

ARCHITECTURAL DESIGN V

STRUCTURES

BUILD.CONST. & MATERIALS V

WORKING DRAWING I

VERNACULAR ARCHITECTURE

BUILDING SERVICES

ALLIED DESIGN STUDIO V

ELECTIVE- V

CONTEMPORARY ARCHITECTURE

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SEMESTER

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Year In Charge:-Ar. Vaijayanti Yadav

Architectural Design

Coordinator: Vaijayanti

Yadav

Team- Dr.Pratima Dhoke, Ar. Vaijayanti Yadav, Ar. Mrinmayee Tiwari,
Ar. Sarika Joshi

Allied Design Studio

Coordinator: Vaijayanti

Yadav

Team- Dr.Pratima Dhoke, Ar. Vaijayanti Yadav, Ar. Mrinmayee Tiwari,
Ar. Sarika Joshi

Building Construction & Materials -V

Team :- Dr. Pratima Dhoke, Ar. Mrinmayee Tiwari, Ar. Sneha
Mandekar

Structural Design & Systems -V

Subject Teachers Mr.Rupal Wadegaonkar

Building Services II

Subject Teachers -Ar. Mrinmayee Tiwari, Ar. Samruddhi Amte

Architectural Graphics-V

Team - Ar. Sanjivani Mohgaonkar,
Ar. Vaijayanti Yadav

Vernacular Architecture

Subject Teachers - Dr. Seema Burele, Ar. Sarika Joshi

Contemporary Architecture

Subject Teachers - Ar. Sarika Joshi, Ar. Tanvi Burghate

Elective V- Institutional Project

Subject Teachers - Ar. Vaijayanti Yadav

Vision

The vision limits to the present situation or at best for the near future. We should mention that we equip students to venture into the future.

Our vision is to reach global standards by deliberate modernization without losing the essential characteristics of our tradition. Being a women's college we find it more pertinent to imbibe both these qualities very consciously in our girl students.

We wish to produce socially responsible architects with sensitivity towards social issues of immediate contexts, national concerns and global effects and positive and creative approach towards life.

Mission

To create an educational environment in which students are prepared to meet the challenges of a fast developing and changing world.

Hence the students are equipped with:

- Up to date knowledge
- Analytical and practical skills
- Creative approach towards everything that they undertake
- Attitude to be sensitive towards national, social and environmental issues

While addressing the global challenges we believe strongly in anchoring ourselves to the immediate context. We accept gratefully our role in preserving and enhancing Vidarbha and Nagpur- the place, its people and architecture.

Core Values

- Integrity
- Discovery
- Discipline
- Creativity
- Collaboration
- Excellence
- Innovation
- Respect
- Diversity

Objectives

- To develop among students academic and Professional competency.
- To foster value-based, creative and critical learning
- To hone skills of living in a technological, globalized and ecologically aware environment
- To develop culture of commitment to excellence

Code of Conduct

Punctuality- It is mandatory for students to be punctual in the college and shall have to be present every day at 8.45 a.m.. Every student is expected to attend the morning assembly. Attendance of the students will be taken at the time of assembly by respective class coordinators.

The attendance will also be taken at the beginning of the classes in the afternoon after lunch break. The record of attendance shall be displayed at the end of each month for students. Every student is expected to go through the displayed attendance and request rectification of the record within 8 days by talking to the class teacher if her attendance has been wrongly recorded.

In case of absentism, student shall bring a letter of absence duly signed by her parents/guardian. However, a student having less than 75% attendance will face disciplinary action and will not be permitted to appear for University Examination.

Dress Code - Salwar suit/Jeans /Leggings with long Kurti.

Extracurricular activities- Credits are allotted to each activity and students are required to attend the activities to earn these credits. Every student has to attend the programmes organized by the college from time to time.

Attendance for programme of 26th January and of 15th August is mandatory for every student and the dress code a white Salwar Suits/Leggings with Long Kurti.

Study tours- Every year study tours are arranged for students of different years as per their curriculum requirements. Active participation in Study Tour is necessary.

Academic Performance

Submission schedule of all the subjects of a semester will be displayed at the beginning of the session. Students must follow the submission schedules given by respective subject teachers. No late submissions will be accepted after the scheduled date.

