BNCA
MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S
DR. BHANUBEN NANAVATI
COLLEGE OF ARCHITECTURE
FOR WOMEN
BNCA New Campus,
Siddhivinayak College Gate
Karve Nagar Pune, India 411052
+91 20 25474062, 25476966, Fax. 020 2547443
Email:mail@bnca.ac.in, www.bnca.ac.in

ARCHITECTURAL Design I

Subject Code 1201909 [SV]

Syllabus **3**
Course Outcomes **4**
Teaching Philosophy **5**
Schedule **7**
CO Attainment Targets **8**
List of Assignments **9**
Division D **10**

Pooja Ghorpade
Name and Sign of Faculty

Principal

Syllabus

Welcome to Architectural Design I. In this course, Architectural Design I Studio introduces students to the fundamental principles of architectural design through a hands-on, project-based approach. Emphasis is placed on the exploration of form, space, structure, and materiality within the context of real-world constraints and creative expression. Through design exercises, critiques, and individual projects, students will learn to communicate their ideas effectively and develop a personal design methodology.

We will meet twice a week, every **Tuesday from 11.15 AM to 2.45 PM and Friday from 9.45 AM to @.45 PM**. Students will develop skills in conceptualization, spatial analysis, drawing, and model making.

All course materials, resources, schedules, and attendance will be managed through the LMS course page, which will be your primary platform for accessing assignments, announcements, and updates. You will have a A2 size portfolio along with design models as a final submission for this subject.

Course pre-requisites

- Basic Drawing Skills: Proficiency in basic drawing techniques, including hand drawing and sketching, is essential. Students should be able to produce simple sketches and diagrams to communicate ideas. If not explicitly required, students
- Basic Mathematics: A fundamental understanding of geometry, proportions, and scale is crucial for architectural design.
- Critical Thinking and Analytical Skills: A willingness and ability to engage in critical thinking, problem-solving, and analysis of architectural concepts will be required. Students should be prepared to reflect on design ideas, incorporate feedback, and iterate on concepts.
-

Course Policies

- Attendance: Regular attendance is mandatory. Missing more than two studio sessions without valid reason will affect your grade.
- Late Work: Late submissions will incur a penalty unless prior arrangements are made.
- Studio Etiquette: Students are expected to work collaboratively and respect the studio space and materials.
- Critiques: Constructive feedback is essential. Students are required to participate actively in critiques, both giving and receiving feedback.

My name is **Pooja Ghorpade**, your course coordinator. You can contact me on my cell number in 9172266096 and pooja.ghorpade@bnca.ac.in. Along with me the following faculty will be a part of the studio team

Dr. Chetan Sahasrabudhe
Geeta Nagarkar
Supriya Dhamle

Course Description Subject Code

ARCHITECTURAL DESIGN I			
Subject Code 1201909 [SV]			
Teaching Scheme		Examination Scheme	
Total Contact Hours per week= (lectures=1, Studio=6, Total=7)		Sessional [CIA100+EA100] Viva [INT 25+ EXT 25]	200 50
		In-semester exam	NIL
		End Semester exam	NIL
		Total Marks	250
		Total Credits	10

Course Outcomes

Course Outcome		Bloom Level	Curricular Unit
CO1	**Illustrate and Document tribal house form through measured drawings and models**		Unit 1 : Study and analysis of small scale built spaces with respect to its context, comfort, function, anthropometrical data and layout
CO2	**Apply understanding of given house patterns from Christopher Alexander's Pattern Language and illustrate them using spatial and formal expressions from the settlement studied.**		
CO3	**Analyze the given building using the design principleXdesign approach matrix**		Unit 3 : Study and analysis of a rural settlement and architecture with respect to lifestyle, climate & social structure etc.
CO4	**Create a set of design instances for the assignment using the matrix.**		Unit 2a : Designing of single activity space like a seating area in public space, kiosks, play area, entrance gate etc.
CO5	**Evaluate the instances and choose an approach for design development**		
CO6	**Represent the design idea as a massing model and a detail model**		
CO7	**Analyse an activity and decide the area required.**		Unit 4 : Designing in the context of the studied settlement.
CO8	**Illustrate functional analysis using bubble diagram that clearly shows relationship between identities using appropriate modifiers**		Unit 2b : demonstrating the application of the design principles
CO9	**Develop figure ground compositions for the design assignment using the ArchiBlox**		
CO10	**Design a building incorporating atleast two of the identified patterns.**		
CO11	**Prepare a set of drawings to communicate the design idea.**		Unit 2c : Effective communication through two and three-dimensional hand drawings, sketches and models.

Teaching Philosophy

The primary aim of this first-year architectural design studio is to introduce students to the fundamental principles of architectural design by fostering a deep understanding of spatial relationships, functional analysis, and contextual awareness. The studio will focus on developing students' ability to analyze, interpret, and design small-scale spaces that address comfort, function, and human scale while considering the environmental and social context of the architecture. By exploring these core themes, students will learn how to design responsive and meaningful spaces that connect with both their users and their surroundings.

Core Teaching Goals:

1. **Developing Design Sensitivity**: Students will gain an understanding of how to create designs that are sensitive to both the needs of the users and the environmental and cultural context in which they are situated.
2. **Enhancing Spatial Thinking**: By studying the relationships between different types of spaces (such as public vs. private, communal vs. individual), students will refine their ability to think spatially and conceptually.
3. **Fostering Technical and Communicative Skills**: The studio will also emphasize the technical aspects of architectural design, such as functional analysis, the use of anthropometrical data, and how to communicate design ideas clearly through drawings and models.

Studio Structure:

1. **Illustrating and Documenting Tribal House Forms**

The first unit of the studio encourages students to delve into the analysis and representation of tribal house forms through measured drawings and physical models. This hands-on approach emphasizes precision and critical observation, as students will need to document these structures not only in terms of size and shape but also in relation to their cultural and environmental contexts

2. **Contextualizing Design through Rural Settlement Study**

In this segment, students will explore the architecture of rural settlements, focusing on understanding how buildings and spaces are shaped by lifestyle, climate, and social structure. This analysis will provide insights into how buildings respond to local conditions and cultural practices, informing the students' design process.

Focus Areas: Climate-responsive design, social structures, vernacular architecture, and spatial organization.

Key Outcome: Students will develop a comprehensive understanding of the way context influences architectural design and will be asked to reflect this in their own design projects.

3. **Designing a Single Activity Space**

In this unit, students will apply the knowledge gained from their studies of small-scale spaces and rural settlements to design a single activity space. This could be a seating area, a small pavilion, a kiosk, or any other compact, functional space meant to serve a specific purpose.

Focus Areas: Functionality, spatial relationships, human scale, comfort, and environmental considerations.

Key Outcome: Students will produce a series of functional diagrams (such as bubble diagrams) to show relationships between different elements of the design. This will be followed by the creation of a conceptual design, culminating in a set of technical drawings that communicate their ideas.

4. **Functional Analysis and Bubble Diagrams**

To help students organize their design thinking, the studio will emphasize the use of functional analysis through bubble diagrams. These diagrams will be used to map out the relationships between different spaces, showing how each area functions and how it connects to other spaces within the design.

Focus Areas: Identifying relationships between spaces, understanding user needs, and ensuring spatial efficiency.

Key Outcome: By using bubble diagrams, students will be able to express complex functional relationships clearly and concisely, a skill that will be fundamental in later design development.

5. **Preparing and Communicating Design Ideas through Drawings**

Finally, the studio will focus on preparing a set of drawings to communicate the design idea effectively. This will include plans, sections, elevations, and 3D visualizations, as well as the use of physical models.

Focus Areas: Technical drawing skills, scale, proportion, and presentation.

Key Outcome: A comprehensive set of technical drawings that illustrate the final design and its functional relationships, demonstrating the student's ability to express and communicate their design ideas.

Pedagogical Approach:

- **Exploration and Observation:** The studio will encourage students to engage deeply with their environment, promoting a sense of curiosity and critical observation. Fieldwork, case study analysis, and site visits will form an integral part of the learning process.
- **Iterative Design Process**: Emphasis will be placed on the iterative nature of design. Students will be encouraged to sketch, model, and prototype their ideas early in the process and refine them through critique and feedback. This will develop their ability to solve design problems progressively and thoughtfully.
- **Collaboration and Peer Learning**: Although architectural design is often seen as an individual pursuit, the studio will foster a collaborative environment where students can share insights, critique each other's work, and learn from different perspectives. Peer reviews will be an essential part of the design process.
- **Contextual Sensitivity and Human-Centric Design**: Students will be taught to design with an awareness of the larger context in which a building or space exists. The aim is not only to create functional spaces but to ensure that the spaces respond to the needs of the users and the environment in a thoughtful and responsible manner.

