



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

# CRITERIA 1

## CURRICULAR ASPECTS



  
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Phones : 022 - 27571451-27564646  
E-mail : principalbvcoanm@gmail.com,  
principal.bvcoanm@bharatividyaapeeth.edu

# COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## Key Indicator – 1.2 Academic Flexibility

*1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years*



  
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth

## COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.D.I.D., P.G.D.I.D., IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

### Table of Contents

Sr. No.	Contents
	Description
	List of Certificate Programs offered during the last five years (AY 2022-2023 to AY 2018-2019)

AY 2022-2023	
Courses	Coordinators
NPTEL Courses	
AY 2020-2021	
Courses in Collaboration with Acedge	
Courses	Coordinators
<b>Course 1 - Certificate Course on Architectural thinking, representation, narration</b> Poster, Course Curriculum modules with assessment procedure	Prof. Shomika Sarkar Prof. Ashwini Bapat Prof. Sinduree Iyengar
<b>Course2 - Certificate Course on Conception and Perception of Space-Elements of Space Making and Spatial Narratives</b> Poster, Course Curriculum modules with assessment procedure	Prof. Kamakshi Vaidya Prof. Shraddha Kapadia Prof. Mayuri Deshmukh
<b>Course 3 - Certificate Course on Disaster Relief Shelters</b> Poster, Course Curriculum modules with assessment procedure	Prof. Tejawini H.M. Prof. Priyanka Sinha Prof. Suvarna Thakre
<b>Course 4 - Certificate Course on Habitation Aaj Kal</b> Poster, Course Curriculum modules with assessment procedure	Prof. Pritam Dey Prof. Nikhil Shah
<b>Course 5 - Certificate Course on Impact of COVID 19 on Public Spaces</b>	Prof. Ruta Pawar Prof. Harshada Katkar



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Poster, Course Curriculum modules with assessment procedure	Prof. Neha Pradhan
<b>Course 6 - Certificate Course on Industrial Heritage in India</b> Poster, Course Curriculum modules with assessment procedure	Prof. Aastha Khare Prof. Madhura Naik Prof. Ajinkya Vekhande
<b>Course 7 - Certificate Course on Landscape and Site Development</b> Poster, Course Curriculum modules with assessment procedure	Prof. Sonu Bothe Prof. Himika Lakhanpuria Prof. Kirti Lonerkar
<b>Course 8 - Certificate Course on Smart City- A Paradigm Shift post pandemic</b> Poster, Course Curriculum modules with assessment procedure	Prof. Shipla Zabak Prof. Sumitra Kadam
<b>Course 9 - Certificate Course on Zonal Built Heritage</b> Poster, Course Curriculum modules with assessment procedure	Prof. Harshada Ponshe Prof. Renuka Wazalwar Prof. Swapna Deshpande
<b>AY 2019-2020</b>	
<b>Courses</b>	<b>Coordinators</b>
<b>Course 1 - Certificate Course on AutoCAD</b> Poster, Notices, Course Curriculum modules with assessment procedure	CADD Centre Prof. Tejaswini H.M.
<b>Course 2 - Certificate Course on Building with Natural Materials</b> Poster, Notices, Course Curriculum modules with assessment procedure	Design Jatra Prof. Tejaswini H.M. Prof. Sumitra Kadam
<b>Course 3 - Certificate Course on Performance of Building Envelope</b> Poster, Notices, Course Curriculum modules with assessment procedure	Prof. Varsha Annadate Prof. Vinita Deshmukh
<b>Course 4 - Certificate Course on Parametric Modelling</b> Poster, Notices, Course Curriculum modules with assessment procedure	Mr. Sai Srimanth (Parakraft) Prof. Madhura Naik



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

<b>Course 5 - Certificate Course on Mitti- Folk arts and Crafts</b> Poster, Notices, Course Curriculum modules with assessment procedure	Prof. Renuka Wazalwar Mrs. Shoma Banerjee
<b>AY 2018-2019</b>	
<b>Courses</b>	<b>Coordinators</b>
<b>Course 1- Certificate Course on Earth Architecture, Auroville</b> Poster, Notices, Course Curriculum modules with assessment procedure	Ar. Shubha Mishra Prof. Tejaswini H.M.
<b>Course 2- Certificate Course on Biomimicry and Tensegrity</b> Poster, Notices, Course Curriculum modules with assessment procedure	Ar. Chetan Shivaprasad Ar. Shreya Sen Prof. Tejaswini H.M. Prof. Sumitra Kadam
<b>Course 3 - Certificate Course on Mitti- Folk arts and Crafts</b> Poster, Notices, Course Curriculum modules with assessment procedure	Prof. Renuka Wazalwar Prof. Trupti Kamat Mrs. Shoma Banerjee
<b>Course 4 - Certificate Course on Building Skin for High-rise Smart Facade: Collaborative Design Approach</b> Poster, Notices, Course Curriculum modules with assessment procedure	Prof. Varsha Annadate Prof. Vinita Deshmukh
<b>Course 5 - Certificate Course on Mind Mapping and Design Thinking</b> Poster, Notices, Course Curriculum modules with assessment procedure	Prof. Kamakshi Vaidya Prof. Dipanwita Chakraborty
<b>Course 6 - Certificate Course on Parametric Design Thinking</b> Poster, Notices, Course Curriculum modules with assessment procedure	Prof. Madhura Naik Ar. Nigar Khan Ar. Ameena Sheikh



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## Criteria 1 - Curricular Aspects

### Key Indicator - 1.2 Academic Flexibility

1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

#### Description

The Add on / certificate / Value Added programs and Student Development Programs (SDP) offered in the college has demonstrated four kinds of competencies in the students to make them ready as future professionals.

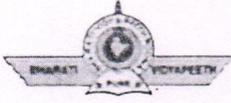
- **Vocational skills** - It includes art and architecture, model making, digital competency, parametric, structural understanding, analysis, sustainability and climate responsive building, construction materials, techniques and practices, urban design, landscape, conservation and other allied fields.
- **Professional skills** - Understanding the needs of the client with respect to space, structure, site, services. The context and its understanding and optimizing the resources
- **Critical thinking** - The ability to think, analyze and synthesize. Understanding the critical aspects with respect to art architecture and theory as well as culture and history
- **Ethical responses** - Understanding the role of an architect in the society and act in the interest of larger good including empathy for other professionals, diversity and environmental concerns.

These topics are identified to enrich the curriculum under the technical, theory and design courses. The institute emphasizes on appointing resource person or an expert in that particular subject to conduct certain courses. The course also includes hands on activities, assignments, site visits, surveys wherever required.

Successful participants are awarded with participation certificate.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Bharati Vidyapeeth  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.D.D., P.G.D.D., IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M /

Date :

### Email from Acedge

Fwd: Association for the Elective between ACEDGE and BVCOA



**Ritu Deshmukh**  
to me

Thu, Aug 24, 3:47 PM (10 days ago) ☆ ↶ ⋮

----- Forwarded message -----

From: **Sonam Ambe** <sonam@acedge.in>  
Date: Wed, May 13, 2020, 7:47 AM  
Subject: Association for the Elective between ACEDGE and BVCOA  
To: Ritu Deshmukh <ritudeshmukh@gmail.com>

Dear Ritu,

We thank BVCOA for approaching ACEDGE to facilitate Online electives and Design workshops for your students. We formally accept the association and would request you to approve of the scope of work as mentioned in the PDF attached.

Please reply to this email after reading the document for a formal confirmation.

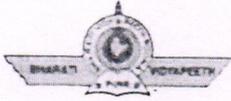
Warm regards,

**Sonam Ambe**  
B. Arch, Sir J. J. College of Architecture M.Phil(Gold), Institute Silver medal 2013, IIT Bombay  
Enabler at ACEDGE,  
Content and Course Developer  
+91-9004267620

On behalf of ACEDGE



  
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



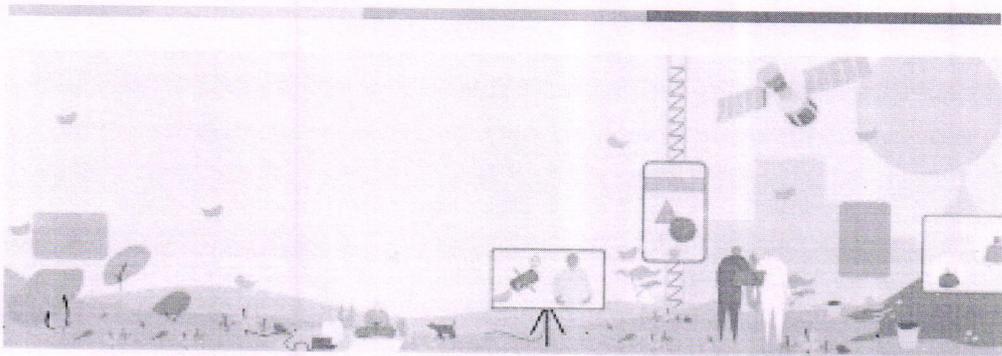
Founder:  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec. 7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :



## E-Learning and Engagements

**An association between ACEDGE &  
BVCOA for Courses and Design  
Workshops**

8.05.2020



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**

(G.D.D.I.D., P.G.D.I.D., IIA, M.Sc.I.D., M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## Background:

BVCOA approached ACEDGE to facilitate Online courses, electives and Design workshops for their students. ACEDGE and BVCOA joined hands and decided the following scope of work and payment schedule.