Midterm assessment

A midterm assessment will be conducted to assess the progress of a student. It is mandatory for all the students to appear for this assessment.

Student Council

The Student Council will be formulated for the main purpose of empowering the students. Having a formal setup of a Student Council enables students to organize and conduct certain activities, coordinate publications like 'Her Space', and properly convey any concerns students may have to the college administration and teaching faculty. The student council also takes the lead in organizing and coordinating many events in the academic year- like daily assembly, Republic Day and Independence Day celebrations, NASA, Teachers Day, Archiventure, Women's Day celebration and all other major events conducted by the college. The structure of the council is such that students from all years find representation in it. The team is headed by fourth year students with representative from first, second and third year. Third year students take over the reins when fourth year students go for their training in the 8th semester. Final year students act as mentors to the council. The organization set up for student council will comprise of - President Vice-president Treasurer Design Heads Activity Heads Cultural Heads Editorial Heads In addition, there are Class Representatives from first and second year - one representative from each of the three sections in a year.

SCHEME OF EXAMINATION – B.Arch.

THIRD YEAR B.ARCH.

Semester – 5

Sr. No.	Sub. Code	Sub. Name	Paper Code	Category	Board	Load Per Week					Credits					Paper / Sessional	Duration in Hours	Max. Marks	Total Marks	Min. Pass Marks
						L/D	T	S	P	Total	L	T	S	P	Total					
1	5S-A-1	Architectural Design V	BAR05S01	PC	AR	1	0	4	0	5	1	0	6	0	7	Sessional		100	200	50
			BAR05P01													Viva Voce		100		50
2	5S-A-2	Allied Design Studio-V	BAR05S02	PC	AR	1	0	2	0	3	1	0	3	0	4	Sessional		100	100	50
3	5S-A-3	Building Construction and Materials -V	BAR05T03	BS&AE	AR	2	0	2	0	4	2	0	3	0	5	Paper	3	100	150	40
			BAR05S03													Sessional		50		25
4	5S-A-4	Working Drawing -I	BAR05S04	PC	AR	2	0	0	2	4	2	0	0	1	3	Sessional		50	100	50
			BAR06P04													Viva Voce		50		
5	5S-A-5	Structural Design & Systems V	BAR05T05	BS&AE	AR	2	1	0	0	3	2	0.5	0	0	2.5	Paper	3	60	100	50
			BAR05S05													Sessional		40		
6	5S-A-6	Contemporary Architecture	BAR05S06	PC	AR	1	1	0	0	2	1	0.5	0	0	1.5	Sessional		100	100	50
7	5S-A-7	Building Services - II	BAR05T07	BS&AE	AR	2	1	0	0	3	2	0.5	0	0	2.5	Paper	3	60	100	50
			BAR05S07													Sessional		40		
8	5S-A-8	Vernacular Architecture	BAR05S08	PC	AR	2	1	0	0	3	2	0.5	0	0	2.5	Sessional		100	100	50
9	5S-A-9	Elective V	BAR05S09	EC	AR	1	2	0	0	3	1	1	0	0	2	Sessional		50	50	25
Total										30					30.0			1000	1000	

Elective V Pattern Language / Product Design /Advanced Spatial Analysis / Behavioural Architectural / Rhapsodic Architecture/ Vastu Shastra / Institutional Project 5

ARCHITECTURAL DESIGN V

Design Coordinator- Ar. Vaijayanti Yadav

Teachers-in-charges- Dr. Pratima Dhoke, Ar. Vaijayanti Yadav, Ar. Mrinmayee Tiwari, Ar. Sarika Joshi

Course Outcomes

CO1 - To define mixed use development to identify the complexities via case study and interpret according to design project

CO2- To interpret the site, site context and development required for mixed use development

CO3- To develop the concept and functional organization of activities with respect site, topography and surrounding development

CO4- To design the proposed scheme with all required details

CO5- To evaluate the overall completeness of design solutions

Co working Hub for Designers

The current economy of emerging markets of India can be categorized into many classes. A certain corner within that sub - classification of a Post - Industrial society is what known to be the Experience at the top, but by combining already existing technology with multiple disciplines, Entrepreneur in such start - ups attempt to create a new market with their products and services. This is a tricky business; risk is high and so is the value of the business if it succeeds. In this environment, the risk takers are usually those who have not much to lose, or sometimes everything to lose. Professionals and stakeholders can thus meet and create meaningful inventions that are extremely consumer centric. And so a new typology of spaces emerges whereby product development and business ends are met in the same space.