With warm regards

Pooja Ghorpade

Schedule

Session	Course Outcome		Bloom Level	Curricular Unit	Assignment	
Week 1	**CO1**	**Illustrate and Document tribal house form through measured drawings and models**		Unit 1 : Study and analysis of small scale built spaces with respect to its context, comfort, function, anthropometrical data and layout	**Settlement Study**	Self Evaluation
Week 2& 3	**CO2**	**Apply understanding of given house patterns from Christopher Alexander's Pattern Language and illustrate them using spatial and formal expressions from the settlement studied.**				Panels and models (GroupWise)
Week 4	**CO3**	**Analyze the given building using the design principleXdesign approach matrix**		Unit 3 : Study and analysis of a rural settlement and architecture with respect to lifestyle, climate & social structure etc.	**Short Design Problem- Broken but Beautiful**	Case Study
Week 5	**CO4**	**Create a set of design instances for the assignment using the matrix.**		Unit 2a : Designing of single activity space like a seating area in public space, kiosks, play area, entrance gate etc.		Idea Matrix
Week 6	**CO5**	**Evaluate the instances and choose an approach for design development**				Sheet
Week 7	**CO6**	**Represent the design idea as a massing model and a detail model**				Model
Week 8	**CO7**	**Analyse an activity and decide the area required.**		Unit 4 : Designing in the context of the studied settlement.	**Long Design Problem- School Design**	Program & Bubble diagram
Week 9	**CO8**	**Illustrate functional analysis using bubble diagram that clearly shows relationship between identities using appropriate modifiers**		Unit 2b : demonstrating the application of the design principles		Circulation and Planform
Week 10	**CO9**	**Develop figure ground compositions for the design assignment using the ArchiBlox**				Structure + Material
Week 11	**CO10**	**Design a building incorporating atleast two of the identified patterns.**				Tartian Grid + Model
Week 12 & 13	**CO11**	**Prepare a set of drawings to communicate the design idea.**		Unit 2c : Effective communication through two and three-dimensional hand drawings, sketches and models.		Drawings
Week 14	Final Submission					

CO Attainment Targets

Bloom Taxonomy Level	Course Outcome		Target class average %
	CO1	**Illustrate and Document tribal house form through measured drawings and models**	70%
	CO2	**Apply understanding of given house patterns from Christopher Alexander's Pattern Language and illustrate them using spatial and formal expressions from the settlement studied.**	60%
	CO3	**Analyze the given building using the design principleXdesign approach matrix**	55%
	CO4	**Create a set of design instances for the assignment using the matrix.**	
	CO5	**Evaluate the instances and choose an approach for design development**	60%
	CO6	**Represent the design idea as a massing model and a detail model**	60%
	CO7	**Analyse an activity and decide the area required.**	70%
	CO8	**Illustrate functional analysis using bubble diagram that clearly shows relationship between identities using appropriate modifiers**	
	CO9	**Develop figure ground compositions for the design assignment using the ArchiBlox**	55%
	CO10	**Design a building incorporating atleast two of the identified patterns.**	50%
	CO11	**Prepare a set of drawings to communicate the design idea.**	60%

List of Assignments

Course Outcome		Bloom Level	Curricular Unit	Assignment	
CO1	**Illustrate and Document tribal house form through measured drawings and models**		Unit 1 : Study and analysis of small scale built spaces with respect to its context, comfort, function, anthropometrical data and layout	**Settlement Study**	Self Evaluation
CO2	**Apply understanding of given house patterns from Christopher Alexander's Pattern Language and illustrate them using spatial and formal expressions from the settlement studied.**				Panels and models (GroupWise)
CO3	**Analyze the given building using the design principleXdesign approach matrix**		Unit 3 : Study and analysis of a rural settlement and architecture with respect to lifestyle, climate & social structure etc.	**Short Design Problem- Broken but Beautiful**	Case Study
CO4	**Create a set of design instances for the assignment using the matrix.**		Unit 2a : Designing of single activity space like a seating area in public space, kiosks, play area, entrance gate etc.		Idea Matrix
CO5	**Evaluate the instances and choose an approach for design development**				Sheet
CO6	**Represent the design idea as a massing model and a detail model**				Model
CO7	**Analyse an activity and decide the area required.**		Unit 4 : Designing in the context of the studied settlement.	**Long Design Problem- School Design**	Program & Bubble diagram
CO8	**Illustrate functional analysis using bubble diagram that clearly shows relationship between identities using appropriate modifiers**		Unit 2b : demonstrating the application of the design principles		
CO9	**Develop figure ground compositions for the design assignment using the ArchiBlox**				Circulation and Planform
CO10	**Design a building incorporating atleast two of the identified patterns.**				Structure + Material
CO11	**Prepare a set of drawings to communicate the design idea.**		Unit 2c : Effective communication through two and three-dimensional hand drawings, sketches and models.		Tartian Grid + Model

Division D

Attendance record

Dr. Bhanuben Nanavati College of Architecture for Women, Pune						AD I									D Division	
			09-01-2024	13-02-2024		23-02-2024	27-02-2024	01-03-2024	05-03-2024	08-03-2024	19-03-2024	26-03-2024	02-04-2024			
Sr.	Roll No	StudentName	1	1		1	1	1	1	1	1	1	1	10		
1	A23004	SHRAVANI MADHAV PADALKAR	P	P		A	P	P	P	P	P	P	A	7	58	
2	A23008	SHRAVANI NAVNEET PATIL	P	P		P	A	A	A	A	P	A	A	3	25	
3	A23016	HEMALEE NAVNATH NAGE	P	P		P	P	P	P	P	P	P	P	9	75	
4	A23024	SAMRUDDHI SANTOSH NALAWADE	P	A		P	A	P	P	P	P	A	P	6	50	
5	A23028	RIYA SUJIT TAMBADE	P	P		P	P	P	P	P	P	A	P	8	67	
6	A23032	NIKITA NITIN TARALKAR	P	P		A	P	P	P	P	P	P	P	8	67	
7	A23036	KHUSHI DHANANJAY PATIL	P	P		P	P	P	P	P	A	P	A	7	58	
8	A23040	DIKSHA ATULKUMAR TADE	P	P		P	P	P	P	A	P	P	A	7	58	
9	A23044	SHARVARI NILESH KONDE	P	P		P	P	P	P	P	P	P	P	9	75	
10	A23048	SHREYA GANESH DHAWALE	A	P		P	P	P	P	P	P	P	A	8	67	
11	A23052	ADITI BANTIKUMAR MOHANANI	P	P		P	P	P	P	P	P	P	P	9	75	
12	A23056	PRANJAL SANDIP KADAM	P	P		P	P	P	P	P	P	P	P	9	75	
13	A23060	DIYA BHARAT POPTANI	P	P		P	A	P	P	P	P	P	P	8	67	
14	A23064	DAKSHAYANI SHASHISHEKHAR PATRAWALE	P	P		A	A	P	P	P	P	A	P	6	50	
15	A23072	DIYA MILIND JAMDAR	A	P		P	P	P	A	P	P	P	P	8	67	
16	A23077	VIDHI PRAMOD PATIL	P	A		P	P	P	A	P	P	A	P	6	50	
17	A23082	AASTHA RITESH PALIWAL	P	P		P	P	P	P	P	P	P	P	9	75	
18	A23086	DEVKI ANAND MANDHANE	P	P		P	P	P	P	P	P	P	P	9	75	
19	A23090	PRATIKSHA KRUSHNA GAJBHIYE	P	A		P	P	A	P	A	A	P	A	4	33	
20	A23094	APURVA HANUMANT JADHAV	A	A		P	P	P	P	P	A	A	A	5	42	
21	A23098	ASMITA DNYANESHWAR DONGARE	A	A		P	P	A		P	A	A	A	3	25	
22	A23106	DNYANESHWARI HANUMANT GAWADE	P	A		P	P	P	A	A	P	P	P	6	50	
23	A23110	SIDDHI HANMANT DONGARGAONKAR	P	P		P	A	P	P	P	P	P	P	8	67	
24	A23114	JHANVI DEEPAK PATIL	P	A		A	A	P	P	P	P	A	P	5	42	
25	A23076	TANISHKA SANJAY HATANKAR	P	P		P	P	P	P	P	P	P	A	8	67	
26	**A23124**	SHREYA SANJAY HINGMIRE	P	A		P	P	P	P	P	P	P	A	7	58	
27	**A23132**	SAMIKSHA SANTOSH SONVANE	A	A		P	P	A	A	A	P	P	A	4	33	
28	**A23134**	SHRISTI RAJIV SHETTY	P	P		P	P	P	P	P	P	P	P	9	75	
29	**A23130**	NIDHI VIJAY BHANDARI	P	P		P	P	P	A	P	P	P	A	7	58	
30	**A23137**	SHREYA SUNIL HATTE	P	P		P	A	A	P	A	A	A	A	3	25	
31	**A23138**	YASHASHRI AJAY THOKE	A	A		A	A	A	A	A	A	A	A	0	0	
32	**A23139**	RIYA APPASAHEB ADSUL	P	P		P	P	P	A	P	P	P	A	7	58	
33		TANVI RATAN BHONGE	P	P		P	P	P	A	P	P	P	A	7	58	
34	A23059	SHARVARI NILESH DESHPANDE	P	A		P	P	P	P	P	P	P	P	8	67	