## ACEDGE's Scope of work

1. Create landing pages for enrollment for 9 course electives and 2 design workshops
2. Create payment portal, coupon code for enrollment.
3. Share lectures from ACEDGE backend relevant to BVCOA's studio profile
4. Invite speakers along with BVCOA as guest speakers for the course electives
5. On suggestion of BVCOA, ACEDGE will make payment to speakers invited by ACEDGE at Rs 2000/- per talk with a maximum of 5 speakers per course elective. Any additional fee will be paid by BVCOA to the speaker if they recommend higher honorarium.
6. Upload recording in the dashboard as the faculty shares the same
7. Share progress report as sought by the faculty
8. Only host sessions with guest speakers and upload the recording on the Dashboard

## BVCOA's Scope of work

1. Curate the course elective, select the speakers, share details for invitation
2. Appoint a webinar coordinator to communicate with ACEDGE coordinator
3. Conduct the course elective on personal Zoom and share the recording through the drive for ACEDGE to upload, ACEDGE will host the lectures with guest speakers.
4. Record and note student attendance for every session
5. Invite speakers for short trials one day before the live session
6. Connect with speakers to discuss the pedagogical strategies

## FEEES

ACEDGE will charge a lump sum of Rs 2,50,000 for this association. Additional taxes to be considered. Students will pay at Rs 1180/- per enrollment or they can choose to pay at college. ACEDGE will collate the total amount received from direct payment and deduct the same from the total fee. We will raise an invoice of the balance amount.

**ACEDGE**  
AN ETHOS OF LEARNING



Principal

Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

? ethos !!  
www.ethos.in



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2020-21**

**Course 1- Certificate Course on Architectural Thinking, Representation and Narration**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

An initiative by:  
Bharati Vidyapeeth College of Architecture,  
Navi Mumbai  
In Collaboration with ACEDGE

online  
**Course**  
on  
Architectural  
thinking  
representation  
narration

duration : 18th may - 3rd June

let us  
**defeat**  
corona virus



**ACEDGE**  
an ethics of learning

co-ordinators :



**shomika sarkar**

Asst. Professor,  
M.Arch theory and design



**sinduree iyengar**

Asst. Professor,  
PGDM NICMAR, M.A. Sociology

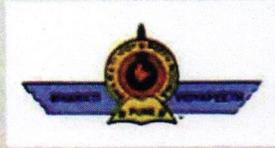


**ashwini bapat**

Asst. Professor,  
M.Arch theory and design



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

Online Course on

**'Architectural Thinking, Representation and Narration'**

Duration - 18<sup>th</sup> May 2020 to 3<sup>rd</sup> June 2020

Timing - 2:00 pm to 4:30 pm

Platform - Zoom in collaboration with Acedge

**Online Course Description:**

The Architectural Thinking, Representation, and Narration online course explores the fundamental principles and techniques of architectural design thinking, visual representation, and storytelling. Students will learn to develop a critical and creative mindset to approach architectural projects, understand the role of representation in communicating design ideas, and explore the power of narrative to convey architectural concepts. Through a combination of lectures, hands-on exercises, and design projects case studies, students will enhance their skills in conceptual thinking, visual communication, and storytelling, ultimately enabling them to effectively convey architectural ideas and engage with diverse audiences.

**Course Objectives:**

- Develop an understanding of architectural design thinking and its application in creative problem-solving.
- Acquire proficiency in various forms of architectural representation, including drawings, diagrams, models, and digital media.
- Explore the principles and techniques of visual communication in architecture.
- Develop skills in storytelling and narrative techniques to communicate architectural concepts.
- Enhance critical thinking and analysis through the examination and interpretation of architectural narratives.
- Foster creativity and imagination in architectural design processes.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

**Online Course Outline:**

**Module 1: Introduction to Architectural Thinking**

- Understanding the principles and elements of architectural design thinking
- Developing a critical and creative mindset in architectural problem-solving
- Exploring the role of architecture in society and the built environment

**Module 2: Architectural Representation Techniques**

- Introduction to architectural representation methods and tools
- Drawing techniques for conceptualization and visualization
- Creating and interpreting architectural diagrams and models

**Module 3: Visual Communication in Architecture**

- Principles of effective visual communication in architecture
- Graphic design principles and composition in architectural representation
- Introduction to digital media and visualization tools in architectural practice

**Module 4: Architectural Storytelling and Narrative**

- The power of narrative in architectural communication
- Techniques for creating compelling architectural narratives
- Storytelling in various architectural contexts, such as urban design, historical preservation, and interior architecture

**Module 5: Interpreting Architectural Narratives**

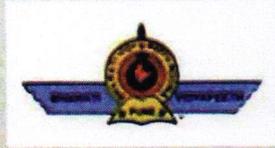
- Analyzing and interpreting architectural narratives in historical and contemporary contexts
- Understanding the sociocultural and contextual dimensions of architectural storytelling

**Module 6: Creativity and Imagination in Architectural Design**

- Techniques for fostering creativity in architectural thinking and design processes



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

Ref. No. : BV / COA / N.M./

Date :

**Prof. Satish Dhale**

(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

- Exploring imagination and its role in architectural innovation
- Design exercises to stimulate creative problem-solving

**Module 7: Applying Architectural Thinking and Representation**

- Integrating architectural thinking and representation in the design process
- Developing and refining architectural proposals using various representation techniques
- Presenting design concepts through compelling visual narratives online

**Module 8: Collaborative Design Assignment**

- Working collaboratively in multidisciplinary teams to develop a comprehensive design proposal
- Incorporating diverse perspectives and narratives in architectural projects
- Presenting and critiquing design concepts online within a narrative framework

**Course Coordinators:**

**Ar. Shomika Sarkar, Asst. Prof. BVCOA**

M.-9833223127

**Ar. Ashwini Bapat, Asst. Prof., BVCOA**

M. - 9664285385

**Ar. Sindhuree Iyengar, Asst. Prof., BVCOA**

M.-9004273095

**Guest Speakers:**

Speaker 1- **Prof. Manoj Parmar, Professor, KRVI, Mumbai**

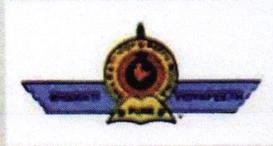


  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**Bharati Vidyapeeth**

# COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Speaker 2- **Prof. Piyush Das**, Assistant professor, Sushant School of Art  
and Architecture, Gurgaon

Speaker 3- **Ar. C. Anjalendran**, Renowned Architect, Sri Lanka

### Assessment Methods:

Design concept development through presentation to evaluate practical skills in architectural representation and storytelling.

Written assignments and reflections in the form of narratives to assess critical thinking and understanding of architectural thinking and narratives.

Group discussions and critiques to foster collaboration and exchange of ideas.

Final presentation to demonstrate comprehensive understanding and application of course concepts.

### Reference Material:

Some reference books that can supplement the course on  
Architectural Thinking, Representation, and Narration:

- "Architectural Graphics" by Francis D. K. Ching and Corky Binggeli
- "Architectural Drawing" by David Dernie
- "Architectural Diagrams" by Neil Spiller
- "Architectural Rendering Techniques: A Color Reference" by Mike W. Lin
- "Graphic Design for Architects: A Manual for Visual Communication" by Karen Lewis
- "Architecture: Form, Space, and Order" by Francis D. K. Ching
- "Architecture: The Story of Practice" by Dana Cuff
- "Narrative Architecture: Architectural Design Primers" by Nigel Coates
- "Narrative and Space: Across Short Stories and Architecture" by Laura Chiesa and Luca Galofaro



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
 M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
 Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
 (G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Schedule for the online course  
**'Architectural Thinking, Representation and Narration'**  
 Duration - 18<sup>th</sup> May to 3<sup>rd</sup> June 2020

Date	Time	Description
18 <sup>th</sup> May	2:00pm -4:30pm	Module 1: Introduction to Architectural thinking Course (Definitions / Concepts / Ideas) by Prof. Shomika Sarkar
19 <sup>th</sup> May	2:00pm - 3:00pm 3:00pm-4:30pm	Module 2: Architectural Representation Techniques How to start? By Prof. Ashwini Bapat Hands-on Exercise-- Exploring tools such as Reading, mind mapping, model making, inspirations, etc. Assignment 1- Developing Concept through write-up
20 <sup>th</sup> May	2:00pm-4:30pm	Work on data collection and discussions
21 <sup>st</sup> May	2:00pm -3:00pm 3:00pm-4:30pm	Module 3: Visual Communication in Architecture Aesthetics- Perception of Aesthetics in Architecture by prof. Sindhuree Iyenger
22 <sup>nd</sup> May	2:00pm-4:30pm	Discussion on assignments
25 <sup>th</sup> May	2:00pm -3:00pm 3:00pm-4:30pm	Module 4: Architectural Storytelling and Narrative Assignments discussion <b>Guest Lecture- Prof. Manoj Parmar - What is architectural thinking?</b>
26 <sup>th</sup> May	2:00pm - 4:30pm	Module 5: Interpreting Architectural Narratives Lecture - Mediums of Drawings by Prof. Shomika Sarkar and Prof. Ashwini Bapat Assignment 2- Concept development through drawing using different mediums
27 <sup>th</sup> May	2:00pm -4:30pm	Lecture - Parti diagrams and concept formations by Prof. Sindhuree Iyenger Assignments discussion
28 <sup>th</sup> May	2:00pm -4:30pm	Module 6: Creativity and Imagination in Architectural Design Lecture - Conversion text to mind-map by Prof. Shomika Sarkar
29 <sup>th</sup> May	2:00pm -4:30pm	Discussion on data <b>Guest Lecture- Prof. Piyush Das - Narration in architecture</b>
1 <sup>st</sup> June	2:00pm -4:30pm	Module 7: Applying Architectural Thinking and Representation Lecture -Communication and Imageability by Ar. Ashwini Bapat Presentation by students on mind mapping
2 <sup>nd</sup> June	2:00pm -4:30pm	Discussion <b>Guest Lecture- Prof. Anjalendran, Sri Lanka on Architectural Thinking</b>
3 <sup>rd</sup> June	2:00pm -4:30pm	Lecture - Writing Architecture by Prof. Sindhuree Iyengar Presenting and critiquing design concepts within a narrative framework Final Students feedback on the course



Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

### 1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

**AY 2020-21**

**Course 2- Certificate Course on Conception and Perception of Space- Elements of Space-making**



  
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

An initiative by:  
Bharati Vidyapeeth College of Architecture, Navi Mumbai  
In Collaboration with ACEDGE

Online

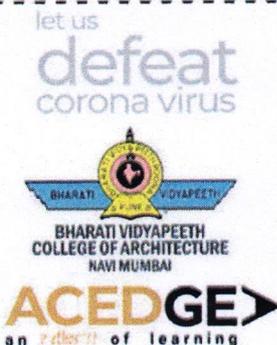
# Course on Elements of Space Making & Spatial Narratives

duration : 16th may- 30th may  
web platform :

## what is it about?

Architecture is easy to understand when we simply break down the space in elemental form and try to understand the attributes of each of these elements, be it tangible or intangible, through their spatial properties. And quality architecture is the balanced composition of these elements. The composition further evokes emotions, gives ideas, creates mystery and amuses, thus making the architecture experiential. The workshop would deal with the understanding of these elements through their organization, embellishment and many other qualities with the help of various case studies. The workshop will also help the students articulate narratives which will further help bridge the gap between conception and perception.

### webinar co-ordinators :



Ar. Kamakshi Vaidya  
Professor



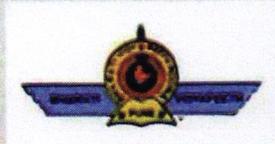
Ar. Shraddha Kapadia  
Asso. Professor



Ar. Mayuri Deshmukh  
Asst. Professor



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Online Course on  
**'Conception and Perception of Space'**

Duration - 16<sup>th</sup> May 2020 to 30<sup>th</sup> May 2020

Timing - 2:00 pm to 4:30 pm

Platform - Zoom in collaboration with Acedge

**Online Course Description:**

This online course delves into the conception and perception of space, focusing on the elements of space-making as presented in the book by renowned architect Ar. Yatin Pandya. Students will explore how architectural elements such as floors, roofs, columns, stairs, doors, windows and more contribute to the creation of meaningful and engaging spaces. Through theoretical discussions, online case studies, design exercises, and critical analysis, students will gain a deep understanding of how these elements shape our perception of space and influence human experiences within built environments.

**Course Objectives:**

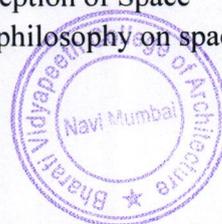
By the end of this course, students will be able to:

- Understand the conception and perception of space as explored in the work of Ar. Yatin Pandya.
- Analyze the role of architectural elements such as floors, roofs, columns, stairs, doors, windows and others in shaping spatial experiences.
- Explore the sensory, psychological, and cultural aspects of space perception.
- Apply design principles related to each element to create functional, aesthetically pleasing, and contextually responsive spaces.
- Develop skills in visual and verbal communication of spatial concepts and narratives related to the elements of space-making.
- Critically evaluate the impact of architectural elements on spatial perception and user experiences.
- Reflect on personal design philosophies and approaches
- Apply historical, cultural, and contextual knowledge to inform the creation of meaningful spaces.

**Course Outline:**

Module 1: Introduction to Conception and Perception of Space

- Overview of Ar. Yatin Pandya's work and philosophy on space-making



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec. 7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Understanding the relationship between conception, perception, and architectural elements
- Exploration of the sensory, psychological, and cultural aspects of space perception

Module 2: Floors as Elements of Space-making

- Analysis of the significance of floors in shaping spatial experiences
- Study of different floor materials, patterns, and textures
- Incorporating floor design principles to enhance the perception of space

Module 3: Columns and Walls as Elements of Space making

- Analysis of the structural and aesthetic significance of columns and walls
- Study of column and wall design principles, styles, and textures
- Incorporating columns and walls to define and shape spatial experiences

Module 4: Roofs and Ceilings as Elements of Space making

- Understanding the role of roofs and ceilings in creating spatial narratives
- Exploration of roof and ceiling design principles, materials, and aesthetics
- Utilizing roofs and ceilings to influence the perception of space and create visual interest

Module 5: Stairs and Ramps as Elements of Space making

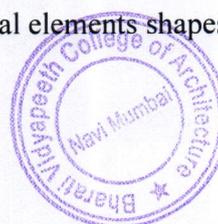
- Understanding the impact of stairs and ramps on spatial perception and circulation
- Exploration of stair and ramp design principles, forms, and materials
- Utilizing stairs and ramps to create dynamic and engaging spatial sequences

Module 6: Doors and Windows as Elements of Space making

- Analysis of the role of doors and windows in framing views and influencing spatial perception
- Study of door and window design principles, styles, and placements
- Incorporating doors and windows to establish connections, transitions, and visual relationships

Module 7: Integration of Elements and Spatial Narratives

- Analysis of how the integration of architectural elements shapes spatial narratives



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Bharati Vidyapeeth

# COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Study of online case studies showcasing effective integration for specific conceptual goals
- Applying design strategies to create cohesive spatial narratives and enhance perception

## Module 8: Reflection and Synthesis

- Reflection on personal design philosophies and approaches influenced by Ar. Yatin Pandya's ideas
- Synthesis of acquired knowledge and skills in a final assignment emphasizing the conception and perception of space
- Presentation and critique of design developed by students

## Course Coordinators:

**Ar. Kamakshi Vaidya**, Prof., BVCOA, M.-9820522416  
**Ar. Shraddha Kapadia**, Asso. Prof., BVCOA, M- 9920187850  
**Ar. Mayuri Deshmukh**, Asst. Prof., BVCOA, M-9423891079

## Guest Speakers:

Speaker 1- **Prof. Fatima Kabir**, Professor, Aayojan School of Architecture and Design, Pune  
Speaker 2- **Prof. Harimohan Pillai**, Principal Architect, Archiesticudio  
Speaker 3- **Prof. Pradnya Chavan**, Professor, Rizvi College of Architecture and Director, Macrame Studio

## Assessment Methods:

The assessment procedure was done on the basis of following methods:

- **Written Assignments:** Written assignment to critically analyze specific architectural projects or writings by Ar. Yatin Pandya, focusing on the elements of space making and spatial narratives. Help evaluate their ability to analyze, synthesize, and interpret the concepts and their application
- **Presentations:** Case study analyses, highlighting the elements of space making and spatial narratives. This will help assess their ability to articulate their ideas, explain their design decisions, and effectively communicate the relationship between the elements and spatial experiences.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Bharati Vidyapeeth

# COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Class Participation: Students' active participation in class discussions, group activities, and critiques. Help evaluate their ability to engage in thoughtful discussions, provide constructive feedback, and contribute to the exploration of concepts related to space making and spatial narratives.

This assessment criteria and grading helps in evaluating students' performance.

### Reference Material:

Here are some reference materials for the course

1. Book: "The Poetics of Space" by Gaston Bachelard

This influential book explores the poetic and philosophical aspects of space, focusing on how spaces are experienced and imagined.

2. Book: "Space and Place: The Perspective of Experience" by Yi-Fu Tuan

In this book, Tuan examines the human experience of space and place, discussing the ways in which people perceive, understand, and interact with their surroundings.

3. Book: "The Eyes of the Skin: Architecture and the Senses" by Juhani Pallasmaa

Pallasmaa explores the multisensory experience of architecture, emphasizing the role of sensory perception in creating meaningful and immersive spaces.

Book: "Architecture and Disjunction" by Bernard Tschumi

Tschumi explores the relationship between architecture, space, and events, discussing the concept of disjunction and the importance of creating dynamic and transformative spaces.

Book: "The Dynamics of Architectural Form" by Rudolf Arnheim

Arnheim investigates the perception and understanding of architectural form, discussing the psychological and visual aspects of spatial composition.