Design is a field of interaction, exploration and communication. It cannot be completely learnt in a confined atmosphere and hence it requires continuous networking with the outside world. One of the ways to learn architecture is by working with the professionals at the nascent stage of architecture education.

The idea is to provide a space for the students and upcoming designers related to the construction industry to co-exist and work in tandem. This will help in exchanging the ideas and methodologies and exploring avenues in software and AI skills by the new generation of designers.

Aim

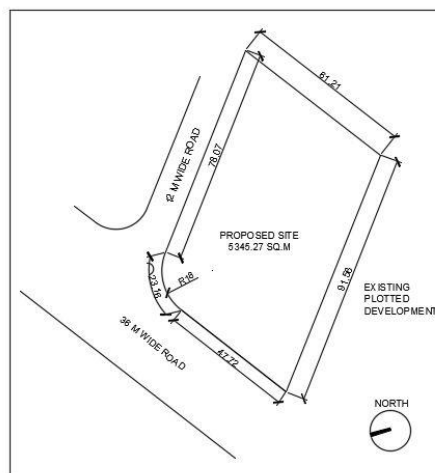
To design a co working space for students of construction industry and upcoming designers.

Objectives

1. To understand the architectural spaces required for Designers office.
2. To derive innovative form with different structural systems
3. To understand the services required in multi-storeyed buildings
4. To discover different building materials and techniques meeting the sustainable needs.

Site Details

The identified site is located on the Wadi Katol ring road, Dabha situated on the north-west corner of Nagpur city. The total site area is 1.3 Acres (5345.27 Sq m)



Studio Modalities

STAGES/DATE	TASK	STUDIO DISCUSSION	EXPECTED OUTPUT
Module A: Basic understanding of the Co working spaces and Designer spaces			
Stage 1 Week 1 July 2023	Introduction	Understanding of Designer Spaces, standards required to be followed	A2 Size Sheet
	Precedent Study and Inferences.	Various professional under designer category.	
Review 1			
Module B: Conceptualization and schematic Development of the Designer Coworking Hub			
Stage 2 Week 3 & 4 July 2023	Site Inventory and Site Analysis	Discussion in studio - Input regarding site by Teachers	Analysis in A2 Size Sheet.
	Formulation of Design Program based on the Module A		A2 Sheets - Detailed Design Program with Area Allocation

	Creative Exercise and Concept Generation	Horizontal Vertical Planes composition	Model
Review 2			
Module C: Architectural Detailing of the Designer Coworking Hub			
Stage 4 Week 1 Aug 2023	Detailed site plan	Detailed Discussions about the Site Plan	A1 Sheets with detailed Landscaping to be shown on Site Plan
Review 3			
Stage 5 Week 2 & 3 Aug 2023	Architectural Floor plans of all levels	Discussions in Studio. Inputs from faculty.	A1 Sheets
Review 3			
Stage 5 Week 4 Aug 2023	Elevations, Sections, views, details to explain the scheme.	Discussion in Studio	A1 Sheets
Stage 6 Week 1 Sept 2023	Detailing of Services	Discussion in studio - Input regarding services by Teachers	A1 Sheets
Stage 6 Week 2 Sept 2023	Views, Model to explain the designed architectural solution.		A1 Sheets
Final Submission			

Evaluation Scheme

REVIEW 1 CO1 (10 Marks) Presentations and Case Studies			REVIEW2 CO2 (10 Marks) Site analysis and zoning			REVIEW 3 CO3 (15 marks) Concept, form evolution and Design Program		PRE FINAL CO4 (20 marks) Architectural Drawings	FINAL SUBMISSION CO5 (35 marks) Final portfolio				Attendanc e
Description of case	Analysis	Observations and Inferences	Inventory	Analysis	Inferences	Innovation and originality in concept evolution	Design program Feasibility	Master plan Plans/Elevations/ Sections 3D views Site development Site services	Functionality of design solution	Completeness of Portfolio	Graphical Representation skills	Oral Presentation skills	
2.5	5	2.5	2	4	4	8	7	20	15	10	5	5	10

ALLIED DESIGN STUDIO V

Design Coordinator- Ar. Vaijayanti Yadav

Teachers-in-charges- Dr. Pratima Dhoke, Ar. Vaijayanti Yadav, Ar. Mrinmayee Tiwari, Ar. Sarika Joshi

Course Outcomes

CO1 - To identify and analyse the current architectural issues of Nagpur city.