Settlement study week

Final Internal Mark list of Division D

Architectural Design 2023-24

Sr.	Roll No	Syllabus	Settlement Study		Short Design Problem- Broken but Beautiful				Long Design Problem- School Design					Total marks
		Bloom's level												
		Outcome	CO1 Illustrate and Document tribal house form through measured drawings and models	CO2 Apply understanding of given house patterns from Christopher Alexander's Pattern Language and illustrate them	CO3 Analyze the given building using the design principleX design approach matrix	CO4 Create a set of design instances for the assignment using the matrix.	CO5 Evaluate the instances and choose an approach for design development	CO6 Represent the design idea as a massing model and a detail model	CO7 Analyse an activity and decide the area required.	CO8 Illustrate functional analysis using bubble diagram that clearly shows relationship	CO9 Develop figure ground compositions for the design assignment using the ArchiBlox	CO10 Design a building incorporating atleast two of the identified	CO11 Prepare a set of drawings to communicate the design idea.	
		Bloom's level												
			Settlement Study		Short Design Problem- Broken but Beautiful				Long Design Problem- School Design					
		Assignment	Panels and models (Measured drawing)	Analysis Sheets (GroupWise)	Idea Matrix		Sheet	Model	Program & Bubble diagram		Circulation and Planform	Tartian Grid + Model	Plan, Elevation, Section , Views	
		Max marks	30	10	10		10	5	10		10	10	30	125
Sr.	Roll No	StudentName												
1	A23004	SHRAVANI MADHAV PADALKAR	21	7	6		7	2.5	6		6	5	18	78.5
2	A23008	SHRAVANI NAVNEET PATIL	15	5	5		3	0	3		2	0	12	45
3	A23016	HEMALEE NAVNATH NAGE	21	7	6.5		5	0	5		5	5	16.5	71
4	A23024	SAMRUDDHI SANTOSH NALAWADE	18	6	6		5.5	0	5.5		6	0	18	65
5	A23028	RIYA SUJIT TAMBADE	21	7	6		7	3.5	7		6	8	21	86.5
6	A23032	NIKITA NITIN TARALKAR	21	7	7.5		7.5	4	6		6	6	21	86
7	A23036	KHUSHI DHANANJAY PATIL	21	7	5.5		6	0	6		6	6	18	75.5
8	A23040	DIKSHA ATULKUMAR TADE	18	6	3		2	2.5	5		5	4	16.5	62
9	A23044	SHARVARI NILESH KONDE	21	7	6		6	0	6		6	5	18	75
10	A23048	SHREYA GANESH DHAWALE	18	6	5		5	0	5		0	0	18	57
11	A23052	ADITI BANTIKUMAR MOHANANI	21	7	5.5		5	3	5		5	5	16.5	73
12	A23056	PRANJAL SANDIP KADAM	18	6	0		0	0	0		0	0	0	24
13	A23060	DIYA BHARAT POPTANI	21	7	5.5		4	0	5		5	4	13.5	65
14	A23064	DAKSHAYANI SHASHISHEKHAR PATRAWALE	21	7	5.5		6.5	0	6		6	5	15	72
15	A23072	DIYA MILIND JAMDAR	21	7	6.5		6	0	5		5	6	18	74.5
16	A23077	VIDHI PRAMOD PATIL	18	6	5.5		4.5	0	5		5	0	0	44
17	A23082	AASTHA RITESH PALIWAL	21	7	7		6	3	6.5		7	5	19.5	82
18	A23086	DEVKI ANAND MANDHANE	21	7	8		7	7	7		7	7	22.5	93.5
19	A23090	PRATIKSHA KRUSHNA GAJBHIYE	15	5	0		0	0	0		0	0	0	20
20	A23094	APURVA HANUMANT JADHAV	15	5	3		0	0	4		2	2	9	40
21	A23098	ASMITA DNYANESHWAR DONGARE	18	6	0		0	0	0		0	0	0	24
22	A23106	DNYANESHWARI HANUMANT GAWADE	18	6	0		0	0	0		0	0	0	24
23	A23110	SIDDHI HANMANT DONGARGAONKAR	21	7	6.5		6.5	0	6		6	5.5	18	76.5
24	A23114	JHANVI DEEPAK PATIL	21	7	5		4	0	5		5	0	13.5	60.5
25	A23076	TANISHKA SANJAY HATANKAR	21	7	2.5		6	5	6		6	6	19.5	79
26	A23124	SHREYA SANJAY HINGMIRE	21	7	5		5	0	5		5	4	15	67
27	A23132	SAMIKSHA SANTOSH SONVANE	18	6	3		3	0	3		0	3	10.5	46.5
28	A23134	SHRISTI RAJIV SHETTY	21	7	4		5.5	5	4		4.5	4	15	70
29	A23130	NIDHI VIJAY BHANDARI	21	7	5		3	0	4		3	4	15	62
30	A23137	SHREYA SUNIL HATTE	15	5	0		0	0	5		5	0	13.5	43.5
31	A23138	YASHASHRI AJAY THOKE	0	0			0	0	0		0	0	0	0
32	A23139	RIYA APPASAHEB ADSUL	18	6	6		6	0	5		3	0	10.5	54.5
33		TANVI RATAN BHONGE	18	6	0		0	0	4		0	0	10.5	38.5
34	A23059	SHARVARI NILESH DESHPANDE	21	7	4		4	0	4.5		4	3	13.5	61
		Purva Ranade	15	5	5.5		5.5	0	5.5		0	4	19.5	60
		Class average	19	6	4		4	1	4		4	3	13	
		Class Average Percentage	62.3	62.3	44.0		40.4	20.3	44.3		37.6	30.4	44.3	

CO Attainment and Gap for Division D

AD CO Attainment and Gap							
Division D							
	Course Outcome		**CIE (Continuous Internal Evaluation)**	**Target class average %**	**Attainment Gap Percentage**	**Action Proposed to bridge the gap**	**Modification of target where achieved**
	CO1	**Illustrate and Document tribal house form through measured drawings and models**	62	70%	8%	No action felt necessary	
	CO2	**Apply understanding of given house patterns from Christopher Alexander's Pattern Language and illustrate them using spatial and formal expressions from the settlement studied.**	62	60%	-2%		70
	CO3	**Analyze the given building using the design principleXdesign approach matrix**	44	55%	11%	No action felt necessary	
	CO4	**Create a set of design instances for the assignment using the matrix.**					
	CO5	**Evaluate the instances and choose an approach for design development**	40	60%	20	Students may do better after showing examples of similar task completed by other students	
	CO6	**Represent the design idea as a massing model and a detail model**	20	60%	40	Alter the pedagogy for teaching anthropometry	
	CO7	**Analyse an activity and decide the area required.**	44	70%	26	More time required for students to Understand and finish the work	
	CO8	**Illustrate functional analysis using bubble diagram that clearly shows relationship between identities using appropriate modifiers**					
	CO9	**Develop figure ground compositions for the design assignment using the ArchiBlox**	38	55%	17	No action felt necessary	
	CO10	**Design a building incorporating atleast two of the identified patterns.**	30	50%	20	Alter the pedagogy for teaching anthropometry	
	CO11	**Prepare a set of drawings to communicate the design idea.**	44	60%	16	No action felt necessary	

BNCA
MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S
DR. BHANUBEN NANAVATI
COLLEGE OF ARCHITECTURE
FOR WOMEN
BNCA New Campus,
Siddhivinayak College Gate
Karve Nagar Pune, India 411052
+91 20 25474062, 25476966, Fax. 020 2547443
Email:mail@bnca.ac.in, www.bnca.ac.in

ARCHITECTURAL GRAPHICS AND DRAWING II

Subject 1201913 [SS]

Syllabus **3**
Course Outcomes: **4**
Teaching Philosophy **4**
Schedule **6**
CO Attainment Targets **7**
List of Assignments **8**
Division D **9**

Pooja Ghorpade
Name and Sign of Faculty

Principal

Syllabus

Welcome to Architectural Graphics and Drawing (AGD II). In this course, we will focus on developing the essential visual communication skills that form the foundation of the architectural profession. We understand that you may have already learned various drawing and communication skills in your previous studies, but this course is specifically designed to help you acquire the technical proficiency needed for architectural practice.

We will meet once a week, every **Wednesday from 9:45 AM to 2:45 PM**. During this time, we will explore drafting as a drawing technique used in the architectural field. Expect a balance of theory, practical exercises, and hands-on application that will help you express your design ideas clearly and professionally.

All course materials, resources, schedules, and attendance will be managed through the LMS course page, which will be your primary platform for accessing assignments, announcements, and updates. You will have a A1 size portfolio as a final submission for this subject.

Course pre-requisites

- Basic skills in using pencil and other drafting instruments.
- Drawing Tools: Set square, T-square, compass, ruler, mechanical pencils, erasers, and a scale ruler.

My name is Pooja Ghorpade, your course coordinator. You can contact me on my cell number in 9172266096 and pooja.ghorpade@bnca.ac.in. Along with me Ar. Chaitanya Padhye will be teaching this subject.

Required Reading / Reference Material

Sem II- Architectural Graphics and Drawing II

For Skill Building

1. Ching Francis D.K.: Architectural Graphics
2. Kelsey W. E.: Geometrical & Building Drawing

For viewing – Drawings and sketches of expert faculty, demonstrations of drafting by faculty in class.

Course Description Subject Code

ARCHITECTURAL GRAPHICS AND DRAWING II			
Subject Code 1201913 [SS]			
Teaching Scheme		Examination Scheme	
Total Contact Hours per week= (lectures=1, Studio=4, Total=5)		Sessional [CIA50+EA50] Viva	100 NIL
		In-semester exam	NIL
		End Semester exam	NIL
		Total Marks	100
		Total Credits	03

Course Outcomes:

Course Outcomes mapped with Curricular Units

AGD II			
COS	**Course Outcome**	**Bloom Level**	**Curricular Unit**
CO1	Construct an orthrographic representation of a given interpenetrating built form		Unit 1 Solid Geometry: Understanding and drawing of composite and complex three dimensional objects including building components formed by addition and/or interpenetration of various objects. .
CO2	Develop the surface of given solids		Surface Development of various three dimensional objects.
CO3	Draw a perfect projection of true shape of a sectional plane		Orthographic projections of true shapes of sectional planes.
CO4	Build a One point perspective		Unit 2 Perspective Drawing: (3 Assignments)
CO5	Build a Two point perspective		Drawing one-point and two-point perspective of objects and buildings/ building components usingvarious methods including grid method.
CO6	Build a perspective using Perspective Grid		
CO7	Build a Birds eye view. Build a Worms eye view		Introduction to concept of bird's eye view, worm's eye view etc
CO8	Build sciography of given solid objects in plans and elevation		Unit 3 Sciography: Principles of Sciography (shades and shadows) for 3-Dimensional objects and buildings on plans, elevation, isometric and perspective. (3 Assignments)
CO9	Build sciography of given solid objects in isometric and perspective view		

Teaching Philosophy

In teaching Architectural Graphics and Drawing with a focus on hand drafting, my philosophy centers on the belief that traditional drawing techniques provide essential foundational skills for understanding and communicating architectural ideas. My goal is to create a classroom environment where students

can refine their technical skills while gaining confidence in their ability to express complex architectural concepts through their drawings.