Documentary: "The Human Scale" directed by Andreas Dalsgaard

This documentary explores the impact of urban design and architecture on the human experience, highlighting the importance of creating human-centered and well-designed spaces.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**Bharati Vidyapeeth**

**COLLEGE OF ARCHITECTURE**

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
 M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
 Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

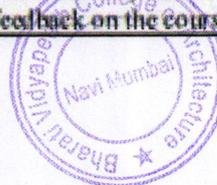
Principal  
**Prof. Satish Dhale**  
 (G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

**Schedule for the online course**  
**'Conception and Perception of Space'**  
 Duration - 16<sup>th</sup> May to 30<sup>th</sup> May 2020

Date	Time	Description
16 <sup>th</sup> May	2:00pm -4:30pm	Module 1: Introduction to Conception and Perception of Space Overview of Ar. Yatin Pandya's book, 'The elements of space-making'
18 <sup>th</sup> May	2:00pm -4:30pm	Module 2: Floors as Elements of Space-making Analysis of the significance of floors in shaping spatial experiences and Incorporating design principles to enhance the perception of space
19 <sup>th</sup> May	2:00pm-4:30pm	Module 3: Columns and Walls as Elements of Space making Analysis of the structural and aesthetic significance of columns and walls Discussion on Assignment 1 - Writeup on works of Ar. Yatin Pandya
20 <sup>th</sup> May	2:00pm -3:00pm 3:00pm-4:30pm	Discussion on Chosen cases study <b>Guest Lecture- Prof. Fatima Kabir - Bridging the gap between conception and perception</b>
21 <sup>st</sup> May	2:00pm-4:30pm	Roofs and Ceilings as Elements of Space making Understanding the role of roofs and ceilings in creating spatial narratives Utilizing roofs and ceilings to influence the perception of space and create visual interest Discussion on Assignment 2- Case study presentation
22 <sup>nd</sup> May	2:00pm-4:30pm	Presentation by the students on case studies chosen Discussion
23 <sup>rd</sup> May	2:00pm -3:00pm 3:00pm-4:30pm	Discussion and doubt clearing session <b>Guest Lecture- Prof. Harimohan Pillai - Traditional architecture through elements of space-making</b>
25 <sup>th</sup> May	2:00pm -4:30pm	Module 5: Stairs and Ramps as Elements of Space making Understanding the impact of stairs and ramps on spatial perception and circulation
26 <sup>th</sup> May	2:00pm -3:00pm 3:00pm-4:30pm	Discussion and doubt clearing session <b>Guest Lecture- Prof. Pradnya Chavan - Architectural story-telling and narrative</b>
27 <sup>th</sup> May	2:00pm -4:30pm	Module 6: Doors and Windows as Elements of Space making Analysis of the role of doors and windows in framing views and influencing spatial perception
28 <sup>th</sup> May	2:00pm -4:30pm	Module 7: Integration of Elements and Spatial Narratives Analysis of how the integration of architectural elements shapes spatial narratives
29 <sup>th</sup> May	2:00pm -4:30pm	Final presentation by the students
30 <sup>th</sup> May	2:00pm -4:30pm	Module 8: Reflection and Synthesis Final Students feedback on the course



Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

### 1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

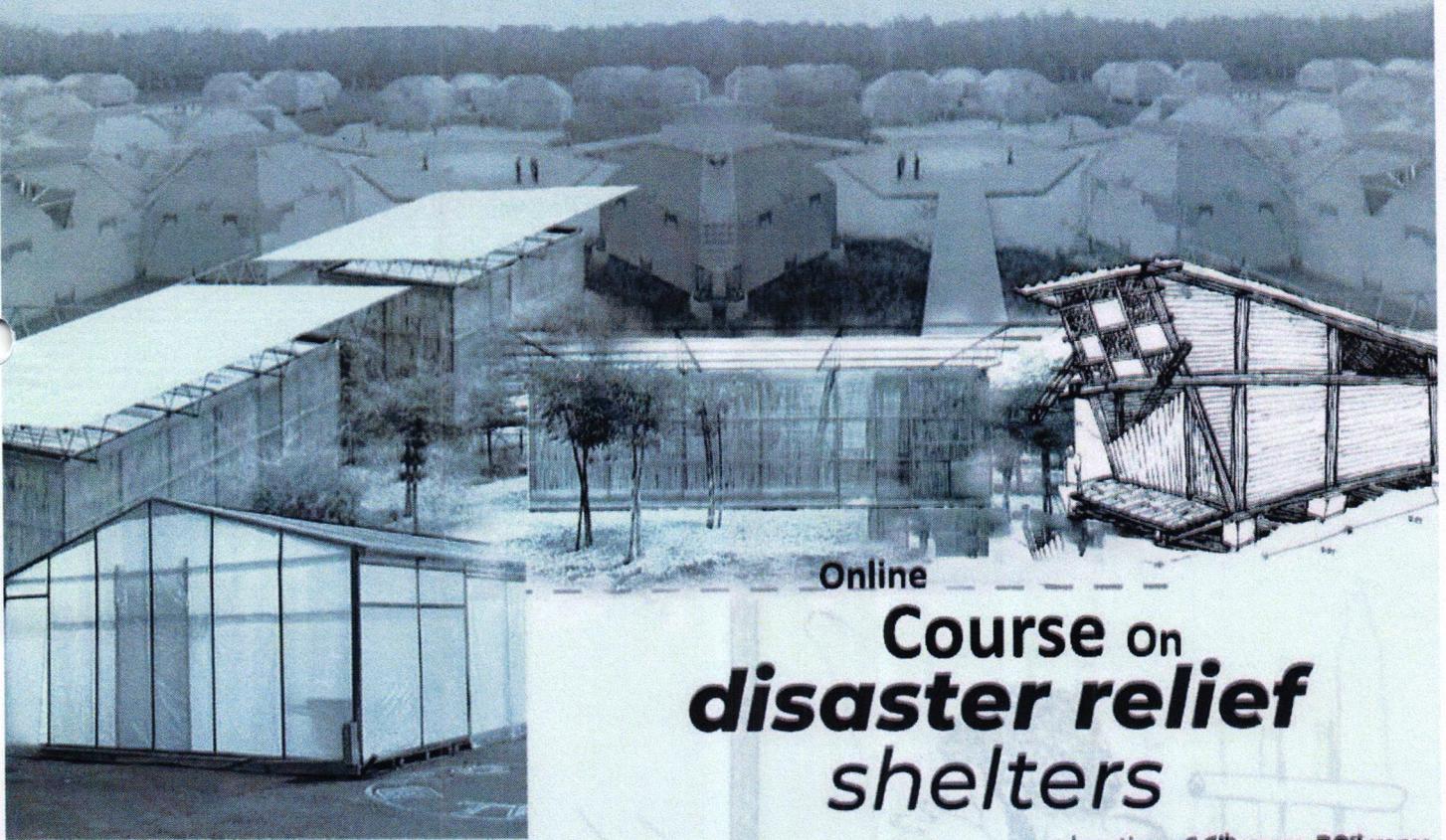
**AY 2020-21**

**Course 3- Certificate Course on Disaster Relief Shelters**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

An initiative by:  
Bharati Vidyapeeth College of Architecture,  
Navi Mumbai  
In Collaboration with ACEDGE



Online

# Course on *disaster relief shelters*

duration : 16<sup>th</sup> may- 30<sup>st</sup> may

let us  
**defeat**  
corona virus

course  
co-ordinator



**BHARATI VIDYAPEETH**  
COLLEGE OF ARCHITECTURE  
NAVI MUMBAI

**ACEDGE**  
an ethics of learning



**Suvarna Thakare**  
Assistant Professor



**Tejaswini HM**  
Associate Professor



**Priyanka Tripathi**  
Assistant Professor



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

Online Course on  
**'Disaster Relief Shelters'**  
Duration - 16<sup>th</sup> May to 30<sup>th</sup> May 2020  
Timing - 12:30 pm to 3:00 pm  
Platform- Zoom in collaboration with Acedge

**Online Course Description:**

The Design of Disaster Relief Shelters online course focuses on providing students with the knowledge and skills required to design safe, sustainable, and efficient shelters for disaster-affected population. Students will learn about the principles and considerations involved in shelter design, including site selection, structural design, materials, and spatial planning. The course will cover various types of disaster relief shelters, such as temporary emergency shelters and transitional housing, and explore innovative approaches to address the unique challenges of providing shelter in post-disaster scenarios. Through lectures, case studies and assignments, students will develop a comprehensive understanding of the design process and its critical role in meeting the shelter needs of disaster-affected communities.

**Course Objectives:**

- Understand the principles and concepts of disaster shelter design and humanitarian aid.
- Analyze the specific requirements and challenges associated with designing disaster relief shelters.
- Develop skills in site selection, spatial planning, and assessing the needs of affected populations.
- Design structurally sound and resilient shelters using appropriate materials and construction techniques.
- Incorporate sustainable and environmentally friendly design features in shelter solutions.
- Explore innovative approaches and technologies for rapid deployment and scalability of shelter designs.
- Understand the cultural, social, and psychological aspects of shelter design for affected communities.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

- Apply design thinking and problem-solving techniques to address complex challenges in shelter design.