CO2- To develop the vertical integration amongst the students.

CO3- To understand climatic consideration to design-built façade through hands on experience

CO4- To classify and apply the appropriate materials with respect to climate

Workshop on Climate Responsive Building Facade

Evaluation Scheme

VERTICAL STUDIO			ATTENDANCE	TOTAL	WORKSHOP			ATTENDANCE	TOTAL
REVIEW 1 CO1 (10 Marks) Pre Study	REVIEW2 CO2 (10 Marks) Site analysis and zoning Coceptual Drawing	Final Submission			REVIEW 1 CO3 (10 marks)	REVIEW 2 CO4 (10 marks)	FINAL SUBMISSION		
10	10	20	10	50	10	10	20	10	50

BUILDING CONSTRUCTION & MATERIALS V

Teachers-in-charges :- Dr. Pratima Dhoke, Ar. Mrinmayee Tiwari, Ar. Sneha Mandekar

Course Outcomes

CO1:- To learn the advanced RCC footings, their structural stability, bearing capacity and applications

CO2:- To understand the loading pattern, structural considerations and principles for RCC slabs line grid slab, flat slab and lift slab

CO3:- To study the defects of building and remedies to rehabilitate them.

Also, to know about the construction chemicals required to alter the properties of the materials.

CO4 :- To know the waterproofing techniques with respect to old and new materials

CO5 :- To understand the additions and alterations and structural systems thereon to rehabilitate the structure.

CO 6 :- To know about the shoring and underpinning to support the structure

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Topics	Objectives	Date/Time Required	Sketch Book	Site Visit/Market Survey	Audio Visual	Interactive Teaching	Expected Output/Date Of Submission
Unit-I Types of foundations	To study soil conditions and suitability of foundations on particular type of soil. To study the design considerations for different types of foundations Strip footing, combined footing, eccentric footing, foundation for floating columns and cantilever beams	6 hours 4 hr- introduction to the topic. 2 hrs.- sketches	Proportionate sketches of all types of footings	To be identified later, as per availability.	Explaining basic concepts , materials adopted and constructional details	Clarifying the queries if any.	Sketch book, tutorials and test
Unit-I Types of foundation (contd.)	To study different types of foundation like Steel grillage footing, raft and cellular foundation. Machine Foundation etc and their suitability as per the soil conditions.	4 hours	Sketching types of foundation depending upon the soil conditions, load distribution etc.	will be decided as per availability	Audio visual presentation explaining in detail types of foundation. Criteria for selection of foundation type as per the soil condition and the load behaviour of the structure.	Clarifying the queries	Sketch book, tutorials and models
Unit-I Pile foundation	To study the types of piles with respect to material, method of construction like Piles In Timber, Steel and R.C:C. (Pre-cast and Cast-in situ) R.C.C. Under-rimmed piles, pile caps etc.	3 hours		Site visit to be finalised as per availability.	Power point presentation for understanding the decision to recommend pile foundation on site. Understanding the methods of construction. Types of pile foundations	Discussion on site visit experience and clarifying the queries if any.	Sketch book and tutorials
Unit-II Advanced	To understand the construction principles and	6 hours	Sketches of lift slab	-	Reinforcement details of grid slab and flat slab with	Clarifying the queries	Plates of grid slab and flat