Through guided exercises and iterative practice, I encourage students to approach each drawing as both a technical and creative challenge. Peer critiques and collaborative learning are also integral, helping students learn to communicate their ideas clearly and refine their work based on feedback.

In sum, my teaching philosophy emphasizes active learning, critical and visual thinking, technical skill-building, and reflective practice. Through this course, students will not only learn to draw, but they will develop the confidence to use drawing as a tool for innovative problem-solving and professional communication. Looking forward to a mutually enriching semester!

With warm regards

Pooja Ghorpade

Schedule

Architectural Graphics and Drawing II										
Academic Year 2023-24										
Sno	**Dates**	**Session**	**COS**	**Course Outcome**	**Bloom Level**	**Curricular Unit**	**Assignment**	**Session**	**Session outline**	**Submission**
1	10-01-2024	Week 1	CO1	Construct an orthrographic representation of a given interpenetrating built form		Unit 1 Solid Geometry: Understanding and drawing of composite and complex three dimensional objects including building components formed by	A1	2	Lecture-introduction to orthographic projection principles and interpenetrating forms. Demonstrate how to interpret and simplify complex 3D forms into 2D views. + Studio work	Orthographic Projections- Complex Interpenetrating Geometry,
2	17-01-2024	Week 2							Studio work- Guided practice problem solving	
3	24-01-2024	Week 3	CO2	Develop the surface of given solids		Surface Development of various three dimensional objects.	A2	1	Lecture- Introduce the concept of surface development and its importance in representing 3D solids in 2D. Explain methods for unfolding various solids (cylinder, cone, prism) into flat patterns. + Studio work	Development of Surfaces (Basic)
4	31-01-2024	Week 4					A3	2	Studio work- Guided practice problem solving	Development of Surfaces (Complex)
5	07-02-2024	Week 5							Studio work- Guided practice problem solving	
6	14-02-2024	Week 6	CO3	Draw a perfect projection of true shape of a sectional plane		Orthographic projections of true shapes of sectional planes.	A4	1	Lecture- Explain how to visualize true shapes of sections by aligning sectional planes perpendicular to viewing angles+ Studio work	True shape
7	21-02-2024	Week 7	Midterm Marking							
8	28-02-2024	Week 8	CO4	Build a One point perspective		Unit 2 Perspective Drawing: (3 Assignments)	A5	4	Lecture- introduction to perspective drawing, covering concepts like vanishing points, horizon lines, and eye level. Explain 1-point, 2-point, and 3-point perspectives with visual examples + Studio work	One Point Perspective Sheet
9	06-03-2024	Week 9	CO5	Build a Two point perspective		Drawing one-point and two-point perspective of objects and buildings/ building components			Studio work- Guided practice problem solving	(Basic)
10	13-03-2024	Week 10	CO6	Build a perspective using Perspective Grid					Studio work- Guided practice problem solving	(Complex)
11	20-03-2024	Week 11	CO7	Build a Birds eye view. Build a Worms eye view		Introduction to concept of bird's eye view, worm's eye view etc	A6		Studio work- Guided practice problem solving	Two Point Perspective
12	27-03-2024	Week 12	CO8	Build sciography of given solid objects in plans and elevation		Unit 3 Sciography: Principles of Sciography (shades and shadows) for 3-Dimensional objects and buildings on plans, elevation, isometric and perspective. (3 Assignments)	A7	3	Lecture- Introduce sciography, emphasizing its role in architectural drawing to represent shadows and depth. Explain light source, shadow casting, and key principles in sciographic representation. Demonstrate shadow construction techniques on basic forms (cubes, cylinders) under natural light. + Studio work	Basic Object
13	03-04-2024	Week 13	CO9	Build sciography of given solid objects in isometric and perspective view					Studio work- Guide students through exercises creating sciographic views of complex shapes.	Complex
14	10-04-2024	Week 14							Studio work- Guided practice problem solving	Perspective
15	17-04-2024	Week 15	Final Portfolio Submission							

CO Attainment Targets

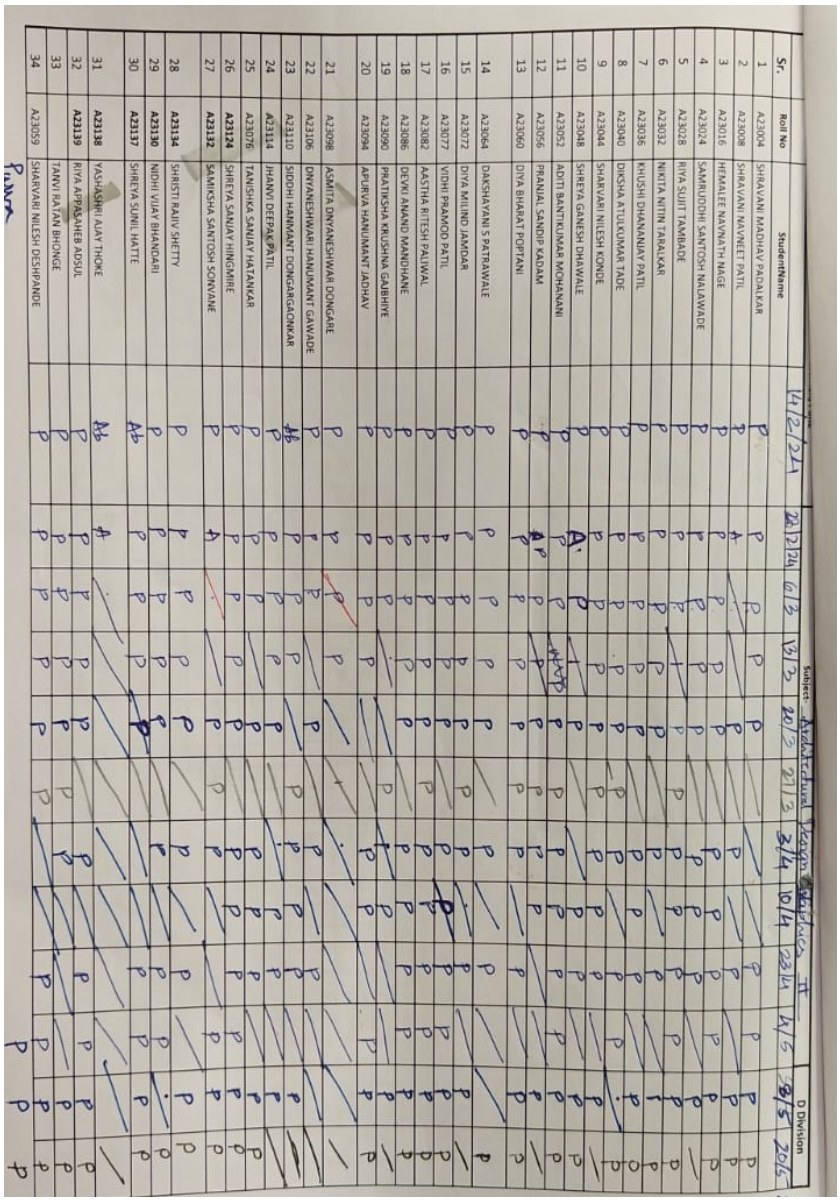
Blooms level	AGD II - CO Attainment Targets		
	Course Outcome		Target class average
3	CO1	Construct an orthrographic representation of a given interpenetrating built form	
3	CO2	Develop the surface of given solids	70%
3	CO3	Draw a perfect projection of true shape of a sectional plane	60%
3	CO4	Build a One point perspective	60%
3	CO5	Build a Two point perspective	55%
3	CO6	Build a perspective using Perspective Grid	55%
3	CO7	Build a Birds eye view. Build a Worms eye view	50%
3	CO8	Build sciography of given solid objects in plans and elevation	60%
3	CO9	Build sciography of given solid objects in isometric and perspective view	55%

List of Assignments

Course Outcomes associated	Assignment No.	Assignment Description
CO1	A1	Orthographic Projections- Complex Interpenetrating Geometry,
CO2	A2	Development of Surfaces (Basic)
	A3	Development of Surfaces (Complex)
CO3	A4	True shape
CO4	A5	One Point Perspective Sheet
CO5		(Basic)
CO6		(Complex)
CO7	A6	Two Point Perspective
CO8	A7	Basic Object
CO9		Complex
		Perspective

