstration of Tensile test on mild steel.	Assignment 3 on SFD and BMD	10	Students now can apply hooks law understand diffrent material properties & their significance regarding strength and performance
	Studio 1	**Lecture-1**	Simple stresses and strains. Hook's Law. Stress- strain curve for Mild steel.				
	Studio 2	**Lecture-2**					
11	**WEEK 11**	**Topic of Study**		Numericals Stress-strain calculation for prismatic and non prismatic bars			Better Understanding of Hooks law and application
	Studio 1	**Lecture-1**	Simple stresses and strains Contd				
	Studio 2	**Lecture-2**					
12	**WEEK 12**	**Topic of Study**		Introducing to terms Tension Zone, Compression zone and Neutral Axis in Beams Section Modulus and Moment Of Resistance of Rectangular Beams	NA		Students can understand the effect of loads on beams. Effect of bending, cause of stresses control of bending
	Studio 1	**Lecture-1**	Simple bending of beams. Bending equation.				
	Studio 2	**Lecture-2**					
13	**WEEK 13**	**Topic of Study**		Numetricals on calculating Bending stresses for different beams	NA		Learning concepts well
	Studio 1	**Lecture-1**	Bending Contd				
	Studio 2	**Lecture-2**					
14	**WEEK 14**	**Review**		More numerical practice	NA		Learning concepts well
	Studio 1	**Lecture-1**	Simple Bending Contd				
	Studio 2	**Lecture-2**					
15	**WEEK 15**	**Review**			NA		
	Studio 1	**Lecture-1**	REVISION				
	Studio 2	**Lecture-2**					
16	**WEEK 16**	**Review**			NA		
	Studio 1	**Lecture-1**	Old question paper practice/Revision				
	Studio 2	**Lecture-2**					

Suggested Readings:-

1. Strength Of Materials by S Ramamrutham.

2. Engineering Mechanics , by R S Khurmi
3. Strength Of Materials By RS Khurmi

No.of Teaching Weeks: 16
Contact Hours: per week : L : 0 S: 3
Contact Hours: per sem : L : 48 S: 0
Credit: 3
Total Marks:100 (E=50 I=50)

Course Title: BUILDING ECONOMICS
Course Code: AP-443
4th YEAR – 2025, Semester VII
Course Coordinator : JYOTI LUTHRA
Studio Team: JYOTI LUTHRA

Objectives:
To understand the economic principles associated with building design
To create awareness among students about economic aspects related construction and real- estate Industry

Pedagogy:
PPT Presentation, short/quick exercises during class to keep students engaged and make learning interesting, Videos, Group/ Team work, Discussions/ Talks/Brainstorming sessions (Lateral thinking). As per syllabus the subject lectures and presentationas are divided into four units - 1. Elementary concepts of Economics 2. Scenario of Construction and Real Estate Industry 3. Economic Performance of Buildings 4. Valuation of Immovable Properties.

Expected Outcomes:
1. Understanding of basic economic terms and economic principles 2. Awareness about real estate and construction industry 3. Knowledge of Valuation of Immovable Properties 4. Basics of cost and financial aspects related to construction projects

TEACHING PLAN FOR SEMESTER VII (Session 2025-26)

S NO.	WEEK/D	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED OUTCOME
1	**WEEK 01**	**Sketchfile/Research**		Discuss: Why do architects need to have knowledge of Building Economics? Basic terms used in Economics (eg. Asset, Liability, Cost, Profit, Resources, Land, Real Estate etc). Lecture with PPT and Class discussion/Interaction. Short exercise in class - Browse few terms online related to economics and try to understand n discuss in class			
	Studio 1	**Lecture-1**	Overview of the subject and brief introduction about course contents.				Overview of the subject and its role/ importance for Architects.
	Studio 2	**Lecture-2**					
2	**WEEK 02**	**Sketchfile/Research**		Lecture with PPT/ Notes and Class discussion/Interaction. Economic concepts explained with simple examples from day to day life activity. Involve/ encourage students to think and share their experiences (if possible relate to economics)	Start Initial work **Continuous Assignment 1** (Individual) - To be developed throughout the course - **Graphical Glossary** of Terms related to economics/ building economics/real estate (**NOT TO BE SUBMITTED at this stage BUT DISCUSS IN**		
	Studio 1	**Lecture-1**	Building Economics, Fundamental economic concepts and analysis, Demand and Supply, Law of demand			**10**	Basic terms of Economics
	Studio 2	**Lecture-2**					
3	**WEEK 03**	**Sketchfile/Research**		Lecture with PPT/ Notes and Class discussion/Interaction. **Introduce Assignment 2 and 3** presentation topics for group work. **Assignment 2** - Select any recent news /article/ cover story/ research paper related to construction/ real estate sector and present in class on submission day. **Assignment 3** - List of topics is provide to students from unit 2 and unit 3 of syllabus, prepare presentation of topic assigned to group and present on given dates.	Assignment 1 (Graphical Glossary)- discussion in class		
	Studio 1	**Lecture-1**	Elasticity of demand, Law of diminishing marginal utility, Law of equi-marginal utility,Market and its typology, equilibrium				understand fundamental concepts of economics
	Studio 2	**Lecture-2**					
4	**WEEK 04**	**Sketchfile/Research**		Lecture with PPT/ Notes and Class discussion/Interaction.	Assignment 1 (Graphical Glossary)- discussion in class		
	Studio 1	**Lecture-1**	Principles of valuation, cost, price and value, purpose of valuation, wealth tax, capital gain etc. Easement, valuation, law relating to properties and buildings				Valuation Principles
	Studio 2	**Lecture-2**					
5	**WEEK 05**	**Topic of Study**		Lecture with PPT/ Notes and Class discussion/Interaction. Introduce **Assignment 4** - Real Estate Valuation - powerpoint submission - Select any one methods of valuation of immovable property and explain in detail (Process, relevance, advantages, disadvantages, report format)	Assignment 1 (Graphical Glossary)- discussion in class		
	Studio 1	**Lecture-1**	methods of valuation, land and building method, rent capitalization method, belting method etc.				Valuation Methods

	Studio 2	**Lecture-2**					
6	**WEEK 06**	**Topic of Study**		Lecture with PPT/ Notes and Class discussion/Interaction. **Assignemt 2 presentation** by students PPT any recent news /article/ cover story/ research paper related to construction/ real estate sector and present in class	Assignment 1 (Graphical Glossary)- discussion in class **SUBMISSION Assignment 2**		
	Studio 1	**Lecture-1**	Presentation by students - Group work (Assignment 2).			**10**	Understand present status of real estate in India, leading players in market -
	Studio 2	**Lecture-2**					
7	**WEEK 07**	**Topic of Study**		Presentation by students - Group work (Assignment 3) - Topic 1 and 2. Topic 1 Cost control, cash flow analysis, cost projections, cost benefit. Topic 2 Demand and supply of real estate in India	**SUBMISSION Assignment 3**		
	Studio 1	**Lecture-1**	Presentation by students - Group work (Assignment 3) - Topic 1 and 2. **Topic 1** Cost control, cash flow analysis, cost projections, cost benefit. **Topic 2** Demand and supply of real estate in India			**20**	Cost, cash flow, cost benefit, demand and supply of real estate in
	Studio 2	**Lecture-2**					
8	**WEEK 08**	**Topic of Study**		Presentation by students - Group work (Assignment 3) - Topic 3 and 4. Topic 3 Methods of construction project financing Topic 4 Land market in cities under the policies of various policies/act			
	Studio 1	**Lecture-1**	Presentation by students - Group work (Assignment 3) - Topic 3 and 4. **Topic 3** Methods of construction project financing **Topic 4** Land market in cities under the policies of various policies/act				construction project financing, Land market in cities
	Studio 2	**Lecture-2**					
9	**WEEK 09**	**Topic of Study**		Presentation by students - Group work (Assignment 3) - Topic 5 and 6. Topic 5 Financing, feasibility, Estate investment and returns, rentals, pre-construction, construction and post construction of project Topic 6 Financial planning of construction project, accounting for risks and uncertainties.			
	Studio 1	**Lecture-1**	Presentation by students - Group work (Assignment 3) - Topic 5 and 6. **Topic 5** Financing, feasibility, Estate investment and returns, rentals, pre-construction, construction and post construction of project **Topic 6**				Financing, feasibility, Estate investment and returns, rentals,
	Studio 2	**Lecture-2**					
10	**WEEK 10**	**Topic of Study**		Presentation by students - Group work (Assignment 3) - Topic 7 and 8. Topic 7 Feasibility analysis, cost benefit analysis, rate of return analysis Topic 8 Ownership titles, regulations, and registration of immovable property			
	Studio 1	**Lecture-1**	Presentation by students - Group work (Assignment 3) - Topic 7 and 8. Topic 7 Feasibility analysis, cost benefit analysis, rate of return analysis Topic 8 Ownership titles, regulations, and registration of				Feasibility analysis, cost benefit analysis, rate of return analysis,
	Studio 2	**Lecture-2**					
11	**WEEK 11**	**Prefinal**		**Assignment 4** - Real Estate Valuation - powerpoint submission - Select any one methods of valuation of immovable property and explain in detail (Process, relevance, advantages, disadvantages, report format)	**SUBMISSION Assignment 4**		
	Studio 1	**Lecture-1**	Presentation and discussion by students - Assignment 4			**10**	Examples - Real Estate Valuation from books
	Studio 2	**Lecture-2**					
12	**WEEK 12**	**Review**		**Assignment 4** - Real Estate Valuation - powerpoint submission - Select any one methods of valuation of immovable property and explain in detail (Process, relevance, advantages, disadvantages, report format)			
	Studio 1	**Lecture-1**	Presentation and discussion by students - Assignment 4				Examples - Real Estate Valuation from books
	Studio 2	**Lecture-2**					
13	**WEEK 13**	**Test Week**		Discussions/ Talks/Brainstorming sessions. Lecture on additional topics.			
	Studio 1	**Lecture-1**	Discussions/ Talks/Brainstorming sessions. Lecture on additional topics.				Students understating of overall subject
	Studio 2	**Lecture-2**					