RCC slabs	techniques of flat slabs, coffered slabs/ grid slabs, lift slabs, flat plate slabs		construction		the method of construction of each slab		slab
Submission on 18th August 2023							
Unit-III Defects in building	Causes and remedies of various defects, study of non-destructive tests, rebound test, penetration test and pull out techniques, surface hardness test	4hrs	Sketches of various cracks and remedies to treat them	Lab visit to show testing (as per availability)	AV presentation on different types of cracks	Interaction with experts	Sketches, tutorials, test
Unit-III Study of building structure rehabilitation	Various methods such as grouting, guniting, jacketing	2hrs	Sketches of all the techniques		Explaining principles and reasons for rehabilitation and studying the construction techniques		Test
Unit-IV Construction chemicals	Study of construction chemicals, admixtures, with emphasis on common chemicals and repair solutions	3 hrs		Lab visit to Apple Chemie Factory, Butibori	Explaining the need and purpose of the topic	Interaction with expert	Tutorial, Site visit report
Unit-IV DPC and Water Proofing	To study Waterproofing with respect to old and new materials. To study methods of water proofing for roofs, slabs, foundations), basements, swimming tanks etc.	3 hours	Collecting photographs of effects of dampness in buildings	Market Survey	Explaining the difference between water proofing and damp proofing Techniques used during construction to avoid water percolation Various materials used from traditional time to present day, etc.	Clarifying queries if any	Market survey report
Submission 12th Sept							

Unit-V Additions and Alterations	Additions and Alterations in existing buildings	6 hours	Class notes/ sketches	-	Explaining the purpose and necessity of alterations, structural stability, techniques of modifications, precautionary measures.	Discussing on the conventional and new methods adopted.	Plates
Unit V Shoring, underpinning, scaffolding	Shoring, underpinning and scaffolding for building work	2 hours	Class notes/ sketches		Explaining the importance and techniques.	Clarifying the queries	Sketches
FINAL PORTFOLIO SUBMISSION 1st week of October							

Assignments

Sketch book	Model	Site Visit	Tutorials	Market Surveys(material)
Quality of Sketches	Scale & Proportion	Que. Regarding visit	No. of questions	Format for surveys
Proportion	Material	(As time and situation permits)		

Evaluation scheme

	CO1	CO2	CO3	CO4	CO5	CO6	Sessional	Attendance	TOTAL
	U-1	U-2	U-3	U-4	U-5	U-6			
Max. Marks	10	10	10	5	5	20	30	10	100
	Sketches	Tutorials/ Sketches	Tutorials	Test	Sketches	Plates, Model and sketches			

STRUCTURAL DESIGN & SYSTEMS V

Teacher-in-charge :- Mr. Rupal Wadegaonkar

Unit	Topics
I	Properties of concrete, Concept of R.C. C, Elastic, Ultimate load Theory, Limit State Theory
II	Design of singly reinforced concrete, Doubly reinforced Concrete
III	Design of T beam, L beam
IV	Design of shear reinforcements, R.C.C Sections in tension

BUILDING SERVICES II

Teachers-in-charge –Ar. Mrinmayee Tiwari, Ar. Samruddhi Amte

The second part of building services approaches with increased complexity and direct relation to design. This is a continued version to previous semester with a larger magnitude wherein you get the information related to large campuses, complexes, high rise buildings . This semester is not only a theory-based subject but you also need to design and handle the services layouts of larger scale projects.

Aim

The aim of the subject is to acquaint you about the importance, installation and working of various services related to campuses and high rise buildings. The scope lies in water services, sanitation, electrical services, storm water drainage and rain water collection and disposal.

Course Outcomes

The objective of the subject is not only to transmit knowledge but to provide a deeper insight into the subject by following various physiological, psychological and sociological bases of education.

CO1 To know the importance, installation & working of various services related to campuses & high-rise buildings. (Test, Live project)

CO2 To understand the importance of sustainability which can be achieved by Electrical Services and solar energy. (Sheet)

CO3 To apply the collection and disposal of storm water & different active & passive techniques of RWH in a residence(Audit report)

CO4 To implement Water services, sanitation, electrical services, storm water drainage & rain water collection & disposal at global level. (Sessional exam)

Date/Week	Topic	Learning Objectives	Input	Expected Output
1 st , 2 nd week July	Competition on Bathing Experience	Implementation of theory of previous semester	Site visit to Jaquar showroom	Write up, sheets
Submission 17th July				
3 rd week July CO1	Hot water supply in high rise buildings, boilers, furnaces, solar water heaters.	To teach them about the active systems in hot water supply. To introduce them to various piping materials and the impact of hot water on them (Heat radiation and thermal conductivity) To make the understand about the demand and calculate the capacities of storage tank To introduce different terminologies related to hot water supply and their applicability in multi-storey buildings.		Test