### Course Outline:

#### Module 1: Introduction to Disaster Relief Shelters

- Overview of disaster management principles and frameworks
- Importance of shelter in emergency response and recovery
- Case studies of successful disaster relief shelter designs

#### Module 2: Need, Assessment and Site Selection

- Conducting assessment for disaster relief shelters
- Factors to consider in site selection, including safety, accessibility, and community integration

#### Module 3: Spatial Planning and Design Principles

- Principles of spatial planning for disaster relief shelters
- Zoning and layout design to accommodate diverse needs and activities
- Universal design considerations for accessibility and inclusivity

#### Module 4: Social and Cultural Aspects of Shelter Design

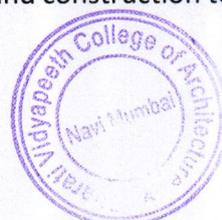
- Understanding the social and cultural dimensions of shelter design
- Gender-sensitive design considerations
- Social support and community engagement in shelter projects

#### Module 5: Sustainable and Low-Impact Design

- Incorporating sustainable design principles in shelter solutions
- Energy-efficient and environmentally friendly design features
- Waste management and water conservation strategies

#### Module 6: Structural Design and Construction Techniques

- Design principles for structurally sound and resilient shelters
- Selection of appropriate materials and construction techniques

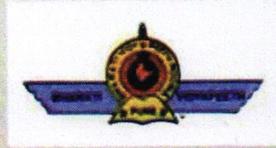


  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**Bharati Vidyapeeth**

# COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Seismic and wind-resistant design considerations

#### Module 7: Innovative Shelter Technologies

- Introduction to innovative shelter technologies and materials
- Rapid deployment and scalability of shelter designs
- Case studies of innovative shelter solutions

#### Module 8: Design Thinking and Problem-Solving

- Applying design thinking methodologies to address complex challenges
- Human-centered design approaches in shelter design
- Prototyping and testing design solutions

#### Assessment Methods:

- Written assignments and discussion to assess theoretical knowledge.
- Presentations to demonstrate comprehensive understanding and application of course concepts.
- Group discussions and case study analysis to foster critical thinking and problem-solving abilities.

#### Course Coordinators:

**Ar. Tejaswini H.M.**, Asso Prof. BVCOA  
M. -8169046524

**Ar. Priyanka Sinha**, Asso.. Prof., BVCOA  
M. - 9137386491

**Ar. Suvarna Thakare**, Asst. Prof., BVCOA  
M.-8452016532

#### Guest Speakers:

Speaker 1- **Ar. Anshu Sharma**, Principal architect, SEED org.

Speaker 2- **Mr. Kamal**, Principal architect, SEED org.

Speaker 3- **Prof. Bobby Vijaykar**, Professor, Rachana Sansad College of Architecture



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

**Schedule of Course**  
**'Disaster Relief Shelters'**  
Duration - 16<sup>th</sup> May to 30<sup>th</sup> May 2020

Date	Time	Description
16 <sup>th</sup> May	12:30pm - 3:00pm	Module 1- Introduction- Disasters and their types, Case studies of successful disaster relief shelter designs Distribution of students into groups for each types of disasters
18 <sup>th</sup> May	12:30pm - 3:00pm	Module 2- Factors to consider in site selection, including safety, accessibility, and community integration Assignment 1: Disaster relief shelter case studies
19 <sup>th</sup> May	12:30pm - 3:00pm	Guest Lecture- Ar. Anshu Sharma - Spatial Planning and Design Principles Module 3-Types of disaster and human response Disaster relief shelters and services Group presentations and discussion on Assignment 1
20 <sup>th</sup> May	12:30pm - 3:00pm	Module 4- Understanding the social and cultural dimensions of shelter design Role of gender in disaster rehabilitation
21 <sup>st</sup> May	12:30pm - 3:00pm	Presentation by students- Uttarakhand Floods- 2013 Indian Ocean Tsunami-2005 Nepal Earthquake response- 2015 Assignment 2- Model and sketches of disaster relief shelters
22 <sup>nd</sup> May	12:30pm - 3:00pm	Module 5- Sustainable and Low-Impact Design Introduction to renewable, Cost effective and innovative material
23 <sup>rd</sup> May	12:30pm - 3:00pm	Group presentations and discussion on Assignment 2
25 <sup>th</sup> May	12:30pm - 3:00pm	Guest Lecture. Prof. Bobby Vijaykar- Origami folds and its use in disaster shelters Stability of structure through origami folds
26 <sup>th</sup> May	12:30pm - 3:00pm	Guest Lecture- Ar. Anshu Sharma and Mr. Kamal Module 6: Structural Design and Construction Techniques Shelter design and techniques Selection of appropriate materials and construction techniques with Case study Typical joinery details
27 <sup>th</sup> May	12:30pm - 3:00pm	Module 7: Innovative Shelter Technologies Innovative technologies and materials
28 <sup>th</sup> May	12:30pm - 3:00pm	Module 8: Design Thinking and Problem-Solving
29 <sup>th</sup> May	12:30pm - 3:00pm	Finalization of students work in the form of sketches and model
30 <sup>th</sup> May	12:30pm - 3:00pm	Discussion on takeaways, experience and feedback



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

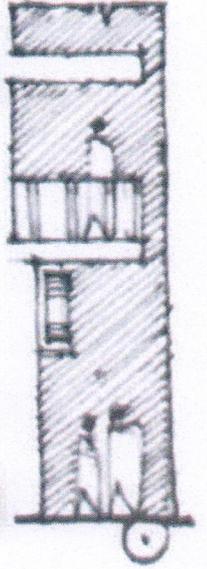
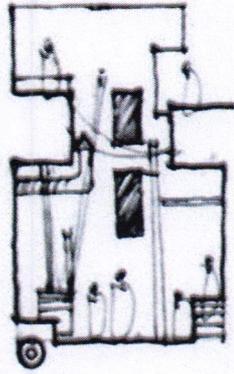
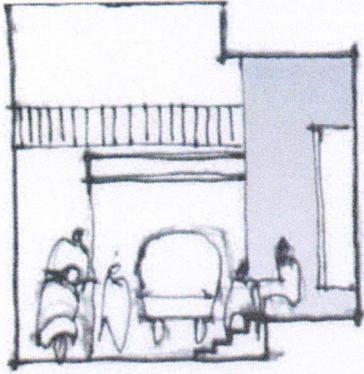
**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2020-21**

**Course 4- Certificate Course on Habitation Aaj Kal**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



An Initiative by:  
 Bharati Vidyapeeth College of Architecture, Navi Mumbai  
 In Collaboration with ACEDGE

Online  
**Course**  
 on  
**habitation**

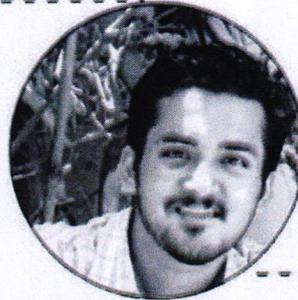
**आज... कल**  
 the future of today's habitats

duration: 11th may-29th may

let us  
**defeat**  
 corona virus



co-ordinators:



**nikhil shah**  
 urban designer/assistant prof.



**pritam dey**  
 urban designer/assistant prof.



Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Online Course on  
**'Habitation Aaj Kal'**  
Platform- **Zoom** in collaboration with Acedge

**Course Overview:**

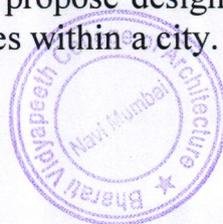
The online course "Habitation Aaj Kal" explores the relationship between architecture, habitation, and the broader urban context. It focuses on understanding the role of architecture in creating sustainable and livable habitats within the context of communities and cities. Through theoretical exploration, online case studies, and design projects and assignments, students will gain knowledge and skills in designing inclusive, community-oriented, and environmentally conscious built environments.

**Course Duration: 11<sup>th</sup> May to 29<sup>th</sup> May 2020**

**Timing - 2:00 pm to 4:30 pm**

**Learning Objectives:**

- Understand the concept of habitation in relation to habitat, community, and city.
- Analyze the social, cultural, and environmental factors that shape habitation within urban contexts.
- Explore the principles of urban design and planning and their impact on habitation.
- Investigate the importance of community engagement and participation in the design and development of projects.
- Examine sustainable design strategies and their application in creating environmentally responsible habitats within urban areas.
- Develop skills in site analysis, spatial organization, and architectural design for community-oriented projects.
- Apply research and analysis to propose design solutions that address the needs of diverse communities within a city.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Enhance communication skills through visual presentations and design documentation through assignments.

### Course Outline:

1. Introduction to Habitation and the Urban Context
  - Understanding the concept of habitation in relation to habitat, community, and city
  - Overview of urbanization and its impact on habitation patterns
  - Historical development of urban communities and their architectural responses
2. Urban Design Principles for Livable Communities
  - Principles of urban design and their application in creating sustainable and inclusive communities
  - Analysis of successful urban design projects and their impact on habitation
  - Designing for walk-ability, connectivity, and accessibility within the urban fabric
3. Social and Cultural Dimensions of Habitation
  - Socio-cultural influences on habitation within urban contexts
  - Designing for diverse communities and fostering inclusivity
  - Community engagement and participatory design processes
4. Environmental Sustainability in Urban Habitation
  - Sustainable design strategies for urban habitats
  - Energy-efficient building systems and technologies
  - Water management and conservation in urban environments
  - Integration of green spaces and natural elements in urban design
5. Case Studies: Successful Urban Habitation Projects
  - Analysis of exemplary urban habitation projects from around the world
  - Evaluation of their design principles, community integration, and sustainability features
  - Lessons learned and best practices for designing urban habitats
6. Urban Planning and Policy
  - Overview of urban planning principles and regulations
  - Understanding the role of policy in shaping urban habitation
  - Examination of case studies on successful urban planning and policy interventions



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

7. Presenting and Communicating Design Proposals
- Effective communication techniques for presenting design proposals and presentation skills
  - Visual representation methods, including drawings and digital tools.