14	**WEEK 14**	**Review**					
	Studio 1	**Lecture-1**	Discussions/ Talks/Brainstorming sessions. Lecture on additional topics.	Discussions/ Talks/Brainstorming sessions. Lecture on additional topics.			Students understating of overall subject
	Studio 2	**Lecture-2**					
1516	**WEEK 15-16**	**Final Submission**					
	Studio 1	**Lecture-1**	Portfolio - Learning throughout semester. Internal Viva		**Portfolio Submission**		Preparedness for external viva
	Studio 2	**Lecture-2**					
					Internal Marks	**50**	

Suggested Readings:-

1. News Papers: Economic times / Business Standards/ Times Property
2. Valuation of Real Properties by Rangwala
3. Building Economics: Theory and Practice, Authors: Ruegg, Rosalie, Marshall, Harold
4. The ABC of Real Estate in India, Book by Sachin Mittal
5. Design and The Economics of Building", Ralph Morton, David Jaggar, 1995, ISBN 0-419-19200-x

VASTU KALA ACADEMY COLLEGE OF ARCHITECTURE

ARCHITECTURAL DESIGN PROGRAMME,

PROJECT I – Greens Empowering Women Village (GrEW ग्राम)

(FOR B. ARCH. 2ND year, SEM – III Batch: AUG – DEC'25

Design Project - I

Introduced (For Site survey & analysis/case studies etc.): Aug

Site Plan & Final Project Requirements: Aug

Final Submission: Nov





AN EMPOWERING WOMEN'S CENTER IN RWANDA, AR. SHARON DAVIS

Teaching Objectives:

To design GrEW ग्राम with the following objectives:

1. **Design Meeting Development** - To create awareness about social and environmental issues and respective responsibility of architects through an academic exercise
2. **Architectural Character** – a place that feels like having its own identity in context with the location.
3. **Legibility** - A place with a clear image and easy to understand
4. **Adjacency** – Placing various related functions in a comprehensive proximity
5. **Continuity and enclosure** – Creating a transition between public/private and open/semi-open/built spaces

Learning Outcomes:

1. **Social Relevance:** The students will learn social relevance of the profession of architecture
2. **Application of Architectural Elements:** Ability to apply specific elements of architecture to give desired character and identity to the building
3. **Ease of Movement:** Understanding and applying the characteristics of circulation within and between different functions in buildings for public use.
4. **Sustainable Building:** Application of vernacular and energy efficient construction measures

Introduction

GrEW ग्राम is envisaged as a place committed to developing and providing affordable opportunities and support services in **Urban farming** to young underprivileged girls. In this process enabling them to attain long-term self-sufficiency and end the cycle of exploitation and poverty. To break the vicious circle of suppression in a patriarchal society, it is important that the women have strong personalities to form a sturdy social and economic union.

Urban farming is the practice of cultivating, processing, and distributing food in or around urban areas.
It goes beyond gardening—urban farming includes:

- Food production (plants, sometimes small animals)
- Composting and waste recycling
- Aquaponics/hydroponics
- Community engagement and food justice

Urban farming is where *architecture meets sustainability*, *community*, and *resilience*.

Farming as an activity helps maintain a healthy **balance** between your **mind**, **body**, and **soul** by nurturing your whole self, including your physical, mental, emotional, and **spiritual** needs, thus creating overall wellness.

GrEW ग्राम will be a step forward to improve the quality of life of the women entrepreneurs in a sustainable way by providing information and training about Urban Farming. It will be a platform for them to develop their personality to full potential.

GrEW ग्राम project focuses on developing cross-cultural communication, community building, and social entrepreneurship.

A multi-facility center

In essence, the various spaces of GrEWग्राम will cater to a wide range of ancillary services such as **Person-Centered Case Management, Employment Readiness, Counseling, Money Management, Credit Counseling, Education, as well as other support services.**
Therefore apart from covered and open learning, experimenting and interactive spaces and offices, GrEWग्राम will have workshops for hands-on training, storage for communal tools and processing equipment, and exhibition and showroom space.

As such GrEWग्राम will help girls with amazing capabilities to become producers, owners, job creators, and leaders in their community.

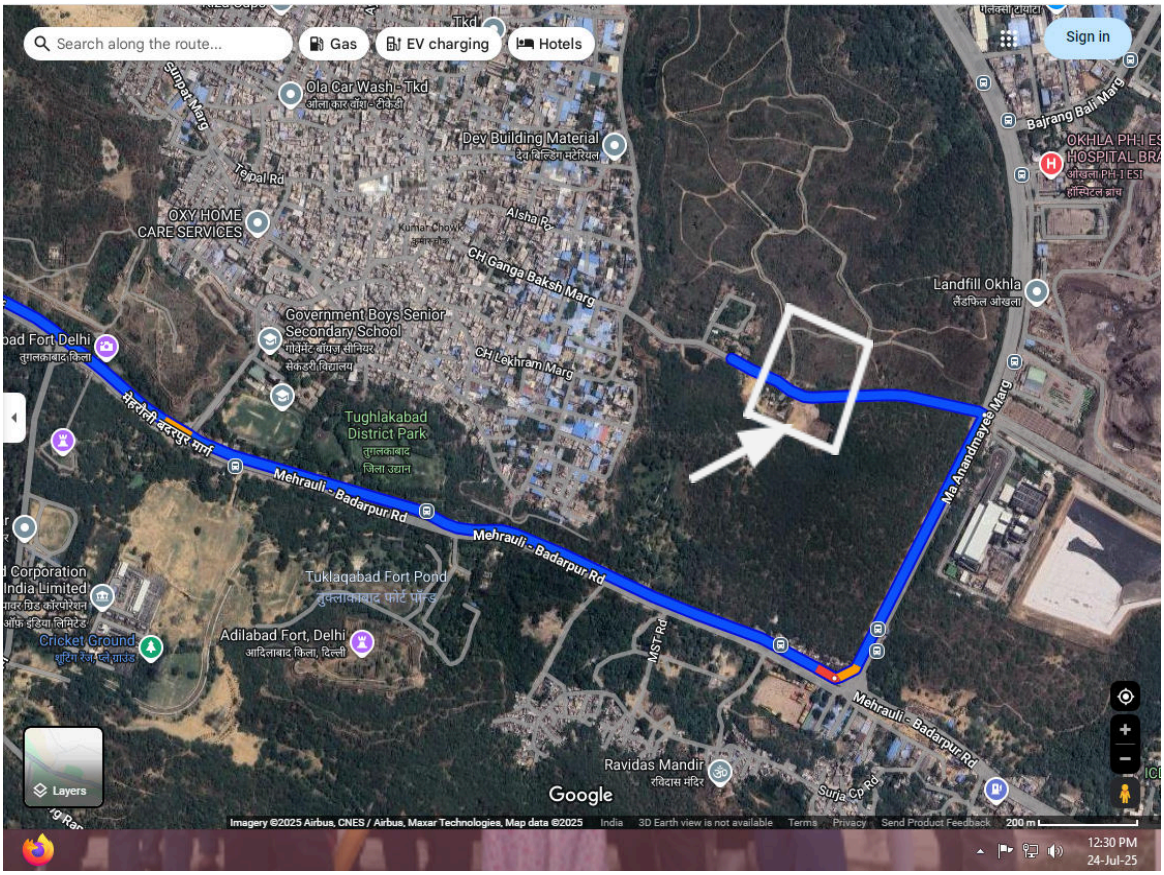
Materials and Building Techniques

The building will apply ecological and local solutions and will be constructed using vernacular materials and methods. With local volunteers as labour, recycled and environment friendly materials, GrEWग्राम will not only provide shelter for various activities, it will also train locals in employable building skills.

Exercise

With the above background and objectives, you have to design GrEWग्राम in New Delhi on a site located as following.

Site Location:
CH Ganga Baksh Marg, Tughlakabad, New Delhi





Suggested Project Requirements –
The proposed building will be designed for various uses as described in the background above, namely -

1. Reception & Offices, Counseling room
2. Classrooms, computer labs & workshops,
3. Various types of farming spaces - Rooftop Farms, Vertical Farms, Community Gardens and Hydroponic Indoor Units
4. Child Care
5. Ancilliary spaces like -First aid & sick room, Stationery shop etc.
6. Assembly/multipurpose hall
7. Visitor Center with exhibition and showroom
8. Hariyali Baithak (Café serving farm food)
9. Caretaker Residence
10. Car parking
11. A variety of semi-open & open recreational /interactive spaces
12. (You may add or subtract requirements as per your discretion - with a justification to do so)

Note – Flexibility of design for multi-utility spaces will be an essential criterion as the project will be supported by charities and sponsorships and project cost will be important for its success and economic sustainability.