4 th week July. 1 st , 2 nd , 3 rd week August CO2	Electrical services, various wiring systems, calculations and distribution of loads, electric fittings and appliances, detailed layout of electrical services in a residence	To acquaint the students with basic electrical services at domestic level To provide knowledge about the basic wiring systems and their applicability in a residence. To make students able to design an electrical layout for given plan and do the load calculations. To introduce them to the solar energy and solar panels for generating electricity.	Lecture & Demonstrations	Sheets
Submission on 30th August				
4 th week August CO3	Storm water collection and disposal	To spread awareness about the importance of water and collection of storm water To inform them about different active and passive techniques of collection To accustom them with the space requirements and piping system and capacity of storage tanks used for collection To teach them about the methods of treating and reusing the rain water for various purposes	Lecture & Interaction	Audit
Submission 28th August				
1 st week Sept CO1	Refuse disposal	To make them aware about the collection and disposal systems at building level, their design and locational aspects and its applications.	Lecture & Interaction	Test
2 nd ,3 rd , 4 th Week Sep 2023 CO1	Sewage collection and disposal for large campuses, complexes, high rise buildings etc. Mechanical methods of removing sewage from special areas like basement (shone's ejector).	To acquaint them with sewage treatment process and introduce them the concept of smart city To teach them of latest STPs and their processes developed by different organisations To introduce them to smart neighbourhoods by teaching different disposal methods To educate them about mechanical collection and disposal of sewage from basement	Lecture & Demonstrations	Live project
Group Submission on 25th Sept				
Sessional exam on all topics (October 1st week)				

Evaluation scheme

CO1	CO2	CO3	CO4	Competition
Live project, Sheets	Sheets	Audit report	Sessional exam	
15	7	5	10	3

Architectural Graphics-V
Teachers-in-charge - Ar. Sanjivani Mohgaonkar Ar. Vaijayanti Yadav

Course Outcomes

- CO1- To learn the standard practices, building regulations, bye laws, procedures and ways of submitting and sanctioning plans
 To define the concept of ground coverage, built up area, FSI etc.
 To demonstrate the submission drawing and methods adopted to draft the plans, elevation and section
- CO2- To reproduce the plans , elevations and sections in the form of working drawings to carry actual work.
 To evaluate the plan as per the revised elevations and sections
- CO3- To associate the centre-line plans, foundation details and the schedule of reinforcement on a virgin site
- CO4- To illustrate the RCC details at plinth, lintel and slab levels
- CO5- To infer and demonstrate the staircase design and details pertaining to the residence plan
- CO6- To show the flooring pattern in detail plans including the specifications of the materials

S.NO	TOPIC/PARTICULARS	DATE	EVALUATION
1	Introduction to submission drawing and importance of the drawing, need, procedures, ways and means of sanctioning the plans. Implementation of building bye-laws, deciphering the structural drawings, the methods adopted to draft and submit the plans, etc.	1st week of July	
2	Drafting of "Submission drawing" based on a G+1 Residence plan of minimum 75 sqm. Introduction to format and composition of the drawing.		
SUBMISSION - Fourth week of July			
3	Introduction to working drawing, preparation of detail drawings with all other supporting details (door/window & cill hts) needed for execution of any project including Sections and Elevations Introduction to drafting of any details of any architectural features in elevations while execution	First week of August	pencil drafted
4	Introduction to centre line plan. Information on the methodology adopted for laying of a layout on a virgin site.	Second week of Aug	Inking of Working Drgs Pencil drafted centre line plan
5	Introduction of "foundation plan". The difference in details required if the plan is load bearing or frame structure. The details of all structural members involved in erecting the structure. Reading of foundation table for erecting reinforcement in structural members, schedule of reinforcement		Pencil drafted
6	Introduction to "plinth level plan". The difference of outer and inner plinth beams. Reading of plinth table, schedule of reinforcement	Third week of Aug	inking of Foundation plan
SUBMISSION - Fourth week of Aug			