**Course Coordinators:**

**Ar. Pritam Dey**, Asso. Prof., BVCOA, M- 9163890843

**Ar. Nikhil Shah**, Asst. Prof., BVCOA,

**Guest Speakers:**

Speaker 1-**Prof. Ritu Deshmukh**

**Assessment Methods:**

- Active participation in class discussions and activities
- Individual and group assignments related to urban habitation analysis and design
- Design project presentations and reviews
- Comprehensive project submission

**Reference Material:**

Here are some reference materials that can be useful for the course "Habitation Aaj Kal"

1. The Death and Life of Great American Cities by Jane Jacobs
2. The Image of the City by Kevin Lynch
3. The Social Life of Small Urban Spaces by William H. Whyte
4. Cities for People by Jan Gehl
5. The Well-Tempered City: What Modern Science, Ancient Civilizations, and Human Nature Teach Us About the Future of Urban Life by Jonathan F. P. Rose
6. Walkable City: How Downtown Can Save America, One Step at a Time by Jeff Speck
7. Design with Nature by Ian L. McHarg
8. Site Planning and Design Handbook by Thomas H. Russ



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

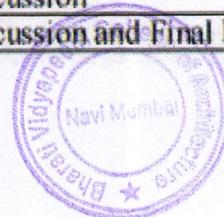
Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M /

Date :

**Schedule for the online course 'Habitation Aaj Kal'**  
Duration - 11<sup>th</sup> May to 29<sup>th</sup> May 2020

Date	Time	Description
11 <sup>th</sup> May	2:00pm -4:30pm	Introduction to Habitation and the Urban Context - Understanding Habitat and Community I
12 <sup>th</sup> May	2:00pm -4:30pm	Introduction to Habitation and the Urban Context - Understanding Habitat and Community II
13 <sup>th</sup> May	2:00pm-4:30pm	Urban Design Principles for Livable Communities -Reading spaces and insights into spatial terminologies I Group-based presentation focusing on community-oriented urban habitation
14 <sup>th</sup> May	2:00pm-4:30pm	Urban Design Principles for Livable Communities -Reading spaces and insights into spatial terminologies II - Discussion and Presentation by students
15 <sup>th</sup> May	2:00pm-4:30pm	Social and Cultural Dimensions of Habitation -Retrospection of the past and reflection on the present
18 <sup>th</sup> May	2:00pm-4:30pm	Environmental Sustainability in Urban Habitation - Learning from cities past and present I
19 <sup>th</sup> May	2:00pm-4:30pm	Case Studies: Successful Urban Habitation Projects - Learning from cities past and present II Case study of relevant project on different aspects in groups through sketches
20 <sup>th</sup> May	2:00pm-4:30pm	Urban Planning and Policy - Determinants of development
21 <sup>st</sup> May	2:00pm-4:30pm	- Projecting Future - Presenting and Communicating Design Proposals
22 <sup>nd</sup> May	2:00pm-4:30pm	Discussion and Presentation by the students
26 <sup>th</sup> May	2:00pm-4:30pm	Speaker I Prof. Ritu Deshmukh Q&A session
27 <sup>th</sup> May	2:00pm-4:30pm	Students Discussion
28 <sup>th</sup> May	2:00pm-4:30pm	Students Discussion
29 <sup>th</sup> May	2:00pm-4:30pm	Students Discussion and Final Presentation



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2020-21**

**Course 5- Certificate Course on Impact of COVID-19 on Public Spaces**



  
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

An initiative by:  
Bharati Vidyapeeth College of Architecture, Navi Mumbai  
In Collaboration with ACEDGE

**Co-ordinators**



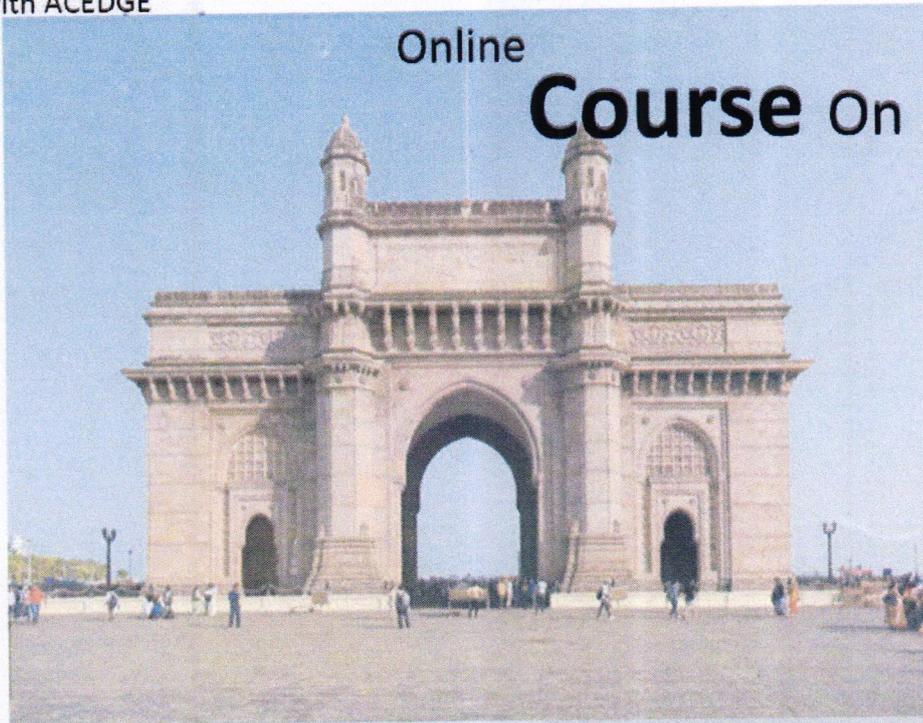
**Ruta Pawar**  
Associate Professor



**Harshada Katkar**  
Assistant Professor



**Neha Pradhan**  
Assistant Professor



Source: Shutterstock.com

**IMPACT OF  
COVID 19 ON  
PUBLIC SPACES**

**Duration : 11th may-29th may 2020**

let us  
**defeat**  
corona virus

**ACEDGE**  
an *edgewise* of learning



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

Online Course on  
**'Impact of COVID 19 on Public Spaces'**

Duration - 11<sup>th</sup> May to 28<sup>th</sup> May 2020

Timing - 1:30 pm to 4:00 pm

Platform- Zoom in collaboration with Acedge

**Online Course Overview:**

The online course "Impact of COVID-19 on Public Spaces" focuses on the transformation of public spaces in response to the pandemic. It will explore the challenges that will be faced by architects and designers in adapting public spaces to ensure safety, health, and social interaction. Through theoretical exploration, case studies, and design projects, students will examine the evolving role of public spaces and develop innovative design solutions that address the needs of post-pandemic communities.

**Learning Objectives:**

- Understand the impact of COVID-19 on public spaces and the need for adaptability in design.
- Analyze the challenges that will be faced by architects and urban planners in rethinking public spaces in response to the pandemic.
- Explore design strategies to enhance safety, health, and social distancing in public spaces.
- Investigate the psychological and social implications of public space design during and post-pandemic.
- Examine case studies of public space adaptations in various contexts.
- Develop skills in spatial planning, circulation, and zoning to accommodate changing requirements in public spaces.
- Apply research and analysis to propose design solutions that balance safety, functionality, and community engagement.
- Enhance communication skills through visual presentations, drawings, and models to effectively convey design proposals.

**Course Outline:**

- Introduction to the Impact of COVID-19 on Public Spaces
  - Overview of the pandemic's effects on public spaces
  - Challenges and opportunities for architects and designers
- Designing for Safety and Health in Public Spaces
  - Analysis of health guidelines and regulations influencing public space design
  - Spatial planning for social distancing and crowd management
  - Sanitization strategies and contact-less design solutions
- Case Studies: Successful Adaptations of Public Spaces
  - Examination of international and local case studies of public space transformations



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**Bharati Vidyapeeth**

# COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**

(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Evaluation of design strategies, user experiences, and community response
  - Psychological and Social Implications of Public Space Design
- Understanding the importance of human interaction and well-being in public spaces
- Designing for comfort, inclusivity, and community engagement
- Integration of nature and biophilic design elements in public spaces
  - Re-imagining Public Spaces
- Design principles for re-imagining parks and plazas in response to the pandemic
- Flexibility and adaptability in park design to accommodate changing needs
- Integration of recreational, cultural, and social activities in outdoor spaces
  - Redesigning Retail and Commercial Spaces
- Strategies for redesigning retail and commercial spaces to ensure safety and customer experience
- Balancing functional requirements with aesthetics and branding
- Integration of digital technologies in retail and commercial environments
  - Future Perspectives: Post-Pandemic Public Space Design
- Anticipating the future of public space design beyond the pandemic
- Sustainable and resilient design strategies for long-term adaptability
- Emerging technologies and innovations in public space design