The details of some development regulations are as following:

1. Site Area – 10000sqm approx.- 100Mx100m approx.(See attached site plan for surroundings and other details)
2. Maximum Permissible Ground Coverage – 10%
3. Permissible F.A.R. -- 0.20
4. Maximum Permissible Height – 12m
5. Set Backs – Front: 15M Side & Rear: 9M
6. Parking Provision – 1ECS/50SQM of permissible F.A.R including 2 buses and 10 2-wheelers
7. R.O.W. – …..

Literature Review Topics–

1. Low-Cost Building Concepts – Design and planning,
2. Low-Cost Building Concepts –Building services,
3. Low-Cost Building Concepts –Materials and methods of construction,
4. Low-Cost Building Concepts – Energy Saving Technology - automation tools, AI ..and so on
5. Gender Concerns in Built Environment
6. Women Centric Architecture – Lack and Provisions
7. Building for Urban Farming – Planning and Design
8. Building for Urban Farming – Building services
9. Building for Urban Farming –Materials and methods of construction
10. Building for Urban Farming – Technology

Suggested Case Studies–

Primary

1. Development Alternatives
2. Indian Agricultural Research Institute - PUSA Institute of Technology, Delhi
3. Indira Paryawaran Bhawan, Delhi
4. TERI, Gurgaon
5. Institute of Rural Research and Development, Architect - AB Lall
6. NIIT, Neemrana
7. PATNI Knowledge Centre, NOIDA
8. Indian Institute of Health Management Research (IIHMR) Campus
9. CSE (Centre for Science and Environment), Tughlakabad
10. Deepalaya School, Kalkaji Extension,
11. Aurobindo Ashram, Delhi
12. COSTFORD (Centre of Science and Technology for Rural Development), Delhi
13. Katha Lab School, Govindpuri, by Ar. Sanjay Puri

Secondary

1. Laurie Baker Buildings - COSTFORD (Centre of Science and Technology for Rural Development), Kerala

2. Gerard D'Cunha – (Identify buildings)

3. Benny Kuriakose - – (Identify buildings)

4. Auroville Earth Institute

5. Central Institute for Women in Agriculture, Bhubaneshwar, Orissa

6. Krushi Bhawan by Studio Lotus (Bhubaneshwar, Odisha)

SCHEDULE OF SUBMISSIONS

Stage 1:– Symbolic Sculpture (Max. Marks – 25)

Stage 2:– Predesign studies -1 Literature Review related to gender concerns in built environment, low –cost and energy efficient building and urban farming (Max. Marks – 25)

Topics divided for groups of 3.

Stage 3: Predesign studies -2 - Case studies related to gender concerns in built environment, low –cost and energy efficient building and urban farming – ((Max. Marks – 25)

Stage 4: Predesign Studies-3 Site Analysis (Max. Marks – 25)

Stage 5: Concept– (Max. Marks –50)

Stage 6: Design Development I – (Max. Marks –50)

Stage 7: Design Development II– (Max. Marks –50)

Stage 8: Pre-Final – (Max. Marks –50)

Stage 9: Final – (Max. Marks –100)

Note – Stages 2-4 will be done in groups of 3-4 and all other stages will be done individually

Suggested Literature Review for Energy Effiecient Buildings:

1. Brown, L., et al. (2019). *Energy efficiency in building envelopes: Design strategies and challenges.* Journal of Sustainable Architecture, 14(2), 87-99.
2. Doe, J., et al. (2021). *Climate-responsive design for composite climates: Energy-saving approaches in architecture.* Environmental Engineering Journal, 33(4), 251-265.
3. Energy Simulation Standards. (2020). *eQuest 3.64 energy analysis software standards and applications.* Energy Institute Press.
4. Green Building Council. (2022). *The impact of efficient building envelopes on carbon emissions.* GBC Publications.
5. International Energy Agency. (2023). *Global CO_2 emissions from construction: Challenges and solutions.* IEA Report Series, Volume 8.
6. Johnson, T. (2022). *Strategic architectural design in composite climates: A focus on shading and thermal mass.* Urban Design Review, 12(1), 45-62.
7. Lee, M., et al. (2021). *Material innovation in sustainable architecture: A focus on insulation and embodied energy.* Construction Materials Journal, 27(3), 119-130.
8. Sharma, R., et al. (2022). *Optimizing building envelopes for energy efficiency in extreme climates.* Journal of Energy Studies, 9(2), 201-215.
9. Smith, D., & Jones, P. (2020). *Thermal management in urban architecture: The importance of envelope design.* Building Science Perspectives, 18(1), 99-108.
10. UN. (2023). *Annual report on global CO_2 emissions in the construction industry.* United Nations Environmental Programme.
11. Urban Sustainability Institute. (2021). *Sustainable urban development and climate-responsive design.* Urban Sustainability Press.
12. Williams, E. (2018). *Biomimicry in architecture: Nature-inspired solutions for climate challenges.* Architectural Science Quarterly, 35(3), 153-170.
13. Energy Conservation Building Code. (2017). *ECBC 2017: Energy efficiency standards for buildings in India.* Bureau of Energy Efficiency.
14. Zaborova, D., & Musorina, T. (2020). *Environmental and energy-efficiency considerations for selecting building envelopes.* Journal of Sustainable Architecture, 15(4), 185-200.

Suggested Literature Review for Gender Sensitive Architecture:

1. "Gender Space Architecture" – Edited by Jane Rendell, Barbara Penner, and Iain Borden
2. "Feminist City: Claiming Space in a Man-Made World" – Leslie Kern
3. "The Sex of Architecture" – Edited by Diana Agrest, Patricia Conway, and Leslie Kanes Weisman Parlour:
4. Women, Equity, Architecture Website: www.archiparlour.org
5. Designing Justice + Designing SpacesWebsite: www.designingjustice.org
6. The Gender Inclusive Cities Programme (India chapter – Jagori, New Delhi)
7. "Why Loiter? Women and Risk on Mumbai Streets" – Shilpa Phadke, Sameera Khan, and Shilpa Ranade

No.of Teaching Weeks: 16
Contact Hours: per week : L : 2 S: 0
Contact Hours: per sem : L : 32 S: 0
Credit: 02
Total Marks:100 (E=60 I=40)

Course Title: History Of Architecture III
Course Code: AP-223
IInd YEAR – 2025-26, Semester III
Coordinator: Saumya Kohli

Objectives:

The objective is to recognize the most important categories of Pre-Industrial Architecture of Europe during Medieval Period and Renaissance and to understand the process of history in its making, and the markers it leaves behind and their subsequent interpretations.The course aims to develops critical tools for the analysis and appreciation of architecture, for its role in the intellectual environment in which we conduct our lives and will also enable students to do a comparitative evaluation of developments in a chronological manner along the timeline and across different geographies.

Pedagogy:

Lecture - Audio Visual, Online teaching, Presentation, Handouts, Interactive session, seminars etc. along with Tutorial,Presentation, Discussion, Case study, Live examples, Assignments Presentation by subject expert.An effort will be undertaken to enable the students to appreciate tangible and intangible aspects of heritage associated with history and to provide an understanding of the Architecture in its various stylistic modes, characterized by technology,ornamentation and settlement planning practices. An attempt will be made to integrate History of Architecture with Art and appreciation studio.

Expected Outcomes:

The students are expected to have an overall understanding of the European architecture and sequential productions rising from the cumulative effect of forces operating and intersecting in the regions along with being informed about specific and prominent modes of architecture in terms of evolution, function, morphology and character. They will have exposure to works that are architecturally exemplary and/or representative and must be enabled to appreciate architecture as giver of particular and universal meaning by the end of the semester.

S NO.	WEEK/DATE	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED OUTCOME
1	**WEEK 01**	**Sketchfile/Research**		Introduction to the syllabus, course delivery plan,requirements of the subject and evaluation system.Time-line of Pre-Industrial Architecture of Europe during Medivial Period and Rennaissance-Introductory discussion on European Counteries and its Architecture.	1.Seminar by students to be conducted on the given topics 2.Sketchbook/ scrapbook of A4 size to be maintained having sketches, articles, photoes of the Medivial European Architecture.		Understanding of Pre-Industrial Architecture in Europe
	Studio 1	**Lecture-1**	Introduction to Pre-Industrial Architecture of Europe-Early Christian Romanesque Architecture				
	Studio 2	**Lecture-2**					
2	**WEEK 02**	**Sketchfile/Research**		Presentation on development of Early Christian Architecture. Discussion on History and its imperatives,evolutions, adaptation of basilica form, Orthodox Christian, Byzantine &, Venice, Constantinople. Christian Architecture and its deveopment.	Students to be divided into groups and prepare a presentation on given topics of Byzantine architecture for the next class.		Understanding of Pre-Christian Architecture, salient features, architectural characterstics and typical examples
	Studio 1	**Lecture-1**	Pre-Christian Architecture and Baslican church types and introduction to byzantine architecture				
	Studio 2	**Lecture-2**					
3	**WEEK 03**	**Sketchfile/Research**		Presentation on Byzantine Architecture by students on the following:- Construction technology,typical examples in Revenna,Venice and Constantinople and discussion on the main architectural features	Students to be divided into groups and prepare a presentation on given topics of Romanesque architecture for the next class.	Grade	Understanding of Byzantine Architecture, salient features, architectural characterstics and typical examples
	Studio 1	**Lecture-1**	Byzantine Architecture at Contantinople and Venice,Introduction to Romanesque Architecture				
	Studio 2	**Lecture-2**					
4	**WEEK 04**	**Sketchfile/Research**		Lecture and discussion on Romanesque Architecture and its components with typical examples like Leaning Tower of Pisa,Durham Cathedral.			Understanding of Romanesque Architecture, salient features, architectural characterstics and typical examples
	Studio 1	**Lecture-1**	Romanesque Architecture and its components				
	Studio 2	**Lecture-2**					
5	**WEEK 05**	**Topic of Study**		Lecture and interactive session on Gothic Architecture and its evolution. Ecclesiastical Gothic Architecture in Continental Europe and England.Presentation by students on Romanesque architecture.	**Assignment-01** Answer the questions based on the topic undertaken and submit sketches related to the same on an A4 sheets	20	Understanding of Gothic Architecture, salient features, architectural characterstics and typical examples
	Studio 1	**Lecture-1**	Gothic Architecture in Continental Europe and England			Grade	