Division D

Attendance record



Sr.	Roll No	StudentName	14/12/24	20/12/24	6/1/25	13/1/25	20/1/25	27/1/25	3/2/25	10/2/25	23/2/25	17/3/25	24/3/25	31/3/25	D Division
1	A23004	SHRAVANI MADHAV PAGALKAR	P	P	P	P	P					P	P	P	P
2	A23008	SHRAVANI NAVNEET PATIL	P	A											P
3	A23016	HEMALEE NAVNATH NAGE	P	P	P	P	P		P	P	P	P	P	P	P
4	A23024	SAMRUDDHI SANTOSH NALAWADE	P	P	P	P	P		P	P	P	P	P	P	P
5	A23028	RIYA SUJIT TAMBADE	P	P	P	P	P		P	P	P	P	P	P	P
6	A23032	NIKITA NITIN TARALKAR	P	P	P	P	P		P	P	P	P	P	P	P
7	A23036	KHUSHI DHANANJAY PATIL	P	P	P	P	P		P	P	P	P	P	P	P
8	A23040	DIKSHA ATULKUMAR TADE	P	P	P	P	P		P	P	P	P	P	P	P
9	A23044	SHARVARI NILESH KONDE	P	P	P	P	P		P	P	P	P	P	P	P
10	A23048	SHREYA GANESH DHAWALE	P	A	P	P	P		P	P	P	P	P	P	P
11	A23052	ADITI BANTKUMAR MOHANANI	P	P	P	P	P		P	P	P	P	P	P	P
12	A23056	PRANJAL SANDIP KADAM	P	P	P	P	P		P	P	P	P	P	P	P
13	A23060	DIYA BHARAT POPTANI	P	P	P	P	P		P	P	P	P	P	P	P
14	A23064	DAKSHAYANI S PATRAWALE	P	P	P	P	P		P	P	P	P	P	P	P
15	A23072	DIYA MILIND JAMDAR	P	P	P	P	P		P	P	P	P	P	P	P
16	A23077	VIDHI PRAMOD PATIL	P	P	P	P	P		P	P	P	P	P	P	P
17	A23082	AASTHA RITESH PALIWAL	P	P	P	P	P		P	P	P	P	P	P	P
18	A23086	DEVKI ANAND MANDHANE	P	P	P	P	P		P	P	P	P	P	P	P
19	A23090	PRATIKSHA KRUSHNA GAIKHIYE	P	P	P	P	P		P	P	P	P	P	P	P
20	A23094	APURVA HANUMANT JADHAV	P	P	P	P	P		P	P	P	P	P	P	P
21	A23098	ASMITA DNYANESHWAR DONGARE	P	P	P	P	P		P	P	P	P	P	P	P
22	A23106	DNYANESHWARI HANUMANT GAWADE	P	P	P	P	P		P	P	P	P	P	P	P
23	A23110	SIDDHI HANMANT DONGARGAONKAR	Ab	P	P	P	P		P	P	P	P	P	P	P
24	A23114	JHANVI DEEPAK PATIL	P	P	P	P	P		P	P	P	P	P	P	P
25	A23076	TANISHKA SANJAY HATANKAR	P	P	P	P	P		P	P	P	P	P	P	P
26	A23124	SHREYA SANJAY HINGMIRE	P	P	P	P	P		P	P	P	P	P	P	P
27	A23132	SAMIKSHA SANTOSH SONVANE	P	A					P	P	P	P	P	P	P
28	A23134	SHRISTI RAJIV SHETTY	P	P	P	P	P		P	P	P	P	P	P	P
29	A23130	NIDHI VIJAY BHANDARI	P	P	P	P	P		P	P	P	P	P	P	P
30	A23137	SHREYA SUNIL HATTE	Ab	P	P	P	P		P	P	P	P	P	P	P
31	A23138	YASHASHRI AJAY THOKE	Ab	A											P
32	A23139	RIYA AFRAS SHEB ADSUL	P	P	P	P	P		P	P	P	P	P	P	P
33		TANVI RATAN BHONGE	P	P	P	P	P		P	P	P	P	P	P	P
34	A23059	SHARVARI NILESH DESHPANDE	P	P	P	P	P		P	P	P	P	P	P	P

Final Internal Mark list of Division D

AGD II													
Syllabus	**Unit 1 Solid Geometry: Understanding and drawing of composite and complex three dimensional**	**Surface Development of various three dimensional objects.**		**Orthographic projections of true shapes of sectional planes.**	**Unit 2 Perspective Drawing: (3 Assignments)**	**Drawing one-point and two-point perspective of objects and buildings/ building components usingvarious methods including grid method.**		**Introduction to concept of bird's eye view, worm's eye view etc**	**Unit 3 Sciography: Principles of Sciography (shades and shadows) for 3-Dimensional objects and buildings on plans, elevation, isometric and perspective. (3 Assignments)**			**Attendance**	
Bloom's level													
Outcome	**CO1**	**CO2**		**CO3**	**CO4**	**CO6,CO7**		**CO5**	**CO8**		**CO9**		
		A1	**A2**	**A3**	**A4**			**A5**	**A6**		**A7**		
Assignment		Development of Surfaces (Basic)	Development of Surfaces (Complex)	True shape	One Point Perspective Sheet	(Basic)	(Complex)	Two Point Perspective	Basic Object	Complex	Perspective		
Max Marks		**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**		**100**
SHRAVANI MADHAV PADALKAR		9	7.5	8	8.5	8	8	9	8.5	8	7.5	71	**82**
SHRAVANI NAVNEET PATIL		6.5	6	5	6	5	6	2.5	2.5	0	0	43	**39.5**
HEMALEE NAVNATH NAGE		7.5	6.5	7.5	6.5	7	5.5	7	7	5	7.5	86	**67**
SAMRUDDHI SANTOSH NALAWADE		5.5	4	0	0	6	5.5	5	6	4	2	86	**38**
RIYA SUJIT TAMBADE		8.5	7.5	8	8.5	7.5	7.5	6.5	7	8.5	6.5	86	**76**
NIKITA NITIN TARALKAR		7.5	7.5	8	8.5	8.5	7	8	7.5	8	4	86	**74.5**
KHUSHI DHANANJAY PATIL		5	4	6.5	5.5	4	4	4.5	6.5	6	5.5	86	**51.5**
DIKSHA ATULKUMAR TADE		5	4.5	6.5	6.5	5	4	0	5.5	4	4	100	**45**
SHARVARI NILESH KONDE		6.5	6	7	6	1	4	1	5.5	2	3	100	**42**
SHREYA GANESH DHAWALE		5	0	0	5	2	3	5	4	0	0	43	**24**
ADITI BANTIKUMAR MOHANANI		6.5	5.5	6	6	4	4	4.5	4.5	3	3.5	100	**47.5**
PRANJAL SANDIP KADAM		2	5	3	3	0	0	0	4	0	0	86	**17**
DIYA BHARAT POPTANI		7	5.5	5	6	3.5	3	4	4	3	2	100	**43**
DAKSHAYANI SHASHISHEKHAR PATRAWALE		7	7.5	6.5	6.5	7	6.5	6.5	5.5	7	7	86	**67**
DIYA MILIND JAMDAR		7.5	7	7.5	7.5	8.5	7	3	5.5	4.5	4.5	100	**62.5**
VIDHI PRAMOD PATIL		5.5	5	2	5	2.5	2	3.5	3	3	1	86	**32.5**
AASTHA RITESH PALIWAL		5	5	6.5	6	6	5	5.5	6	4	5	100	**54**
DEVKI ANAND MANDHANE		8.5	8	7.5	8.5	7.5	7.5	7.5	7	7	7	86	**76**
PRATIKSHA KRUSHNA GAJBHIYE		4	5	4.5	5	0	0	2.5	3	0	0	71	**24**
APURVA HANUMANT JADHAV		3.5	1	0	4	0	0	2	4	0	0	71	**14.5**
ASMITA DNYANESHWAR DONGARE		0	0	0	0	0	0	0	0	0	0	43	**0**
DNYANESHWARI HANUMANT GAWADE		3.5	0	0	0	0	0	0	0	0	0	71	**3.5**
SIDDHI HANMANT DONGARGAONKAR		7	7.5	7	6	6.5	6	6.5	7	6	6	71	**65.5**
JHANVI DEEPAK PATIL		5	5	5	6	2	3	4.5	4	1	3	71	**38.5**
TANISHKA SANJAY HATANKAR		6.5	6.5	7	7.5	6	6.5	7.5	7.5	8	7	71	**70**
SHREYA SANJAY HINGMIRE		5.5	6.5	6	7	6.5	5.5	6	7	6	7.5	86	**63.5**
SAMIKSHA SANTOSH SONVANE		4	0	2	6	3	4.5	3	5	3		57	**30.5**
SHRISTI RAJIV SHETTY		5	4	5	6.5	5	6	5	5	3	3	86	**47.5**
NIDHI VIJAY BHANDARI		5.5	2	5	5	6	5.5	5	5	1	1	86	**41**
SHREYA SUNIL HATTE		3	4.5	1	4	5	4	0	4	0	0	57	**25.5**
YASHASHRI AJAY THOKE		0	0	0	0	0	0	0	0	0	0	0	**0**
RIYA APPASAHEB ADSUL		5	6.5	6	5	4	3	3.5	4	0	0	86	**37**
TANVI RATAN BHONGE		5.5	4.5	5	5.5	5	5	5	5	3	1	100	**44.5**
SHARVARI NILESH DESHPANDE		5.5	5.5	6	6.5	5.5	5	5.5	6	5	4	86	**54.5**
Purva Ranade		7	5	0	7.5	5		4.5	6	0	0		**35**
Class Average		5.4	4.7	4.6	5.5	4.4	4.2	4.1	4.9	3.2	3.0		
		10.2		4.6					8.1				
Class Average Percentage		51		45.7	54.6	43.6	42.2	41	41		30		