### Design Assignment: Adaptive Public Space Project

- Group-based design project focusing on the adaptive design of a public space in response to the pandemic
- Site analysis, concept development, and design exploration
- Integration of safety measures, social interaction, and community engagement
- Presentation of design proposals with visual representations and digital model

### Assessment Methods:

- Active participation in class discussions and activities
- Individual and group assignments related to public space analysis and design
- Design assignment presentations and reviews

### Course Coordinators:

**Ar. Ruta Pawar**, Asso. Prof., BVCOA, M.-9850975517

**Ar. Harshada Katkar**, Asst. Prof., BVCOA, M- 8380074745

**Ar. Neha Pradhan**, Asst. Prof., BVCOA, M-9867906037

### Guest Speakers:

Speaker 1- **Ar. Uma Ghotge** Architects United, Pune

Speaker 2- **Ar. Abhimanyu Dalal**, Principal Architect, ADA, Delhi

Speaker 3- **Ar. Anand Wadwekar**, Associate Professor, SPA, Bhopal

Speaker 4 - **Ar. Rahul Chemburkar**, Heritage conservation consultant

Speaker 5 - **Ar. S.K. Das**, Principal Architect, S K Das Associated Architects



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

**Reference Material:**

Here are some reference materials that can be useful for the course "Impact of COVID-19 on Public Spaces"

- "The Death and Life of Great American Cities" by Jane Jacobs
- "The Image of the City" by Kevin Lynch
- "Cities for People" by Jan Gehl
- "The Social Life of Small Urban Spaces" by William H. Whyte
- "Design with Nature" by Ian L. McHarg
- "Happy City: Transforming Our Lives Through Urban Design" by Charles Montgomery
- "Urban Design Reader" edited by Michael Larice and Elizabeth Macdonald
- "Site Planning and Design Handbook" by Thomas H. Russ
- "The Architecture of Community" by Léon Krier
- "Urbanism in the Age of Climate Change" by Peter Calthorpe
- "Ecological Urbanism" edited by Mohsen Mostafavi and Gareth Doherty



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
 Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
 M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
 Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
 (G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Schedule for the online course  
**'Impact of COVID 19 on Public Spaces'**  
 Duration - 11<sup>th</sup> May to 28<sup>th</sup> May 2020

Date	Time	Description
11 <sup>th</sup> May	1:30pm - 4:00pm	● Introduction to the Impact of COVID-19 on Public Spaces - Introduction to the Course objectives - Role of Architecture in Pandemic
12 <sup>th</sup> May	1:30pm - 4:00pm	● Designing for Safety and Health in Public Spaces - Learning from existing Pandemic scenario - Future solutions for public building reforms
13 <sup>th</sup> May	1:30pm - 4:00pm	● Case Studies: Successful Adaptations of Public Spaces - Case study for new proposal considering pandemic - Assignment- Case study online (Group formation and briefing for 3 types of public buildings (Museum, mall and Hotel))
14 <sup>th</sup> May	1:30pm - 4:00pm	Guest Lecture- Ar. Uma Ghotge- -New planning idea in COVID- 19 Discussion with students on assignment progress
15 <sup>th</sup> May	1:30pm - 4:00pm	Case study presentation by students Guest Lecture- Ar. Abhimanyu Dalal - Opportunities in urban planning due to COVID-19
18 <sup>th</sup> May	1:30pm - 4:00pm	● Psychological and Social Implications of Public Space Design - Social Behaviour as precaution for pandemic - Automation in architecture as a response to Pandemic
19 <sup>th</sup> May	1:30pm - 4:00pm	● Re-imagining Public Spaces - Planning modifications towards respond to pandemic Guest Lecture- Ar. Anand Wadwekar- COVID-19 an introspection for changing cities
20 <sup>th</sup> May	1:30pm - 4:00pm	Group-based study focusing on the adaptive design of a public space in response to the pandemic - Site allocation and requirements
21 <sup>st</sup> May	1:30pm - 4:00pm	Site analysis discussion Guest Lecture- Ar. Rahul Chemburkar- Concept of 'High in Time' - History in making
22 <sup>nd</sup> May	1:30pm - 4:00pm	Discussion with students on their proposals - Introduction to innovative ways and material responding to pandemic
25 <sup>th</sup> May	1:30pm - 4:00pm	● Future Perspectives: Post-Pandemic Public Space Design - Pandemic transform for urban spaces Guest Lecture- Ar. S.K. Das- City- Then and Now
26 <sup>th</sup> May	1:30pm - 4:00pm	- Planning and preparedness for emergency situations of pandemic - Codal provision and mandates in NBC for pandemic
27 <sup>th</sup> May	1:30pm - 4:00pm	Discussion on students work
28 <sup>th</sup> May	1:30pm - 4:00pm	Presentation by students



Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2020-21**

**Course 6- Certificate Course on Industrial Heritage of India**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

An initiative by:  
Bharati Vidyapeeth College of Architecture, Navi Mumbai  
In Collaboration with ACEDGE

Online  
**COURSE**  
on  
**Industrial  
heritage  
of  
India**

duration : 11th may-27th may

web platform :

Registration mandatory

## What is it about?

Industries introduced in India by the colonial rulers in the late-nineteenth century brought far-reaching changes to the manufacturing set-up of the country, in turn affecting the trade nationally and internationally. The transportation networks, especially railways, were developed to facilitate trade of raw materials from the hinterlands to the ports, so that they could feed the mills in England. These industries led to rapid urbanization in some Indian towns where they were situated and a dynamic culture of new social order developed.

Today, because of rapid changing of technology and de-industrialization, many of these industrial sites have been abandoned. Owing to their central locations, they are facing the effects of urban pressures and have become available for development. The workshop aims at understanding the values of these sites and ultimately the need to protect them.

let us  
**defeat**  
corona virus



**ACEDGE**  
an *edg* of learning

co-ordinators :



Ajinkya **Vekhande**  
Conservation architect/  
asst. prof.



Astha **Khare**  
Conservation architect/  
asst. prof.



Madhura **Naik**  
Digital architect/  
asst. prof.



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Online Course on  
**'Industrial Heritage of India'**  
Duration: 11th May 2020 to 27th May 2020  
Platform- **Zoom** in collaboration with Acedge

The utilization of industrial heritage as a tool for urban development quickly spread by the late 20<sup>th</sup> century as result of to promote inclusive approach towards the Industrial heritage which was in derelict and needed attention.

Even though many excellent examples of Industrial heritage has been restored, but there are still innumerable factories, and mills scattered around the nation that were once significant landmarks in India's growth story but are now little more than skeletal remains that are left to lie abandoned and covered with moss.

The concept of "heritage" and the notion of "industries" appear to be at odds with one another, and to fill this gap, this course will highlight the vast industrial heritage of India

Consequently, one important approach is to exploit industrial past as a resource:

- To develop a new urban narrative
- To provide new functions for the abandoned industries for adaptive reuse

The whole course will be divided into three parts. Creating awareness of the term "industrial heritage" will be first. The subsequent discussion will focus on conservation, and the third will examine the future scope. Virtual site visits will be incorporated into the curriculum to encourage curiosity and find solutions to problems relating to management and conservation.

Students will learn about various strategies for the preservation, conservation, and adaptive reuse of such places during the process.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Founder :  
**Dr. Patangrao Kadam**  
 M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
 Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
 (G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

**Online Course on 'Industrial Heritage of India'**

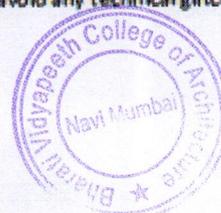
Bharati Vidyapeeth College of Architecture, Navi Mumbai

Duration: 11th May 2020 to 27th May 2020

**Schedule**

STAGE I- Understanding of basics of heritage				
1.	11 <sup>th</sup> - 12 <sup>th</sup> May	02:00 - 03:30 pm 03:30 - 04:00 pm 04:00 - 04:30 pm	Introduction to Architectural Conservation Discussion and suggested readings Distribution of work	Web platform - Zoom
2.	13 <sup>th</sup> - 14 <sup>th</sup> May	02:00 - 04:00 pm	Lecture by Coordinators Work on data	Zoom
3.	15 <sup>th</sup> May	02:00 - 04:00 pm 04:00 - 04:30 pm	Presentation by guest speaker Ar. Yash Joshi Q/A session	ACEDGE
4.	16 <sup>th</sup> - 17 <sup>th</sup> May	Sat-Sun	Working on Stage I Presentation	
STAGE 2- Industrial heritage of India				
5.	18 <sup>th</sup> - 20 <sup>th</sup> May	By 02:00 pm 02:00 - 04:00 pm 04:00 - 04:30 pm	Presentation on Stage I Introduction of Stage II • History of Industrialization in India • Understanding industrial culture of India Discussion and suggested readings	Google Classroom, Zoom
6.	21 <sup>st</sup> May	02:00 - 04:00 pm	Work on data collection Discussions	Zoom
7.	22 <sup>nd</sup> May	02:00 - 04:00 pm 04:00 - 04:30 pm	Presentation by guest speaker Ar. Abantika Mukherjee Q/A session	ACEDGE
8.	23 <sup>rd</sup> - 24 <sup>th</sup> May	Sat-Sun	Working on Stage II Presentation	
9.	25 <sup>th</sup> - 27 <sup>th</sup> May	02:00 - 04:30 pm	Final Presentation	Zoom