	Studio 2	**Lecture-2**					
6	**WEEK 06**		**Topic of Study**	Students to discuss on Ecclesiastical Gothic Architecture in Continental Europe and England based on lecture received. Reasearch on Great Cathedrals - Notre Dam, Canterbury, etc.Development of Churches,Cathedrals, etc.	Students to be divided into groups and prepare a presentation on given topics of Gothic architecture typical examples for the next class.		Understanding of Gothic Architecture, salient features, architectural characterstics and typical examples
	Studio 1	**Lecture-1**	Great Cathedrals at Notre Dame in Paris, Cantebury Cathedral in Cantebury,Kent				
	Studio 2	**Lecture-2**					
7	**WEEK 07**		**Topic of Study**	Discussion on advent of Renaissance in Europe and impact on Architecture. Importance of Renaissance Architecture			Introduction to Renaissance Architecture
	Studio 1	**Lecture-1**	Advent of Early Rennaissance Architecture				
	Studio 2	**Lecture-2**					
8	**WEEK 08**		**Topic of Study**	Group-work on Early to High Renaissance, St.Maria Del Fiore,Florence, Late Renaissance, Michelangelo, Palladio, St. Peters (Rome). St. Paul's (London). Discussion on various famous artists and their work.	The class will be divided into 8 groups (4 groups). All the groups will give the presentation on the given topic	Grade	Famous works and acheivements of Early Renaissance Period.
	Studio 1	**Lecture-1**	Early Rennaissance Period with example of Cathedral of St.Maria Del Fiore at Florence				
	Studio 2	**Lecture-2**					
9	**WEEK 09**		**Topic of Study**	Research-Work and discussion to be done in groups on Late Rennaissance Period	**Assignment-02** Answer the questions based on the topic undertaken and submit sketches related to the same on an A4 sheets	20	Famous works and acheivements of Late Renaissance Period.
	Studio 1	**Lecture-1**	Late Rennaissance Period-Architecture of St. Peters in Rome,famous artists,architects and their famous works of this style				
	Studio 2	**Lecture-2**					
10	**WEEK 10**		**Topic of Study**	Presentation to be done on Baroque-Early, High, Late, Rococo by the students based on their respective topics of research-work Discuss St.Pauls London, Neo-Classical	Powerpoint Presentation in groups showing famous works of various artists of renaissance period	30	Famous works and acheivements of Late Rennaissance , Baroque and Rococco Period.
	Studio 1	**Lecture-1**	Late Rennaissance Period-Famous artists of the style,Michelangelo,Palladio and their famous works				
	Studio 2	**Lecture-2**					
11	**WEEK 11**		**Topic of Study**	Research Work on European Architecture in Colonial India -I Goa Portuguese French Pondicherry Focus: Forts Church			Famous works and acheivemnts of Baroque and Rococco Period. Comparitive analysis of all the undertaken movements.
	Studio 1	**Lecture-1**	Baroque style,St.Pauls London,Rococco style, Neo-Classical movement and its famous works				
	Studio 2	**Lecture-2**					
12	**WEEK 12**		**Prefinal**	Class Discussion on European Architecture in Colonial India-II Madras, Calcutta, Bombay Cantonments Hill Stations Focus: Port Fort Church, Institutions, Bungalows, Barracks.	**Assignment-03** Answer the questions based on the topic undertaken and submit sketches related to the same on an A4 sheets	20	Architecture in Colonial India
	Studio 1	**Lecture-1**	European Architecture in Colonial India-I- Goa, Portuguese,French,Pondicherry, Focus-Fort and Church				
	Studio 2	**Lecture-2**					
13	**WEEK 13**		**Review**	Discussion on Forts and Churches constructed in Colonial Era			Architecture in Colonial India and typical examples.
	Studio 1	**Lecture-1**	European Architecture in Colonial India-I- Goa, Portuguese,French,Pondicherry, Focus-Fort and Church				
	Studio 2	**Lecture-2**					

14	**WEEK 14**	**Review**		Discussion on Ports, Institutions, etc buildings built in Colonial Era. Group Presentations and Sketches.	**Assignment-04** Answer the questions based on the topic undertaken and submit sketches related to the same on an A4 sheets	20	Architecture in Colonial India and typical examples.
	Studio 1	**Lecture-1**	European Architecture in Colonial India-II-Madras,Calcutta,Bombay Contonements Hill Stations				
	Studio 2	**Lecture-2**					
15-16	**WEEK 15-16**	**Final Submission**		Group Discussions on important questions for the exam.	**Assignment-05** Answer the questions based on the topic undertaken and submit sketches related to the same on an A4 sheets	20	Review of the semester
	Studio 1	**Lecture-1**	European Architecture in Colonial India-II-Port, Fort,Church,Institutions, Bunglows,Barracks				
	Studio 2	**Lecture-2**					

Suggested Readings:-

1. Lang & Desai Architecture and Independence- The Search for Identity – India
2. 1880 to 1980. Oxford University Press, India, 1997
3. Watkin, D., “A History of Western Architecture”, Thames and Hudson,1986
4. Fletcher, B., “A History of Architecture”, 20th Ed., Butterworth Heinemann,1996
5. Moffet, M., Fazio, M. and Wodehouse, L., “A World History of Architecture”, McGraw-Hill,2008

No.of Teaching Weeks: 16
Contact Hours: per week : L : 2 S: 0
Contact Hours: per sem : L : 32 S: 0
Credit: 02
Total Marks:100 (E=60 I=40)

Course Title: Sociology
Course Code: AP-229
IInd YEAR , Semester III
Faculty: Vidushi Singh

Objectives:

The objective is to make the students understand about relationship between man and the environment with special emphasis on aspects that are likely to affect intervention in or creation of,the built environment (predominantly urban) and to develop language and vocabolary for discussions.It is to understand the sociological and the physiological dimensions of architecture.

Pedagogy:

The students would be encouraged to have discussions,interactive sessions and extempore presentations on various topics related to sociological and physiological aspects of architectre.The attempt will be to engage them in a dialogue and develop their senstivity towards various aspects related to sociology and the relationship between man and environment.

Expected Outcomes:

It is expeted that the students would become aware of the social issues and its relation to architecture. As an architect/designer their responsibility towards society and make more user-related designs is expected to develop in them.

S NO.	WEEK/DATE	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED OUTCOME
1	**WEEK 01**	**Sketchfile/Research**		(REMARKS :) students were interested and open to the idea of role played by intangible concepts such as beliefs, values, culture, religion in architecture.	topics broadly discussed in class, with expected assignments.		orientation of students to subject
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Introduction to sociology and its relation to architecture.				
2	**WEEK 02**	**Sketchfile/Research**		(REMARKS :) students were coming up with their own examples and often personal instances of generational thoughts differing from each other in the same house. Also, they were able to relate to similarities and differences based on many examples provided as well as suggested by students themselves.	SUB 1: Introduction of group research assignments.		relevance of sociology to architecture.
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Different theories of sociology,particularly in relation to architecture and the role of architects in the society - Classical and modern sociology of architecture, through some examples, Role of architects in modern society				
3	**WEEK 03**	**Sketchfile/Research**		(REMARKS :) slightly obtuse learning but with help of presentation, was broken inot simpler concepts. Studentswere able to relate, even when a small mock-quiz	SUB 1 - CONTENT CHECKS: Assessment of research topics - grading	grades	understanding of theories of architecture. was conducted in class.
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Continuation on different theories of sociology, particularly in relation to architecture and the role of architects in the society.				
4	**WEEK 04**	**Sketchfile/Research**		(REMARKS :) very interesting class discussion evolved based on poular movies and social message. By use of google docs, which were shared amidst all students, a lively and	submit final presentations online, for marking. Introduction of SUB 3: prepare poster on movie review, highlighting socio-cultural context in	**10 marks**	
	Studio 1	**Lecture-1**					