CO Attainment and Gap for Division

AGD II CO Attainment and Gap Division D							
Bloom Taxonomy Level	**Course Outcomes**		**CIE (Continuous Internal Evaluation)**	**Target class average %**	**Attainment Gap Percentage**	**Action Proposed to bridge the gap**	**Modification of target where achieved**
3	CO2	Develop the surface of given solids	50%	70%	20%	Take a revised submission at the end of the semester when skill levels are better	
3	CO3	Draw a perfect projection of true shape of a sectional plane	45%	60%	15%		
3	CO4	Build a One point perspective	54%	60%	6%	No action felt necessary	
3	CO5	Build a Two point perspective	43%	55%	12%		
3	CO6	Build a perspective using Perspective Grid	42%	55%	13%		
3	CO7	Build a Birds eye view. Build a Worms eye view	41%	50%	9%	No action felt necessary	
3	CO8	Build sciography of given solid objects in plans and elevation	40%	60%	20%	Time allotted, explanation offered and clarity of task to be improved	
3	CO9	Build sciography of given solid objects in isometric and perspective view	30%	55%	25%	Time allotted, explanation offered and clarity of task to be improved	

BNCA
MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S
DR. BHANUBEN NANAVATI
COLLEGE OF ARCHITECTURE
FOR WOMEN
BNCA New Campus,
Siddhivinayak College Gate
Karve Nagar Pune, India 411052
+91 20 25474062, 25476966, Fax. 020 2547443
Email:mail@bnca.ac.in, www.bnca.ac.in

Fundamentals of Architecture

Subject Code 1201915 [SS]

Syllabus **3**
Course Outcomes **4**
Teaching Philosophy **5**
Schedule **6**
CO Attainment Targets **8**
List of Assignments ..... Error! Bookmark not defined.
Division D **9**

Pooja Ghorpade
Name and Sign of Faculty

Principal

Syllabus

Welcome to FOA, this course introduces the fundamental principles, concepts, and history of architecture. Students will gain an understanding of the role of architecture in shaping the built environment and its relationship to society, culture, and technology. Topics will include architectural theory, design principles, building materials, history, and the architectural design process.

We will meet once a week, every **Tuesday from 8.00 AM to 11.15AM**. This syllabus aims to provide a comprehensive introduction to the field of architecture, combining theoretical knowledge with practical design skills. All course materials, resources, schedules, and attendance will be managed through the LMS course page, which will be your primary platform for accessing assignments, announcements, and updates.

Course Policies

- Attendance: Regular attendance is mandatory. Missing more than two studio sessions without valid reason will affect your grade.
- Late Work: Late submissions will incur a penalty unless prior arrangements are made.
- Studio Etiquette: Students are expected to work collaboratively and respect the studio space and materials.
- Critiques: Constructive feedback is essential. Students are required to participate actively in critiques, both giving and receiving feedback.

My name is **Pooja Ghorpade**, your course coordinator. You can contact me on my cell number in 9172266096 and pooja.ghorpade@bnca.ac.in.

Course Description Subject Code

FUNDAMENTALS OF ARCHITECTURE			
Subject Code 1201915 [SS]			
Teaching Scheme		Examination Scheme	
Total Contact Hours per week= (lectures=2, Studio=1, Total=3)		Sessional [CIA25+EA25]	50
		In-semester exam	NIL
		End Semester exam	NIL
		Total Marks	50
		Total Credits	2

Course Outcomes

Course Outcome (CO)	Description	Bloom's Level	Linked Curriculum Unit
CO1	Understand the duties and responsibilities of an Architect Summarise the role of architecture in relation to various other disciplines	Understand	Unit 1 and Unit 2
CO2	Analyze fundamental environmental parameters and concepts to evaluate building comfort using floor plans and settlement studies.	Analyze	Unit 3
CO3	Decompose a given activity into functional identities and communicate their interrelationship using a bubble diagram.	Analyze	Unit 4
CO4	Explain forward and backward infrastructural linkages for a building and their implications.	Understand	Unit 4
CO5	Apply principles of structural literacy by experiencing forces through human formations and designing a stable bridge.	Apply	Unit 3
CO6	Explain architectural schema and its role in the design process.	Understand	Unit 3
CO7	Evaluate a building holistically based on environmental, functional, infrastructural, structural, and formal literacies.	Evaluate	Units 3, 4, and 5
CO8	Demonstrate understanding of course content through guided tutorials.	Apply	Units 5 and 6

Teaching Philosophy

Welcome to the Fundamentals of Architecture course!
Architecture is both an intellectual discipline and a creative art form, and my goal is to guide you in building a solid knowledge base while encouraging critical thinking, creativity, and engagement with the world around you. As your instructor, I hope to inspire you to view architecture not just as a profession, but as a powerful tool for shaping spaces that improve lives and foster community.
Throughout this course, we will blend theory and practice, explore innovative design solutions, and develop a deep understanding of how architecture can be sustainable, meaningful, and responsive to human needs. Collaboration and critical thinking will be central to our work, as these skills are vital to both your growth as a designer and your future success in the field.

I look forward to supporting you in your journey to becoming an architect who not only creates functional and beautiful spaces but also contributes positively to the built environment. Together, we'll lay the foundation for a fulfilling and impactful career in architecture.
Let's make this an inspiring and transformative experience

With warm regards

Pooja Ghorpade

Schedule

Fundamental of Architecture							
S.N.	**Date**	**Course Outcome**	**Course Outcome Description**	**Bloom Level**	**Curricular Unit**	**Assignment No.**	**Assignment Description**
1	6th Feb 2024	CO1	Understand the duties and responsibilities of an Architect.	Understand	Unit 1: Introduction to the profession of Architecture	A1	Summarise the role of architecture in relation to other disciplines.
2	13th Feb 2024	CO1	Understand the duties and responsibilities of an Architect.	Understand	Unit 1: Introduction to the profession of Architecture	A1	Continue role of architecture discussion and submission review.
3	20th Feb 2024	CO2	Analyze fundamental environmental parameters and concepts.	Analyze	Unit 3: Fundamentals of Architecture	A2	Evaluate building comfort using floor plans and settlement studies.
4	27th Feb 2024	CO2	Analyze fundamental environmental parameters and concepts.	Analyze	Unit 3: Fundamentals of Architecture	A2	Continue evaluation of settlement study homes for comfort.
5	5th Mar 2024	CO3	Decompose a given activity into functional identities and communicate interrelationships.	Analyze	Unit 4: Factors affecting architectural design	A3	Create bubble diagrams for given activities.
6	12th Mar 2024	CO3	Decompose a given activity into functional identities and communicate interrelationships.	Analyze	Unit 4: Factors affecting architectural design	A3	Submission and peer review of bubble diagrams.
7	19th Mar 2024	CO4	Explain forward and backward infrastructural linkages for a building.	Explain	Unit 5: Concept of Shelter and Building Typologies	A4	Study and document infrastructural linkages for a selected building.
8	26th Mar 2024	CO4	Explain forward and backward infrastructural linkages for a building.	Explain	Unit 5: Concept of Shelter and Building Typologies	A4	Submit documented analysis of linkages.

9	2nd Apr 2024	CO5	Apply principles of structural literacy by experiencing forces.	Apply	Unit 3: Fundamentals of Architecture	A5	Human formations to experience forces and design a stable bridge.
10	9th Apr 2024	CO5	Apply principles of structural literacy by designing a stable bridge.	Apply	Unit 3: Fundamentals of Architecture	A5	Finalize and present stable bridge designs.
11	16th Apr 2024	CO6	Explain architectural schema and its role in the design process.	Explain	Unit 2: Scope of Architecture	A6	Analyze architectural schema through case studies.
12	23rd Apr 2024	CO6	Explain architectural schema and its role in the design process.	Explain	Unit 2: Scope of Architecture	A6	Submission of architectural schema analysis.
13	30th Apr 2024	CO7	Evaluate a building holistically based on multiple literacies.	Evaluate	Unit 6: Scope of Architectural Curriculum	A7	Conduct holistic building appraisal using given parameters.
14	7th May 2024	CO7	Evaluate a building holistically based on multiple literacies.	Evaluate	Unit 6: Scope of Architectural Curriculum	A7	Submission and discussion of appraisals.
15	14th May 2024	CO8	Demonstrate understanding of course content through guided tutorials.	Demonstrate	Unit 6: Scope of Architectural Curriculum	A8	Participate in guided tutorials on holistic building evaluation.
16	21st May 2024	CO8	Demonstrate understanding of course content through guided tutorials.	Demonstrate	Unit 6: Scope of Architectural Curriculum	A8	Reflect and summarize tutorial outcomes.
17	28th May 2024	All COs	Revision and integration of all learning outcomes.	All Levels	All Units	A9	Prepare for final submission and overall presentation.
18	31st May 2024	All COs	Final submission and assessment.	All Levels	All Units	A9	Final evaluation and grading.