7	Introduction to brickwork (4 1/2" & 9") thk Information on coping given at each level for structural stability. Incorporating schedule of doors/windows to reach lintel level.	1st week of Sept	Pencil and inking of lintel level plan
8	Introduction to lintel level plan with design of lintel beams above every opening. Reading of lintel table to erect lintel beam, schedule of reinforcement		
9	Introduction to slab, spanning of slab beams as per loading, schedule of reinforcement relating to the laying of slab		Pencil and inking of slab details
10	Introduction to r.c.c staircase, laying, marking and design of waist slab staircase and folded staircase. Providing of s.s railing in the staircase. Fixing of railing in the staircase.	4th week of Oct	Pencil drafting of staircase details
11	Introduction to flooring pattern to be shown in detail plan, specifying material to be used, layout and fixing by appropriate adhesives. Necessary precautions to be taken for providing finishes to flooring materials after fixing	First week of Oct	inking of staircase sheet and flooring details
FINAL SUBMISSION- second week of OCTOBER			

Evaluation scheme

CO1	CO2	CO3	CO4	CO5	CO6	Viva	
Submission Drawing	Working plans, elevations, Sections	Centre line plan, Footing and foundation details	Plinth Details, Lintel level details, slab details	Staircase details	Flooring layout	Final portfolio	Total
5	10	10	10	3	2	10	50

VERNACULAR ARCHITECTURE

Teachers-in-charge - Dr. Seema Burele, Ar. Sneha Mandekar

A lot of efforts and activities related to promotion of Sustainable Architecture are underway, and this can be reinforced with the knowledge of Vernacular Architecture. The objective is to instill sensitivity towards the less explored field that is concerned with Architectural building traditions/practices that are local, ecologically sensible and culturally relevant.

Course Outcomes

CO1: To analyze principles of indigenous architecture that has evolved over time in response to environment, culture, economy, basic human needs, symbolism, typical features, construction materials and techniques globally through book or internet case study.

CO2: To understand and analyze dwelling typology, symbolism, typical features, construction materials and techniques in Residential/ religious typology of Vidarbha.

CO3: To understand and analyze Tribal Architecture.

Date/Week	Learning objective for each topic/ Content	Teacher's interaction through lectures/ ppt/site visit etc.	Expected output
Week 1,2 & 3 July 2023	Unit 1 - Introduction to Vernacular Architecture: Definitions and theories, Categories, Contextual responsiveness with respect to Climatic, Geographical, Anthropological and Cultural influences.	Book Review <ul style="list-style-type: none"> • Rapoport, A. (1969). <i>House, Form & Culture</i>. • Oliver P -Built to Meet needs- Cultural issues in Vernacular Architecture • May J-Building without architect, A global guide to everyday architecture. 	Report
July Week 4 & Aug week 1	Unit 2 - Environment and Materials: Local building materials, Skill set, Built form & elements, Construction techniques & environmental performance	<ul style="list-style-type: none"> • Presentation on various aspects of the topic (Case studies) 	PPT Handouts
17/08/23 Submission on Assignment 1			
Week 2,3,4 &5 Aug	Unit 4 - Regional Variations in Built Form:	<ul style="list-style-type: none"> • Students working on assignment 2 - Documentation of Traditional wadas of Vidarbha 	Sheets A2

2023	<p>Traditional Architecture: Settlement Pattern, Dwelling Typology, Symbolism, Typical features, Construction materials and techniques in Leh Laddakh, Kutchha, Coastal Telangana, Western Ghats and North East region.</p> <p>Unit 5 - Living style, beliefs, festivals and Spaces: Space- Activity relationship; living style and beliefs reflected on space usage and design with respect to Central Indian rural agrarian society; Indian Festivals and built habitat</p>		
15/09/23 Submission - Assignment 2			
Week 1 & 2 September 2023	<p>Unit 3 - Regional Variations in Built Form: Tribal Architecture: Settlement Pattern, Dwelling Typology, Symbolism, Typical features, Construction materials and techniques.</p>	<ul style="list-style-type: none"> • Discussion on movies based on tribes. 	Movie Review
26th Sep 2023 Submission - Assignment 3			
30th Sep 2023 - Final Submission			