	Studio 2	**Lecture-2**	Classical and modern sociology of architecture. Social interaction and the concept of society.	amidst all students, a lively and interestig debate emerged even within peers as well with the teacher.	cultural context in Sociology - Individual assessment		further understanding of topic.
5	**WEEK 05**		**Topic of Study**	lecture and few presentations (REMARKS :) research based exercise, with maximum theoretical content. use of PPT to enhance knowledge. Also, discussion generated extempore in class on gender and differences, then domestic staff and their treatment at homes, and why.			
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Continuation of classical and modern sociology of architecture. Social interaction and the concept of society. Introduction of Concept of society and its types – rural and urban				history of theories of sociology.
6	**WEEK 06**		**Topic of Study**	Discussion in class ON ISSUES WITHIN FAMILY, PEERS, INSTITUTIONAL. gender and differences perceived in home environments.			
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Social Interaction and the concept of society Social Institutions – family, educational institutions, religion Social interaction – verbal and non-verbal				Understanding of self within Society.
7	**WEEK 07**		**Topic of Study**	(REMARKS:) the importance of knowing the values and mores of self, then family and how these are ingrained in society. how architecture and other artifacts relate to these intangible values - many examples came forth from students itself, once they grasped the idea of the topic.			
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Sociology of space and built environment, sociology of artifacts. Concept of culture and its elements - material and non-material culture. **Material culture-** buildings, artifacts, etc.				TANGIBLE AND INTANGIBLE - CLARITY ON THE TOPICS.
8	**WEEK 08**		**Topic of Study**				
	Studio 1	**Lecture-1**	MINOR TEST WEEK				
	Studio 2	**Lecture-2**					
9	**WEEK 09**		**Topic of Study**	(REMARKS:) introduction to Proxemics briefly. Also analysis using themselves as samples on how comfortable they were in different situations of proximity. Shared Google Office images and discussed diversity in workplace in corporates.			
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Concept of culture and its elements - **Non-material** - Folkways, Norms, Mores, Values, Laws. Requirement of space for various social activitieszation of space in rural and urban areas				SOCIETY AND REQUIREMENT OF SPACE.How it affects different cultures working together
10	**WEEK 10**		**Topic of Study**	(REMARKS:) impromptu discussion- how society has, by its beliefs, safeguarded forests, nature, worship of rivers in olden civilisations, Sustainibility of planet due to beliefs.	SUB 2 : poster - PDF format, to be submitted online.	**5 marks**	
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Culture as adaptive screen between environment and man Cultural Identity, Cultural Diversity, Cultural relativism, Ethnocentrism, Cultural universals				Understanding of new terms introduced in the lecture.
11	**WEEK 11**		**Prefinal**	(REMARKS:) presentation of voices of changes, such as nelson mandela, greta thunberg, malala yousuf zai. well received and many inputs during presentation itself.			
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Social and cultural change, Factors of Social Change, discovery and invention, culture diffusions, ideas & ideologies, collective action, technology.				Broader ramifications of the social aspects of issues - causing social change.

12	**WEEK 12**		**Review**				
	Studio 1	**Lecture-1**	Resistance to Social Change, Theory of Cultural lag, Technology & Social changeUrban and Rural,social,educational institutions and migration. Discovery and invention,culture diffusions,ideas and ideologies,collective action and technology.	(REMARKS:) class handout and discussion on examples. from menstruation and sabarimala temple, to not allowing domestic staff to use toilets in the house.			Discussion, leading to relating with and understanding change.
	Studio 2	**Lecture-2**					
13	**WEEK 13**		**Test Week**	(REMARKS:) general class discussion and how rotis are made in the amritsar gurudwara - how show racks in a temple are marked.How farmers use an app to sell their produce in real time. How pandemic has caused new learning techniques for students and we use technology to order products, etc etc. Many examples and many more came from students themselves.			
	Studio 1	**Lecture-1**	Urban and Rural,social,educational institutions and migration. Discovery and invention,culture diffusions,ideas and ideologies,collective action and technology.				Understanding of new orders in Society, with their implications.
	Studio 2	**Lecture-2**					
14	**WEEK 14**		**Review**				
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	DISCUSSION OF QUESTIONS AND ANSWERS FOR UPCOMING EXAMINATION.	REVIEW OF QUESTIONS AND ANSWERS			
15	**WEEK 15**		**Final Submission**				
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	DISCUSSION OF QUESTIONS AND ANSWERS FOR UPCOMING EXAMINATION.	REVIEW OF QUESTIONS AND ANSWERS			
16	**WEEK 16**		**Final Submission**				
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	DISCUSSION OF QUESTIONS AND ANSWERS FOR UPCOMING EXAMINATION.	DOUBT CLARIFICATIONS.			

Suggested Readings:-

1.Giddens,Anthony,Socialogy,Polity Press,Cambridge(UK),2006

2.Porteous,John Douglas;Environment Behaviour:Planning and Everyday Urban Life Addison Wesley,1977

3.Hall,T.Edward,The Hidden dimension,Anchor books edition,USA,1969

4.Rapoport,Amos,Human Aspects of Urban Form,Pergammon Press,New York,1977

5.Guy Ankerl,Experimental Sociology of Architecture.A Guide to Theory,Research and Literature,Moutonde Gruyter Publ.

6.Anthony D.King(ed.),Building and Society:Essays on the Social Development of the Built Environment, London 1980

7. Sachdeva DR, Intro to sociology, Vidya Bhusham Kitab Mahal

8. Jain Kulbhushan, 1992, Mud Architecture of the Indian Desert, Ads Centre Ahmd.

9. Parmar V.S, Haveli; Wooden houses, Mensions of Gujrat, Mapin, Publication Ahmd., 1989

10. Bhatia Gautam, Laurie Baker, Life works and writing, Viking, Hudco, New Delhi, 1981

11. Indian Sociology by Yogendra Singh

No.of Teaching Weeks: 16
Contact Hours: per week : L : 0 S: 10
Contact Hours: per sem : L : 0 S: 160
Credit: 10
Total Marks:100 (E=60 I=40)

Course Title: Architectural Design VI
Course Code: AP-302
IIIrd YEAR – 2025-26, Semester VI
Course Coordinator : MOHD SHOEB ALAM
StudioTeam: Prof. Shoeb Alam, Prof. Rashmi B Tandon, Prof.Vijay Matange

Objectives:

To design Spiritual Retreat with the following objectives:
To learn site planning of office campus with emphasis on planning of open spaces for various purposes along with outdoor spaces.
The design should give special attention to massing, solar orientation, wind movement passive cooling systems, Fire and Engineering services (MEP).
To customize layouts and understand the process of Designing of a Sustainable Office Building
To understand the most appropriate structural system for the building design due to different types of loadings and spans.

Pedagogy:

Knowledge sharing by the faculty through regular lectures on topics related to the project at hand Conducting site studies, case studies and studies of existing literature
- Lectures were supported with audio-visual content in the form of PowerPoint presentations, and Screen sharing of sketches and text done simultaneously on Whiteboard along with run-through of selected documents.
Faculty sharing online with students all design corrections in the form of sketches along with verbal support to explain the same.
- Freehand sketches made by faculty to suggest corrections in design drawings shared by faculty on Prints/Google Meet screen or on Whatsapp group of the class created especially for informal interaction between students and faculty.
- Digital pens or other built in sketching methods on the Google Meet platform also used to suggest design corrections
• Understanding site planning: organization, scale, hierarchy, orientation and climate through inhouse expert's lectures.

Expected Outcomes:

• Understanding complex services in multi-storied buildings, understanding the architectural content of services in buildings.
The proposed design scheme is not only required to be designed with the least environmental footprint, but also to create spaces that inspire and inculcate environmentally responsible attitude in all the occupants and visitors. To understand the most appropriate structural system for the building design due to different types of loadings and spans.

S NO.	WEEK/DATE	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED OUTCOME
1	**WEEK 01**	**Predesign Stage**		Group alotment based on topics decided for Literature Review. Literature review search	None		An outline of the information that needs to be provided as also learning the best way to present the information so collected
	Studio 1	**Lecture-1**	i) Introduction to the design program- MAJOR AND MINOR PROJECT ii) Literature review –group work				
	Studio 2	**Lecture-2**	MEMORIAL				
2	**WEEK 02**	**Predesign Stage**		Review of information collected by all the student groups for Literature Review. Next Studio all submissions on literature review to be evaluated.	MODEL AND SITE STUDY		Discussion of document by EACH groups with one topics each group, all relevant information regarding development regulations, different standards and case studies of individual alloted spaces.
	Studio 1	**Lecture-1**	Lecture/ Talk -Project Title: Art and Architecture College				
	Studio 2	**Lecture-2**	Discussion on various aspects of ART AND ARCHITECTURE COLLEGE				
3	**WEEK 03**	**Predesign Stage**		Presentation by students : 13 groups with one topics each group, all relevant information regarding development regulations, different standards and case studies of individual alloted spaces.	Literature Review and Case Studies		Submission of document by Thirteen groups with one Case Studies- one Indian and one International
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Lecture: Site Planning			5	
4	**WEEK 04**	**Predesign Stage**		Discussion on Data Collection: from Case Study	office-Case study		Report and presentation on case study
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Lecture: User interface and floor wise requirements			5	
5	**WEEK 05**	**Site Plan Concept**		Discussion on site plan and concepts prepared by groups			Learning about varous aspects of site planning and concept development
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Lecture: concept and form development and Spaces. SHOEB			Grade	
6	**WEEK 06**			Discussion on submission of site plan and concepts prepared by groups	Zoning & Design Concept		Depostition of various buildings/functional components within the site will be shown. A
	Studio 1	**Lecture-1**					
	Studio 2	**Lecture-2**	Lecture: site planning Strategies: PROF. RASHMI			10	
7	**WEEK 07**	**Design Development-1**		Concept Submission of Individually	DD - 1		A-1 Sheets with