CO Attainment Targets

Course Outcome	Assignment details		Bloom's level	Target (%)
CO1	A 1	Introduction to FOA	**2**	**70%**
CO 2	A 2	Intro to Environmental Literacy Understanding various parameters	**4**	**70%**
	A 3	Environmental Literacy Analyzing Building comfort (BNCA Floorplans)		**60%**
	A 4	Environmental Literacy Evaluating Settlement Study Home for Comfort		**55%**
CO3	A 5	Functional Literacy Analyze a given activity into identities and communicate their functional interrelationship using a bubble diagram (worksheet)	**4**	**70%**
CO4	A 6	Infrastructural Literacy Understand forward and backward linkages for a building	**2**	**60%**
CO5	A 7	Structural Literacy Understand and experience various forces acting on a building (human formations+ worksheets)	**6**	**70%**
	A 8	Structural Literacy Create a stable bridge by designing various members		**70%**
CO6	A 9	Formal Literacy Understand architectural schema	**5**	**60%**
CO7	A 10	Building Appraisal Analyse a building for all the literacies	**5**	**60%**
CO8	A 11	Tutorial	**3**	**60%**

Division D

Attendance record

Final Internal Mark list of Division D

Dr. Bhanuben Nanavati College of Architecture for Women, Pune								FOA					D Division	
	Syllabus	"Unit 1 : Introduction to the	"Unit 3 : Fundamentals of architecture -function , structure ,culture and environment and their integration into the architectural form. Unit 4 : Factors affecting architectural design- site, context , function, circulation, structural system, materials ,sustainability and aesthetics."								Unit 5 : Concept of Shelter and introduction to various building typologies and their design			
	Bloom's level	2	2		5	4	2	2	2	6	2	4	3.0	
	Outcome	Introductory											CO10	
Sr.	Assignment	Introduction to FOA	Intro to **Literacies in Architecrue** Understanding various parameters (5	Environmental Literacy Understanding various parameters (	**Environmental Literacy** Evaluating Settlement Study Home for Comfort	**Functional Literacy** Analyze a given activity into identities and communicate their	**Functional Literacy** Understand various activities of Auditorium	**Infrastructural Literacy** Understand forward and backward linkages for a	**Structural Literacy** Understand and experience various forces acting on a building (human formations+	**Structural Literacy** Create a stable bridge by designing various members	**Formal Literacy** Understand architectural schema	**Building** Appraisal Analyse a building for all the literacies	**Tutorial**	**Total marks**
	Max marks		5	5		5	5	5	5	5	5	5	5.0	50
1	SHRAVANI MADHAV PADALKAR		2.5	5		4	3.5	3	4	5	3	4.5	5.0	39.5
2	SHRAVANI NAVNEET PATIL		2	4		2	3	3	3	3.5	2	2.5	0.0	25
3	HEMALEE NAVNATH NAGE		3.5	4		3.5	2.5	3	4	3.5	4	4.5	3.5	36
4	SAMRUDDHI SANTOSH NALAWADE		3	2.5		2.5	3	3	4	4	4	3	0.0	29
5	RIYA SUJIT TAMBADE		4	5		4	4	3	4	4.5	3	4.5	0.0	36
6	NIKITA NITIN TARALKAR		4	5		4.5	5	3	5	5	4	4	5.0	44.5
7	KHUSHI DHANANJAY PATIL		4	4.5		3	5	3	2	5	3	2	2.5	34
8	DIKSHA ATULKUMAR TADE		3.5	4		4	4	3	2.5	4	3	3.5	2.8	34.25
9	SHARVARI NILESH KONDE		4	4		3	3	3	4	3	3.5	4.5	2.5	34.5
10	SHREYA GANESH DHAWALE		4	3		3	3	3	3	4	3	3.5	4.8	34.25
11	ADITI BANTIKUMAR MOHANANI		3	3		2.5	3	3	3.5	2.5	2.5	2.5	4.0	29.5
12	PRANJAL SANDIP KADAM		2	3		2.5	3	3	4	3	1	0	0.0	21.5
13	DIYA BHARAT POPTANI		3.5	3		3	2.5	3	2.5	4	3	3.5	0.0	28
14	DAKSHAYANI S PATRAWALE		3.5	4		4	2.5	3	2	2.5	3	3.5	3.0	31
15	DIYA MILIND JAMDAR		4	3.5		4	4.5	3	3.5	3.5	2.5	3.5	0.0	32
16	VIDHI PRAMOD PATIL		3	2.5		2.5	3	3	3	3.5	2.5	2.5	2.3	27.75
17	AASTHA RITESH PALIWAL		2	3.5		3.5	3	3	4	3.5	4	3.5	2.3	32.25
18	DEVKI ANAND MANDHANE		4	4		3.5	4	3.5	4	4.5	4.5	5	5.0	42
19	PRATIKSHA KRUSHNA GAJBHIYE		2.5	3		2	3.5	3	0	3	2	2.5	1.5	23
20	APURVA HANUMANT JADHAV		2	2		1	3.5	3	0	0	3.5	0	0.0	15
21	ASMITA DNYANESHWAR DONGARE		3	4		4	3	3	0	3	2	3	0.0	25
22	DNYANESHWARI HANUMANT GAWADE		2	3		3.5	3	3	0	3	3	3.5	3.3	27.25
23	SIDDHI HANMANT DONGARGAONKAR		3	4		3.5	4	3	3	0	3.5	4.5	4.4	32.875
24	JHANVI DEEPAK PATIL		3.5	4		3.5	4	3	2	3.5	2	4	4.3	33.75
25	TANISHKA SANJAY HATANKAR		4	3		3.5	3.5	3	4	4.5	4.5	3.5	3.0	36.5
26	SHREYA SANJAY HINGMIRE		3.5	4		3	3	3	5	5	2.5	3	2.8	34.75
	Class average		3.3	3.7		3.3	3.5	3.1	3.0	3.5	3.1	3.3		
	Class Average Percentage		65	74		65	70	62	60	71	62	66		

CO Attainment and Gap for Division D

	Assignment details		Bloom's level	CIE (Continuous Internal Evaluation)	Target class average %	Attainment Gap Percentage	Action Proposed to bridge the gap	Modification of target where achieved
CO1	A 1	Introduction to FOA	**2**	65%	**70%**	5%		
CO 2	A 2	Intro to Environmental Literacy Understanding various parameters	**4**	73%	**70%**	-3%		75%
	A 4	Environmental Literacy Evaluating Settlement Study Home for Comfort		65%	**55%**	-10%		70%
CO3	A 5	Functional Literacy Analyze a given activity into identities and communicate their functional interrelationship using a bubble diagram	**4**	69%	**70%**	1%	More examples of plans to be given for analyzing	
CO4	A 6	Infrastructural Literacy Understand forward and backward linkages for a building	**2**	61%	**60%**	-1%		
CO5	A 7	Structural Literacy Understand and experience various forces acting on a building	**6**	60%	**70%**	10%	exploration on model needs more time	
	A 8	Structural Literacy Create a stable bridge by designing various members		70%	**70%**	0%		
CO6	A 9	Formal Literacy Understand architectural schema	**5**	61%	**60%**	-1%		
CO7	A 10	Building Appraisal Analyse a building for all the literacies	**5**	66%	**60%**	-6%		70%

BNCA
MAHARSHI KARVE STREE SHIKSHAN SAMSTHA'S
DR. BHANUBEN NANAVATI
COLLEGE OF ARCHITECTURE
FOR WOMEN
BNCA New Campus,
Siddhivinayak College Gate
Karve Nagar Pune, India 411052
+91 20 25474062, 25476966, Fax. 020 2547443
Email:mail@bnca.ac.in, www.bnca.ac.in

Workshop II

Subject Code 1201916 [SS]

Syllabus 3
Course Outcomes: 4
Teaching Philosophy 4
Schedule 5
CO Attainment Targets 6
Assignments Briefs 7
CO Attainment and Gap 9

Pooja Ghorpade
Name and Sign of Faculty

Principal

Syllabus

Welcome to the course 'Workshop 2. We will be interacting once a week namely every Thursday from 11.15 am to 02.45 pm. The Workshop 2 course equips architecture students with essential skills in model-making and digital modelling, fostering creativity and precision. It introduces advanced materials like balsa wood, polymers, and cork, along with specialized techniques to craft architectural models that effectively communicate design concepts. Additionally, students are introduced to computer-aided 3D modelling, enabling them to explore and visualize forms and spaces digitally. By integrating hands-on craftsmanship with digital tools, the course bridges traditional and contemporary practices, preparing students to present their ideas with clarity and innovation in both academic and professional contexts.

Course pre-requisites

Basic Model-Making Skills:

- Familiarity with cutting, assembling, and finishing simple architectural models using materials like paper, cardboard, and basic tools (cutters, adhesives, etc.).

Introduction to Design Process:

- An understanding of architectural design concepts and the ability to translate sketches or 2D drawings into 3D forms.

Basic Computer Skills:

- Proficiency in using computers for design-related tasks, such as operating basic software interfaces (Rhino as a tool).

Exposure to Drafting and Representation Techniques:

- Knowledge of basic architectural drawing conventions like plans, sections, and elevations.

My name is Pooja Ghorpade, your course coordinator. You can contact me on my cell number in 9172266096 and pooja.ghorpade@bnca.ac.in. Along with me Ar. Nishigandha **Sakhardande** will be teaching this subject.