Evaluation Scheme

Attendance	CO1 (Assgn 1) (Unit 1 & 2)	CO2 (Assgn 2) (Unit 4 & 5)	CO3 (Assgn 3) (Unit 3)	Sessional Exam	Total
20	20	25	15	20	100

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CONTEMPORARY ARCHITECTURE

Teachers In-charge: Ar. Sarika Joshi, Ar. Tanvi Burghate

Course Outcomes

CO1 : To provide an understanding of Contemporary trends in Indian Architecture in terms of ideas, approach, methodology, concept, design etc

CO2 :- To provide an understanding of Contemporary trends in Western Architecture in terms of ideas, approach, methodology, concept, design etc

CO3 :- Inculcate understanding regarding Contemporary Architectural response to regional climate, culture, local materials, crafts and technology.

Week	Learning Objective for each topic/ content	Teachers' interaction	Expected output	Faculty
July 3 rd	Introduction about the subject, teaching plan & first assignment. Prepare a list of architects (Indian & Western), Group formation & selection of topic. {in a group of 2}	presentations, discussion	Group formation & allotment of topics based on assignment	SJ & TB
July 10 th	Introduction to various concepts & parameters to analyze the works of Architects	Presentation & Discussion	Group wise discussion on selected topic	SJ & TB
July 17 th	Work on the selected topics	Discussions	Presentation	SJ & TB
July 24 th & 31 st	Presentation by students on Architects and their ideologies and philosophies towards architecture.	Discussions	Presentations	SJ & TB
14 th & 21 st August	Presentations by students on 2 nd assignment	discussion	Assignment 2 PPT	SJ & TB

28 th August	Introduction to 3 rd assignment	presentation	Group formation & allotment of topics based on assignment	SJ & TB
4 th , 11 th , 18 th September	Presentations by students on 3 rd assignment	discussion	Assignment 2 PPT	SJ & TB

Evaluation Scheme

CO	Submission (CO1)	Submission (CO2)	Submission (CO3)	Attendance	Total
CO1	15	15	30	20	100

INSTITUTIONAL PROJECT 5
Teacher-in-charge: Ar. Vajayanti Yadav

The aim of the subject is to make students proficient in Revit software as per industry demand. To enhance their 3D visualization skills and presentation techniques.

CO1: To understand the basic functioning and capabilities of Revit software

CO2: To demonstrate floor plans of architectural design of housing project on Revit

CO3: To develop 3D visualization capabilities of architectural design of housing project on Revit.

S.No.		Learning Objective for each topic /Content	Submission	Format
1	1 st 2 nd week of July	Introduction and installation of Revit software	-	
2	3 rd , 4 th week July	Fundamentals of Revit software	-	
3	1 st 2 nd week of August	Fundamentals- Project Template, Template Path, Unit Level, Model, Line, Wall, Duplicate Wall, Modification Commands, Door, Window, Furniture, Filter, Floor, Column, Roof	3D form as per imagination	Softcopy in Revit as well as image format
Submission1 (CO1) - Preliminary 3D visualization form				
4	3 rd , 4 th week August	Curtain Wall, Curtain Grid, Mullion, Wall sweep, Wall revel, Opening, Model text, Group, Stairs, Railing, Ramp, Extrusion, Revolve, Sweep, Blend, Wall by face, Floor by face, Roof by face	Architectural Floor Plans of House	Softcopy in Revit as well as image format
5	1st, 2 nd week Sept	Toposurface, Subregion, Split surface, Merge surface, Property line, building pad, Site component, Parking components, Label contours, Dimension, Text, Room and area plan, Color scheme, Section, Call out, 3d crop view, Camera, Walkthrough, Schedule Sheets		
Submission 2: CO2 Floor plans of architectural design				
6	3 rd ,4 th week Sept	Modify sheets, Material addition, Material modification, Material creation, Revit family creation, Render settings, Cloud render, Project submission. Design Project to be converted into Revit Drawings	3D form of house as per architectural design project	Softcopy in Revit as well as image format
Submission 3: CO3-Developed 3D form of architectural design				

Evaluation Scheme

CO	Submission (CO1)	Submission (CO2)	Submission (CO3)	Attendance	Total
CO1	10	10	20	10	50