	Studio 1	**Lecture-1**		Selected Buildings (2 buildings selected individually)			single line internal plans of various functional spaces on 1:100 scale
	Studio 2	**Lecture-2**	Lecture: outdoor Spaces - shoeb			15	
8	**WEEK 08**			Discussion on DD1 of individual building plans			Revised internal building plans of various functional spaces on 1:100 scale. Openings, levels etc, included in drawings
	Studio 1	**Lecture-1**	Discussion based on students' work and give board instructions-crits on boards with suggetions				
	Studio 2	**Lecture-2**	Lecture: Site services & Landscaping -			Grade	
9	**WEEK 09**		**Design Development-2**	Discussion on DD2 submissions of individual building plans	DD-2		All Floor Plans Scale - 1:100 Building Sections – 2 No.s Scale- 1: 100 Building Elevations _ 2 No.s Scale- 1:100
	Studio 1	**Lecture-1**	Discussion based on students' work and give crits on boards with suggetions				
	Studio 2	**Lecture-2**	Discussion based on students' work and give crits on boards with suggetions			15	
10	**WEEK 10**			Discussion on DD2 submissions of individual building plans			
	Studio 1	**Lecture-1**	Discussion based on students' work and give crits on boards with suggetions				
	Studio 2	**Lecture-2**	Discussion based on students' work and give crits on boards with suggetions			Grade	
11	**WEEK 11**		**Design Development-3**	Discussion on DD3 submissions of individual building plans	DD-3		All Floor Plans Scale - 1:100 Building Sections – 2 No.s Scale- 1: 100 Building Elevations _ 2 No.s Scale- 1:100 Architectural Details- Suitable
	Studio 1	**Lecture-1**	Discussion based on students' work and give crits on boards with suggetions				
	Studio 2	**Lecture-2**	Discussion based on students' work and give crits on boards with suggetions			15	
12	**WEEK 12**		**Test Week**	**TEST WEEK**			NA
	Studio 1	**Lecture-1**	NA				
	Studio 2	**Lecture-2**	NA				
13	**WEEK 13**		**Students' Activity**	Discussion on improvements on DD3 submissions			
	Studio 1	**Lecture-1**	NA				
	Studio 2	**Lecture-2**	**HOLIDAY**				
14	**WEEK 14**		**Review**	**PRE - FINAL SUBMISSION**	Prefinal		Project brief along with area requirements Design concept Case studies and design inferences Site analysis with program and zoning
	Studio 1	**Lecture-1**	Discussion based on students' work and give crits on boards with suggetions				
	Studio 2	**Lecture-2**				15	
15	**WEEK 15**		**Review**		None		
	Studio 1	**Lecture-1**	None				
	Studio 2	**Lecture-2**	None				
16	**WEEK 16**		**Final Submission**	**FINAL SUBMISSION Art and Architecture College**	Final Submission		All drawings and Models
	Studio 1	**Lecture-1**	None				
	Studio 2	**Lecture-2**	None			20	

Suggested Readings:-

1. Neufert, P., "Architects" Data", 3rd Ed., Blackwell Science, 2000

2. Energy efficient buildings in India, edited by Mili Majumdar, published by TERI, New Delhi (about 40 projects in different climatic zones)

3. Climate Responsive Architecture: A Design Handbook for Energy Efficient Buildings, Authors & Editors: Arvind Krishan, Nick Baker, Simos Yannas, S.V. Szokolay

4 Energy efficient buildings in India, edited by Mili Majumdar, published by TERI, New Delhi (about 40 projects in different climatic zones)

4. Green Building Illustrated by Francis D. K. Ching, Ian M. Shapiro

No.of Teaching Weeks: 16
Contact Hours: per week : L : 2 S: 0
Contact Hours: per sem : L : 32 S: 0
Credit: 2
Total Marks:100 (E=60 I=40)

Course Title: Quantity and Estimation
Course Code: AP-329
IIIrd YEAR – 2025-26, Semester V
Course Coordinator: Ms kavita Revo

Objectives:

Teaching basic concept of quantities and estimating measurement of building work etc.

Pedagogy:

The course will be conduted to meet the slated objective through lectures & working out quantities of a small structure

Expected Outcomes:

By the time students complete this semester, they should be able to work out quantities of a small structure with knowledge of units of measurements of different items. They are also clear about specification of various impotant item as per CPWD.

S NO.	WEEK	LECTURE /DISCUSSION		ACTIVITY	SUBMISSION	MARKS	EXPECTED OUTCOME
1	**WEEK 01**	**Sketchfile/Research**		L1: Introduction L2 : Introduction			E.O/2: Students to be made aware of the concept of estimation and the professional market practice for preparing the same
		Lecture-1	Clarifying various terms of area calculation i.e. Plinth Area, Built-up Area, etc for working out Estimates of buildings.				
		Lecture-2	Introduction to cost estimation , need of cost estimation & market practice				
2	**WEEK 02**	**Sketchfile/Research**		L1 :Different types of estimates L2 : Students to prepare shortnotes on various type of areas & various type of estimates.	S2 : submission of shortnotes on types of estimates		E.O/2: To enable students to differentiate and understand the need of preparation of different kinds of estimate
		Lecture-1	Explaining different type of estimates like Preliminary estimate, rough estimate & detailed estimates & when we need them.				
		Lecture-2	Explaining different type of estimates like Preliminary estimate, rough estimate & detailed estimates & when we need them.				
3	**WEEK 03**	**Sketchfile/Research**		L1 :Different types of estimates L2 - taking out quantities for estimating cost of construction for a small house			E.O/2: To enable students to calculate and make estimates based on quantities
		Lecture-1	Explaining different type of estimates like Preliminary estimate, rough estimate & detailed estimates & when we need them				
		Lecture-2	1/2 working out detailed estimates for a building whose plans , sections and elevations are given				
4	**WEEK 04**	**Sketchfile/Research**		L1- Students to prepare shortnotes on varios type of estimate like Preliminary estimate, Detailed estimate etc. L2 - taking out quantities for estimating cost of construction for a small house	S2 : submission of bill of quantities		E.O/2: To enable students to calculate and make estimates based on quantities
		Lecture-1	Explaining different type of estimates like Preliminary estimate, rough estimate & detailed estimates & when we need them.				
		Lecture-2	2/2 working out detailed estimates for a building whose plans , sections and elevations are given				
5	**WEEK 05**	**Topic of Study**		L1 - Working out quantities with long wall and short wall method. L2 - calculating cost of construction for a small house{ preferably 1bhk house : 650 sqft area}	S1 : Submission of short notes on Preliminary estimate and Detailed Estimates		E.O/2: To enable students to calculate and work out cost of construction
		Lecture-1	Working out quantities with long wall and short wall method.				
		Lecture-2	1/2 working out cost of construction based upon the plinth area rates , covered area rates etc				
6	**WEEK 06**	**Topic of Study**		L1 - Students to workout quantities of a small project by long wall short wall method.Dwgs./sketch will be provided by faculty. L2 - calculating cost of construction for a small house	S2 : submission of detailed cost of construction		E.O/2: To enable students to calculate and work out cost of construction
		Lecture-1	Working out quantities with long wall and short wall method.				
		Lecture-2	2/2 working out cost of construction based upon the plinth area rates , covered rates etc				
7	**WEEK 07**	**Topic of Study**		L1 - Working out quantities with centre line method L2 - Rate analysis of parapet wall and other components			E.O/2: To enable students to calculate and understand analysis of rates
		Lecture-1	How to workout quatities with centreline method.				
		Lecture-2	1/2 Rate analysis of various items RCC, Brickwork etc using CPWD2020 of materials and labor & explaining cost index				
8	**WEEK 08**	**Topic of Study**		L1 - Working out quantities with centre line method L2 - Rate analysis of rcc roof and other components	S2 : submission of detailed rate analysis		E.O/2: To enable students to calculate analysis of rates
		Lecture-1	Working out quantities with centre line method of a given sketch.				
		Lecture-2	2/2 Rate analysis of various items concrete , RCC , Brickwork etc using market rates CPWD97 of materials and labor				
9	**WEEK 09**	**Topic of Study**		L1 - Measurement units lecture L2 - Discussion on subjects covered	S1 : Submission of quantities worked out with centre line method.		E.O/2: To clear doubts and queries
		Lecture-1	Lecture on Measurement units of various items.				
		Lecture-2	Question Bank on previous lectures				
10	**WEEK 10**			**TEST WEEK**			
10	**WEEK 11**	**Topic of Study**		L1 : Measurement methods L2 : Introduction	S1: Sumission of notes on measurement units of various items.		E.O/2: To enable students to understand market practice
		Lecture-1	Measurement method of various items on site				
		Lecture-2	Introduction to calculation of market rates of building construction and factors controlling them				
11	**WEEK 12**	**Prefinal**		L1 : Measurement methods L2 - calculation of cost of building based			E.O/2: To enable students to
		Lecture-1	Measurement method of various items on site				

		Lecture-2	1/2 Calculating cost of building based on the market rates and working out rate / sqmt area of the building	L2 - calculation of cost of building based on market rates			understand market practice
12	**WEEK 13**	**Review**		L1: Area Deductions L2 - calculation of cost of building based on market rates	S1 :Notes on measurements method on site. S2 : submission of detailed cost of building as per market rates		E.O/2: To enable students to understand market practice
		Lecture-1	Deduction for openings in measurement. Explaination with examples.				
		Lecture-2	2/2 Calculating cost of building based on the market rates and working out rate / sqmt area of the building				
13	**WEEK 14**	**Test Week**		L1 : Area / measurement wastage / contigency L2 - preparation of computer generated BOQ			E.O/2: To enable students to understand use of computer application in qty and estimation
		Lecture-1	Addition of wastage to measurement. Explanation with example.				
		Lecture-2	1/2 use of softwares for generating BOQ etc.				
14	**WEEK 15**	**Review**		L1: Revision L2 - preparation of computer generated BOQ	S1: Submission of notes on wastage and additions in measurements.		E.O/2: To enable students to understand use of computer application in qty and estimation
		Lecture-1	Revision of course and questions from previous years papers.				
		Lecture-2	2/2 use of softwares for generating BOQ etc.				
15	**WEEK 16**	**Review**		L1: Revision L2 - preparation of computer generated BOQ	S2 : submission of computer generated detailed BOQ		
		Lecture-1	Revision of course and questions from previous years papers.				
		Lecture-2	2/2 use of softwares for generating BOQ etc.				