Recommended Readings :

- John Taylor, Model Building for Architects and Engineers
- Rolf Janke, Architectural Models
- Aidan Chopra, Sketchup-2014 for Dummies

Course Description Subject Code

<table>
<tr><td colspan="4">WORKSHOP II</td></tr>
<tr><td colspan="2">Subject Code 1201916 [SS]</td><td colspan="2"></td></tr>
<tr><td colspan="2">Teaching Scheme</td><td colspan="2">Examination Scheme</td></tr>
<tr><td rowspan="4">Total Contact
Hours per week= (lectures=1, Studio=2, Total=3)</td><td rowspan="4"></td><td>Sessional [CIA 50+ EA 50]
VIVA</td><td>100

NIL</td></tr>
<tr><td>In-semester exam</td><td>NIL</td></tr>
<tr><td>End Semester exam</td><td>NIL</td></tr>
<tr><td>TotalMarks</td><td>100</td></tr>
<tr><td></td><td></td><td>Total Credits</td><td>02</td></tr>
</table>

Course Outcomes:

CO 1	Replicate the instructions in the video and make a model using skewer sticks
CO 2	Use the given drawing and build a contour model using corrugated board
CO 3	Develop a volumetric model of the given building using soap carving
CO 4	Build a model of a shell form using gypsona strips or tensile pavilion using stocking material
CO 5	Build a model of structural members of a given building
CO 6	Construct a model of a selected building using appropriate material and technique
CO 7	Generate volumetric explorations using Rhino modelling software

Teaching Philosophy

The teaching philosophy for Workshop 2 emphasizes learning through doing, fostering creativity, precision, and problem-solving in architectural representation. The course integrates hands-on experimentation with advanced materials and tools, encouraging students to explore their design ideas in tangible forms while understanding material properties and techniques. Simultaneously, digital modelling is introduced as a complementary skill, bridging traditional and contemporary practices. The approach is student-centered, promoting active engagement, iterative learning, and critical thinking. By creating a balance between physical and digital methods, the philosophy aims to empower students with versatile skills, nurturing their ability to visualize, refine, and effectively communicate architectural concepts.

With warm regards

Pooja Ghorpade

Schedule

Week	Date	Course Outcome	Course Outcome Description		Assignment
1	February 8, 2024	CO1	Exploration of various materials to make trees and elements which would be essential for future design models	**A1**	Elements or Architecture and Types of Trees
2	February 15, 2024				
3	February 22, 2024	CO 2	Build a contour model using Foam Board/3ply to make various topographic features	**A2**	Contours model
4	February 29, 2024				
5	March 7, 2024	**Midterm**			
6	March 14, 2024	CO 4	Build a model of a pavillion form using bamboo skewers	**A5**	Hyperbolic Parabola
7	March 21, 2024				
8	March 28, 2024				
9	April 4, 2024	CO5	Build a model of structural tensile members of a creating a covered seating area of a sports stadium	**A6**	Tensile Stadium
10	April 11, 2024				
11	April 18, 2024	CO 3	Generate volumetric explorations using Rhino modelling software	**A3**	Rhino Exercise Basic
12	April 25, 2024			**A4**	Rhino Exercise Advanced
13	May 2, 2024				
14	May 9, 2024	**Final Marking**			

CO Attainment Targets

Course Outcome		Bloom Level		Target class average %
CO1	**Exploration of various materials to make trees and elements which would be essential for future design models**	**1**	**A1**	65%
CO 2	**Build a contour model using Foam Board/3ply to make various topographic features**	**2**	**A2**	60%
CO 3	**Generate volumetric explorations using Rhino modelling software**	**1**	**A3**	60%
		1	**A4**	60%
CO 4	**Build a model of a pavillion form using bamboo skewers**	**4**	**A5**	60%
CO5	**Build a model of structural tensile members of a creating a covered seating area of a sports stadium**	**4**	**A6**	60%

Assignments Briefs

	Course Outcome	Bloom Level	Curricular Unit	
CO1	**Exploration of various materials to make trees and elements which would be essential for future design models**	**1**	Unit-1 Introduction to advanced materials such as balsa wood, polymers/ plastics, cork and the techniques to make Architectural Models	**A1**
CO 2	**Build a contour model using Foam Board/3ply to make various topographic features**	**2**		**A2**
CO 3	**Generate volumetric explorations using Rhino modelling software**	**1**	Unit-2 Introducing computer aided/ Digital 3D Modeling of simple and composite objects as an exploratory tool.	**A3**
		1		**A4**
CO 4	**Build a model of a pavillion form using bamboo skewers**	**4**	Unit-1	**A5**
CO5	**Build a model of structural tensile members of a creating a covered seating area of a sports stadium**	**4**		**A6**

Final Internal Mark list

WORKSHOP II 2023-24												
		Course Outcome	**Exploration of various materials to make trees and elements which would be essential for future design models**	**Build a contour model using Foam Board/3ply to make various topographic features**	**Generate volumetric explorations using Rhino modelling software**		**Build a model of a pavillion form using bamboo skewers**	**Build a model of structural tensile members of a creating a covered seating area of a sports stadium**				
		Bloom's level	**1**	**2**	**1**	**1**	**4**	**4**				**Total final internal marks**
		Outcome	**CO1**	**CO 2**	**CO 3**		**CO 4**	**CO5**				
			A1	**A2**	**A3**	**A4**	**A5**	**A6**				
Sr.	**Roll No**	**Assignment**	Elements or Architecture and Types of Trees	Contours	Rhino Exercise Basic	Rhino Exercise Advanced	Hyperbolic Parabola	Tensile Stadium	Total	Total Scaled	Late Marks	
		Max marks	**10**	**10**	**10**	**10**	**10**	**10**	**60**	**50**		**50**
Sr.	**Roll No**	**StudentName**										
1	A23004	SHRAVANI MADHAV PADALK	7.5	9	9	9	8	8	50.5	42		42
2	A23008	SHRAVANI NAVNEET PATIL	5	4	0	0	6.5	2	17.5	15		15
3	A23016	HEMALEE NAVNATH NAGE	7.5	7	0	0	8	7	29.5	25		25
4	A23024	SAMRUDDHI SANTOSH NALA	7.5	6.5	1	0	7.5	8.5	31	26	3	23
5	A23028	RIYA SUJIT TAMBADE	7	8	7.5	7.5	7	7	44	37		37
6	A23032	NIKITA NITIN TARALKAR	8	7.5	8.5	8.5	8	8.5	49	41		41
7	A23036	KHUSHI DHANANJAY PATIL	8	7	9	8.5	7	5.5	45	38		38
8	A23040	DIKSHA ATULKUMAR TADE	7	6	4	0	7.5	6	30.5	25		25
9	A23044	SHARVARI NILESH KONDE	5	7.5	0	0	7	3	22.5	19		19
10	A23048	SHREYA GANESH DHAWALE	4	5	2	2	8	4	25	21		21
11	A23052	ADITI BANTIKUMAR MOHAN	6.5	7	7	6.5	6.5	7.5	41	34		34
12	A23056	PRANJAL SANDIP KADAM	7	0	2	0	8	0	17	14		14
13	A23060	DIYA BHARAT POPTANI	7.5	6	2	2	7	6	30.5	25		25
14	A23064	PATRAWALE	7	7	6	5.5	8	6	39.5	33		33
15	A23072	DIYA MILIND JAMDAR	7	7	8	4	8	5	39	33		33
16	A23077	VIDHI PRAMOD PATIL	3	6	3	3	7	3	25	21	3	18
17	A23082	AASTHA RITESH PALIWAL	7	7	7.5	7.5	7.5	7	43.5	36		36
18	A23086	DEVKI ANAND MANDHANE	9	8.5	9	9	8.5	8.5	52.5	44		44
19	A23090	PRATIKSHA KRUSHNA GAJBH	2.5	0	0	0	0.5	0	3	3		3
20	A23094	APURVA HANUMANT JADHAV	5	0	0	0	2	0	7	6		6
21	A23098	ASMITA DNYANESHWAR DON	8	8.5	8.5	7	7	8	47	39		39
22	A23106	DNYANESHWARI HANUMANT	5	4	0	0	7	5	21	18		18
23	A23110	SIDDHI HANMANT DONGARG	6	6	8.5	0	0	4	24.5	20		20
24	A23114	JHANVI DEEPAK PATIL	6	7	2	2	6	5	28	23	3	20
25	A23076	TANISHKA SANJAY HATANKA	8.5	8	0	0	7.5	4	28	23	3	20
26	**A23124**	SHREYA SANJAY HINGMIRE	6	7	0	0	6.5	6	25.5	21		21
27	**A23132**	SONVANE	5.5	6.5	0	0	7.5	2	21.5	18		18
28	**A23134**	SHRISTI RAJIV SHETTY	7	7	6	4	7.5	4	35.5	30		30
29	**A23130**	NIDHI VIJAY BHANDARI	5	7	0	4	7	3.5	26.5	22	3	19
30	**A23137**	SHREYA SUNIL HATTE	6.5	6	4	2	7.5	6	32	27		27
31	**A23138**	YASHASHRI AJAY THOKE										
32	**A23139**	RIYA APPASAHEB ADSUL	5	7	2	0	6	5	25	21	3	18
33		TANVI RATAN BHONGE	6.5	7	0	0	7.5	5	26	22		22
34	A23059	SHARVARI NILESH DESHPANI	7	6.5	8	7.5	7.5	7	43.5	36		36
35		PURVA RANADE	0	5	4	4	6.5	5	24.5	20		20
		Class average	6	6	4	3	7	5				
		Class average Percentage	62	61	38	30	67	51				

CO Attainment and Gap

Course Outcome	Assignment details		CIE (Continuous Internal Evaluation)	Target class average %	Attainment Gap Percentage	Action Proposed to bridge the gap	Modification of target where achieved
CO1	**A1**	**Exploration of various materials to make trees and elements which would be essential for future design models**	62%	65%	3%	More time for the assignment required.	
CO 2	**A2**	**Build a contour model using Foam Board/3ply to make various topographic features**	61%	60%	-1%		
CO 3	**A3**	**Generate volumetric explorations using Rhino modelling software**	38%	60%	22%	Computer lab to be made available for more time so that students can practice more.	
	A4		30%	60%	30%		
CO 4	**A5**	**Build a model of a pavilion form using bamboo skewers**	67%	60%	-7%		
CO5	**A6**	**Build a model of structural tensile members of a creating a covered seating area of a sports stadium**	51%	60%	9%		