Suggested Readings:-

1. DUTTA BN (1992) Estimating and Costing in Civil Engineering, UBC PublishersDistributers Ltd, New Delhi.

The Future of Residential Development in Delhi NCR
Trends and Innovations + Site Focus: Andrews Ganj GPRA Housing Redevelopment

Delhi NCR, one of India's most urbanized and rapidly growing regions, is home to over 25 million residents. The area's swift population growth, land scarcity, and climate challenges are driving architects and developers to adopt **smart, sustainable, and inclusive strategies**. Today's housing is no longer just about providing shelter; it's about creating energy-efficient, convenient, community-oriented, and resilient living spaces.

A significant proportion of Delhi's housing stock comprises buildings over 60 years old, which are now being considered for redevelopment projects. Government housing projects and cooperative housing schemes developed in the 1960s are being revamped to accommodate modern lifestyles. Changes in Floor Area Ratio (FAR), additional infrastructure, and services such as parking structures, PNG supply, mobile and communication towers, sewerage and stormwater drains, rainwater harvesting, and storage systems are being upgraded.

The COVID-19 pandemic has also influenced building design, setting new norms for community living and gathering. Convenience and comfort are now essential components of modern living in new housing designs. Some key factors being incorporated into current housing designs include:

1. Smart Homes: The New Standard

Smart homes that integrate advanced technologies and allow residents to remotely control lighting, temperature, security systems, and appliances through smartphones or voice assistants. The benefits of smart homes include reduced energy consumption, enhanced safety, and greater comfort. Smart homes are also compatible with solar and energy management systems, enabling residents to track usage and minimize waste.

2. Sustainability in Focus

Green design and construction practices are now widely adopted in residential projects. Key features include energy-efficient appliances and lighting, solar panels, rainwater harvesting, and greywater reuse. Builders are also opting for environmentally friendly materials like fly ash bricks, recycled wood, and low-VOC paints. Sustainability benefits both the environment and residents, offering long-term savings and healthier indoor air quality.

3. Inclusive and Accessible Housing

Inclusive housing is promoted that caters to people with disabilities and the elderly. . Design elements include ramps, barrier-free entrances, elevators with Braille and audio features, and wider doorways and wheelchair-accessible bathrooms. Such infrastructure ensures a more equitable urban environment where all residents can live comfortably and independently.

4. Vertical Living: A Space-Saving Solution

Limited land area has promoted vertical expansion through high-rise towers and helps accommodate more people per square meter, especially in central locations where land is expensive or scarce. Vertical development offers optimized land use, proximity to public transportation and amenities, and potential for mixed-use developments. However, challenges include privacy and social security, structural safety, fire prevention and vertical movement elevator access etc.

5. New Materials and Construction systems

Developers are experimenting with eco-friendly construction materials, such as bamboo, precast concrete components, composite materials, and smart glass. These materials reduce environmental impact, lower construction time, and enhance durability.

Conclusion and Way Forward

The Delhi NCR region has the potential to become a hub for innovative and sustainable residential development. By adopting **Smart Technologies, Sustainable Practices, and Inclusive Design,** developers can create living spaces that are not only **comfortable and convenient but also environmentally friendly and socially responsible.** As the region continues to grow and evolve, it's essential to prioritize the needs of its residents, ensuring that they have access to **safe, affordable, and high-quality housing.**

STUDIO OBJECTIVE

To research and develop Alternate Housing Schemes that shall emerge as a result of new policies proposed in **Master Plan Delhi 2021 & Draft MPD 2041 along with New GPRA Redevelopment Frameworks**.

The selected and confirmed **site for 2025 Housing Studio** is:
Andrews Ganj GPRA Housing Redevelopment Site – Central Delhi
This site will be used to test strategic redevelopment through design, exploring sustainable, livable, and inclusive future housing solutions

THE SITE: Andrews Ganj offers a rich urban fabric to propose **Redevelopment through Clustering**, Block Amalgamation, and Vertical growth. It has potential to develop as both
LOW RISE and MEDIUM RISE high density urban housing

The Entire Site has an area of approx. 21 Hect. This site is divided into three distinct zones:

Zone A : Residential
Zone C : Residential
Zone B : Community Spaces Built and Open shared by Zone A& B

Area Zone A and B	**7 Hect**
Gross Residential Density	**300 PP Hect**
Total Plot Area	**21 hect**
Total Popn.	**21X300= 6300 Persons**
Visitors @ 10%	**630 P**
Service personal @5%	**315 P**
Total Popn. on Site =	**6300+630+315= 7245 P**
No. of persons Zone A or B	**3315**
Total No. of Units	**3315/ 4.5= 735 Nos.**
Service persons Unit	**315 /4.5 = 70 Nos.**

GPRA Guidelines and Site Context

The GPRA redevelopment policies, guided by CPWD and MoHUA, specify design, density, and infrastructure norms for centrally owned residential properties. Plinth area standards are defined by housing type (Type I–VII), including:

- Façade control with no balconies on the main road side,
- Provision for window-type AC units,
- Mandatory parking norms,
- Minimum standards for room sizes and service areas.

Additionally, redevelopment must integrate:

- Mixed-income and mixed-use approaches,
- Energy-efficient systems,
- Green building principles,
- Community infrastructure,
- Climate resilience and open space networks.

Following Table highlights the proposed Residential and other facilities in Zone A & C
Plot Area 70000 sqmts

Residential Type	No. Of Dwellings	Plinth area per Dwelling -D	Servant Quarter S	Built area (D+S) per Unit	Total Built area for all units in sqmts
Type IV	200	110	25	135	27000
Type V	335	161.5	25	186.5	62645
Type VI	200	229	25	244	48800
Service Personnel	35	45	-`	43	1935
Total Units/ Built For All Types	770				140380
FAR for Residential					200
Average Unit Area					182

List Of Other facilities on Each Site A & B

Activity	Norms	Unit Area	Total Area Req.	
Parking	2Ecs/100 sqmt less 30% for Metro	1800 Cars		
	Surface Parking	@15% = 270 Basement Parking = 1530		
Green Area	4.5 sqmt per person		15000 sqmt	
Nursery School AnganWari Play Schools	1 for 100 1 per Cluster	500 sqmts Built As per Cluster Design	500 sqmts 200x2=400 sqmt	
Community Facilities	As per requirement			

Program of Requirements for Shared facilities in Zone B

HEALTH CARE FACILITIES:

1) NURSING HOME POLYCLINIC: 1 Nos
Plot Area : 2000 SQ.M.
Ground Coverage : up to 30%
Permitted FAR: 150
HT: 18 m

2) VET CLINIC: PLOT: 300 SQ.M.
GC : 30% FAR: 150 HT: N.A.

EDUCATIONAL FACILITIES:

1) PRIMARY SCHOOL –
Plot Area : 2000 SQ.M.
Ground Coverage : up to 35%
Permitted FAR: 150
HT: 15 m

2) SR. SECONDARY SCHOOL
Plot Area : 6000 SQ.M.
Ground Coverage : up to 35%
Permitted FAR: 150
HT: 18 m

Additional Area of 10000 sqmts for playground to be shared by Schools

COMMUNITY FACILITIES

1) MULTIPURPOSE HALL COMMUNITY HALL
Plot Area :2000 SQ.M.
Ground Coverage : up to 30%
Permitted FAR: 120
HT: 15 m

2) CLUB
Plot Area : 4000 SQ.M.
Ground Coverage : up to 35%
Permitted FAR: 150
HT: 18 m

3) Milk and Fruit Vending Both – 2 Nos.
Size -100 sqmt each

4) Communication Tower 1 Nos
DG set and Tower– 200 SQ.M.

5) Underground water Tank -200000 Litrs

6) Underground water Tank for Fire - 200000 Lit

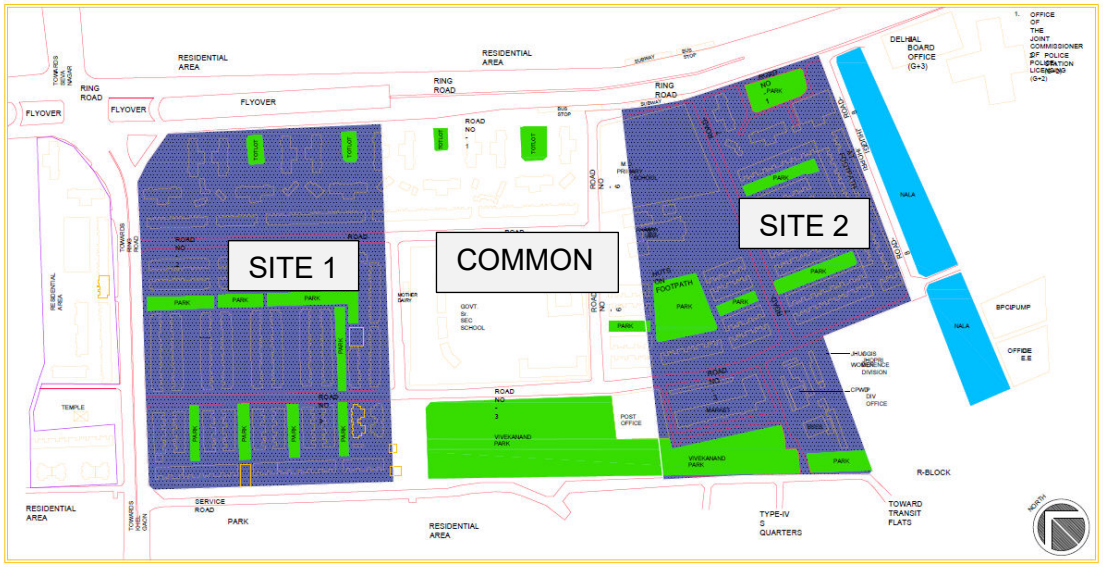
7)App Taxi Pickup/ Drop, 3 Wheelers as per req. (2Nos)
Area 400 sqmts

SHOPPING]

1) Local Shopping Centre
Plot Area : 4000 SQ.M.
Ground Coverage : up to 50%
Permitted FAR: 100
HT: 15 m

2) Service Market - 1000 sqmt open Part of LSC

3) Informal Market – 1000 sqmt (can be integrated with other facilities)



FOLLOWING IS THE STANDARD OPERATIONAL PROCEDURES OF THE CURRENT STUDIO.

Max Marks: 1500

There shall be 4 stages for this Studio Program

Stage 1:	Program Weightage	
Predesign and Site Studies of the Project	12% (6+6)	180
Stage 2:		
Site Analysis, Zoning and Concept Development	16% (4+4+8)	240
Stage 3:		
Design Development Stages - 5 nos	40% (8x5)	600
Stage 4:		
Pre Final and Final Presentation	32% (12+20)	480

Stage 1: Program	Weightage	Marks
Predesign and Site Studies of the Project	**12%**	**(50+100+30)**

A set of 31 students shall be divided in groups of 4,and 5 making 7 groups working on two sites. Maximum of 4 groups shall be allotted to one site. Each of the two sites and surrounding studies shall be done together by 3/4 groups working on the same. Four issues shall be identified to do background studies. These are as follows:

- Site and Surrounding Studies- Building the Context 3%
- Transport and Service infrastructure around the area 3%
- MPD 2041 - and Development Controls relevant for the project 3%
- Open space structure, Landscape, Parking and services 3%

Stage 2:

Site Analysis, Zoning and Concept Development	**16%**	**(60+20+30+50+80)**

- Detailed site analysis and formulation of design drivers for the project 4%
- Program of Requirements, Zoning and 2 Dimensional disposition of FAR and Ground Coverage etc. 4%
- 3 Dimensional Disposition of FAR and Concept 8%

Stage 3:

Design Development Stages - 5 nos	**32% (8x5)**	**(120x4)**
● Design Development Stage I		8%
● Design Development Stage II		8%
● Design Development Stage III		8%
● Design Development Stage IV		8%

Stage 4:	**40% (16+24)**	**(180+300)**
● **Pre Final Presentation**		16%
● **Final Presentation+ Model**		24%

Note: Details of Submissions for Design development, Pre Final and Final presentations shall be provided during the Semester.

4th YEAR – HOUSING STUDIO - Aug2025 – Dec. 2025
DESIGN STAGES - SUBMISSION SCHEDULE - MARKS

STAGE	DESCRIPTION	SUBMISSION DATE	MARKS (1500)
I	Pre Design Research and Site studies	**07.08.2025**	Grade
	R/F	**11.08.2025**	50+100+30
II	Program of Requirements through studies, Activities. Areas typology and functions Design features, cluster study, unit study, avg sizes, No. of towers, Existing type 3,4,5 study upgradation, Roads percentage Site Analysis	**18.08.2025/21-08-2025**	60
III	Zoning and Design Derivatives with areas , buildings, scaled in grid.	**25.08.2025**	20
IV	Final Zoning	**28.08.2025**	30
V	Concept Design – 2D and 3D	**04.09.2025**	50
VI	Zoning and Concept showing All Residential types, Clubhouse, shopping etc., Block model – Volumetric Analysis – , GC and FAR of each block	**15.09.2025**	80

VII	Typology Studies DD1 Plan, Section, Elevation Type I & II	**22.09.2025**	40
	Final Typology Study DD1	**25.09.2025**	80
VIII	DD2 Typology Studies Plan, Section, Elevation Type III & IV	**09.10.2025**	40
	Final Typology Study DD2	**16.10.2025**	80
IX	DD3 Cluster Design Type I & II & Clubhouse Plan, Section, Elevation Type I & II Cluster Design Type III & IV & Shopping Centre Plan, Section, Elevation Type III & IV	**27.10.2025**	40
	Final Typology Study DD3	**30.10.2025**	80
X	DD4 Open Space Structure - Site Sections and Elevations. Basement Parking and ancillary buildings Detail Design of two pockets showing unit designs, floor plans, clusters, and landscape. Open space design/s Sections, elevations etc.	**06.11.2025**	40
	Final Typology Study DD4	**10.11.2025**	80
XI	**Pre Final - Detail to be furnished separately)**	**17.11.2025**	180
XII	**FINAL SUBMISSION - Details to be furnished separately**	**20.11.2025**	**300**
	FINAL INTERNAL EVALUATION		

***Note**: Any change in submission schedule shall be notified. In case of a holiday on submission day, the same shall be received on the next scheduled class.*

VASTU KALA ACADEMY COLLEGE OF ARCHITECTURE

AP405: Seminar

Fourth Year Architecture (2025-26)

SCHEDULE OF SUBMISSIONS

*Plagiarism check report submission will be mandatory at all stages.

Submission	Stage	Submission Deliverables	Expected Outcome	**Mode of submission** (Folder access will be provided for soft copy)	Date of submission/ review
Submission 0	Synopsis	One/ two page introduction of the chosen topic - Aim and Objectives	Topic Finalisation	soft copy to folder and Guides	**WEDNESDAY 13th AUG 2025**
Submission 1	Background study: The detailed introduction and background of the topic chosen for Seminar topic	PowerPoint submission and audiovisual presentation of approx. 08-10 slides along with a write-up of 750-1250 words	Compilation of all background information. Formulation of Abstract and keywords	soft copy to folder and Guides /hardcopy to guide (if required by guide)	**WEDNESDAY 27th AUG 2025**
Submission 2	Compilation of all background with detail understanding information, formation of aim, objectives and tentative research methodology	Powerpoint submission and audiovisual presentation of approx. 10-15 slides along with a writeup of 1000-1500 words	Compilation of all background information. Formulation of Abstract and keywords. Aim, objectives, scope & limitation	soft copy to folder and Guides /hardcopy to guide (if required by guide)	**WEDNESDAY 10th SEPT 2025**
Submission 3	Detailed research methodology to be deployed for research and summarized background	Powerpoint submission and audiovisual presentation of approx. 15-20 slides along with a writeup of 1500-2000 words	Detailing of the research methodology for both qualitative and quantitative research and deployment of the tools for analysis	soft copy to folder and Guides /hardcopy to guide (if required by guide)	**WEDNESDAY 24th SEPT 2025**
Submission 4	Identification of case studies and tentative path of analysis	Powerpoint submission and audiovisual presentation of approx. 20-25 slides along with a write-up of 2000-2500 words	Detailing of the research methodology for both qualitative and quantitative research and deployment of the tools for analysis along with identiication o case studies	**Softcopy to folder and guide. Print out of Report (mandatory) to be submmited on the day of Joint Review to Coordinators.**	**Submission & Joint Review WEDNESDAY 08th OCT 2025**
Submission 5	Primary and secondary studies along with surveys required to undertake the research, along with the analysis of data collected in the defined format	Powerpoint submission and audiovisual presentation of approx. 25-30 slides along with a write-up of 2000-2500 words	Analysis of all the primary and secondary data collected to undertake the research. Drawing inferences from the research	soft copy to folder and Guides /hardcopy to guide (if required by guide)	**WEDNESDAY 22nd OCT 2025**
Submission 6	Drawing out inference, conclusion, suggestions and recommendations if any	PowerPoint submission and audiovisual presentation of approx. 25-30 slides along with a write-up of 2500-3000 words	Drawing conclusions / recommendations/ guidelines/ suggestion	**Softcopy** to folder and guide. **Print out of Report (mandatory)** to be submmited on the day of Joint Review to Coordinators.	**Submission & Joint Review WEDNESDAY 29th OCT 2025**
Submission 7	Final Submission	PowerPoint submission and audiovisual presentation of approx. 25-30 slides along with a write-up of 2500-3000 words	Final preseantation and reoprt	FINAL Submission - soft copy to folder and Guides/ Print out of final with joint review editsReport (mandatory) to Coordinators	**WEDNESDAY 19th NOV 2025**
	SEMINAR COORDINATORS	PROF. JYOTI LUTHRA	PROF. SARIKA NARAYAN		