Note: All the students have to login by 1:45pm to avoid any technical glitches



  
 Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
 M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
 Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
 (G.D.DID., P.G.DID., IIA, M.Sc.ID., M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Week I (Stage I)		
1.	11 <sup>th</sup> - 12 <sup>th</sup> May	#TBT to your memory with heritage! Share your perception of a memory with heritage in the form of drawing/illustration/painting/doodle/video clip/any other medium you like, with a brief write-up/quote/verse/poetry etc.
2.	13 <sup>th</sup> - 14 <sup>th</sup> May	HERITAGE OF MAHARASHTRA (or the state assigned to you) An Indian state has been assigned to you. Task 1: Make a timeline of the Architectural history of the state. Task 2: Categorize on the basis of your learning, the heritage of that state with their illustrations and descriptions in your own words.
3.	15 <sup>th</sup> May	Guest Speaker- Ar. Yash Joshi HERITAGE OF MAHARASHTRA (or the state assigned to you) TASK 3: As per your understanding from the sessions, identify heritage values associated with 5 heritage sites of the state, with justification.
4.	16 <sup>th</sup> - 17 <sup>th</sup> May	Working on Stage I Presentation (compilation of all the assigned activities).
Week 2 (Stage II)		
5.	18 <sup>th</sup> - 20 <sup>th</sup> May	Submission of Stage I presentation for review. INDUSTRIAL HERITAGE OF MAHARASHTRA (or the state assigned to you) Task 1: Find out the traditional Industrial culture/s of the state (continuing / dead). List down the Industrial heritage with descriptions and illustrations. Task 2: Shortlist one Industrial heritage site from your findings. <ul style="list-style-type: none"> <li>• Identify the values associated.</li> <li>• Give the statement of significance.</li> <li>• What should be the grading criteria for it?</li> <li>• Analyze what degree of intervention is required for its conservation.</li> </ul>
6.	21 <sup>st</sup> May	Task 3: Work on the Proposal. What do you think should be done to save the heritage site you've selected? Work at the conceptual level and give proposals.
7.	22 <sup>nd</sup> May	Guest Speaker - Ar. Abantika Mukherjee
8.	23 <sup>rd</sup> - 24 <sup>th</sup> May	Working on Stage II Presentation (compilation of all Stage I and Stage II activities in the sequence).
9.	25 <sup>th</sup> - 27 <sup>th</sup> May	Final Presentation.



  
 Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai

Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

### Course Coordinators:

**Ar. Ajinkya Vekhande**, Asst. Prof. BVCOA M.-9561667847  
**Ar. Astha Khare**, Asst. Prof., BVCOA, M- 9406666232  
**Ar. Madhura Naik**, Asst. Prof., BVCOA, M.-9833798366

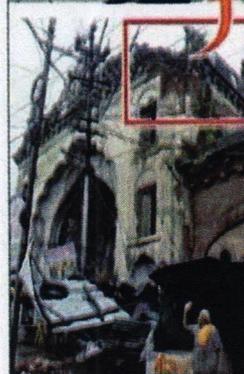
### Guest Speakers:

Speaker 1- **Ar. Yash Joshi**, Assistant Professor, College of Architecture, IPS Academy, Indore  
Speaker 2- **Ar. Abantika Mukherjee**, Conservation Architect, Dharohar India

## How do historic buildings decay?

- Gravity
- Actions of man – neglect, ignorance, vandalism, fires – greatest damage
- Diverse climatic & environmental effects – botanical, biological, chemical & entomological
- Climate (Micro & Macro) – Radiations, temperature, moisture, wind & sunshine
- Natural disasters – Earthquake, hurricanes, floods, landslides, fires caused by lightning

### CRUMBLING BRICK BY BRICK



**CLOSE SHAVE:** The side section of the gate caved in at 2pm on Sunday damaging roof of four makeshift shops. Luckily no one was injured in the incident

### GATE TO ROYAL PAST

- ▶ The 70-foot-tall Dakhil Darwaza is the main entry point to the 220-room historic Taj Mahal palace
- ▶ Being restored by the BMC, the gate is believed to be the tallest in central India



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

### 1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

**AY 2020-21**

**Course 7- Certificate Course on Landscape and Site Development**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

An **Initiative** by Bharati Vidyapeeth College of Architecture, Navi Mumbai  
In **Collaboration** with ACEDGE

Online  
**Course**  
on

# Landscape & Site development

Assessing the site before intervention

course co-ordinator :

Duration: 11th may-29th may

let us  
**defeat**  
corona virus



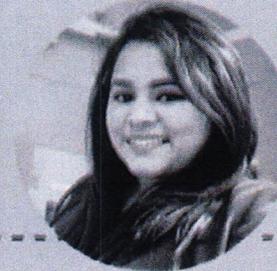
**ACEDGE**  
an *edgewise* of learning



**Sonu Bothe Salunke**  
Landscape Architect  
Assistant professor



**Himika Lakhanpuria**  
Architect  
Assistant professor



**Kirti Lonerkar**  
Architect & Urban Designer  
Assistant professor



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Course on  
**'Landscape and Site Development**  
Duration - 11<sup>th</sup> May to 29<sup>th</sup> May 2020  
Timing - 2:00 pm to 4:30 pm

**Course Overview:**

The course "Landscape and Site Development" focuses on the integration of landscape design principles and site planning strategies within the context of architectural projects. It explores the importance of considering the surrounding environment, natural features, and human factors when designing sites for various architectural interventions. Through theoretical exploration, online case studies, and design exercises, students will develop a comprehensive understanding of site analysis, landscape design principles, and the sustainable development of outdoor spaces.

**Learning Objectives:**

- Understand the principles and significance of landscape architecture in architectural design.
- Analyze and interpret site characteristics, including topography, vegetation, climate, and cultural context.
- Explore sustainable design strategies for site development and integration with architectural interventions.
- Develop skills in site analysis, master planning, and landscape design principles.
- Apply knowledge of site development to address environmental, social, and cultural aspects.
- Evaluate the relationship between built and natural environments and their impact on human experience.
- Integrate site-specific design solutions that respond to the needs of users, climate, and context.
- Enhance presentation and communication skills through visual representation of landscape and site design proposals.

**Course Outline:**

- Introduction to Landscape Architecture and Site Development
- Overview of landscape architecture as a discipline and its role in architectural design
- Importance of site analysis and understanding contextual factors



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

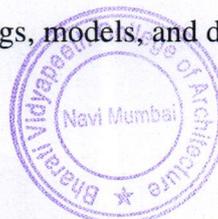
Ref. No. : BV / COA / N.M./

Date :

- Site Analysis and Assessment
  - Techniques for site analysis, including topography, climate, hydrology, and cultural context
  - Identifying site opportunities and constraints for design interventions
- Landscape Design Principles
  - Introduction to fundamental principles of landscape design, including scale, proportion, balance, and unity
  - Exploration of design elements, such as vegetation, water features, hardscape and circulation
- Sustainable Site Development
  - Integration of sustainable design principles in site planning and landscape design
  - Strategies for water management, biodiversity, energy efficiency, and material selection
- Case Studies in Landscape Architecture
  - Analysis of exemplary landscape architecture projects and their integration with architectural interventions
  - Examination of design concepts, materiality, and user experiences
- Site Planning and Master Planning
  - Techniques for site planning, circulation, zoning, and land use allocation
  - Design considerations for creating functional, cohesive, and aesthetically pleasing outdoor spaces
- Landscape Architecture and Urban Design
  - Understanding the relationship between landscape architecture, urban design, and the built environment
  - Integration of landscape elements in urban contexts and public spaces

**Assessment Methods:**

- Active participation in class discussions and critiques
  - Group assignments related to site analysis, landscape design principles, and sustainable strategies
  - Design project presentations and reviews
- Group design project focusing on the development of a site in response to a specific architectural program  
Integration of landscape design principles, sustainable strategies, and user-centered design approach  
Presentation of design proposals through drawings, models, and digital visualizations



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D., Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

### Course Coordinators:

- Ar. Sonu Bothe**, Asst. Prof., BVCOA, M.-8767286805  
**Ar. Himika Lakhanpuria**, Asst. Prof., BVCOA, M- 9819140753  
**Ar. Kirti Lonerkar**, Asst. Prof., BVCOA, M-9423891079

### Guest Speakers:

- Speaker 1- **Ar. Devyani Deshmukh Upasani**, Landscape Consultant,  
Urban design cell, Mumbai  
Speaker 2- **Ar. Savita Punde and Ar. Ravindra Punde**, Co-founder  
of Design Cell  
Speaker 3- **Ar. Shilpa Bakshi Chandawarkar**, Landscape consultant,  
IES College of architecture, Mumbai

### Reference Material:

Here are some reference materials that can be useful for the course "Landscape and Site Development in Architecture":

- Site Engineering for Landscape Architects by Steven Strom, Kurt Nathan, and Jake Woland
- Landscape Architecture: A Manual of Environmental Planning and Design by Barry Starke
- Landscape Architectural Graphic Standards by Leonard J. Hopper
- Landscape Architecture: An Introduction by Robert Holden and Jamie Liversedge
- Site Planning and Design Handbook by Thomas H. Russ
- Landscape Architecture Documentation Standards: Principles, Guidelines, and Best Practices by Design Workshop
- Landscape Architecture: Theory, Application, Practice by Michael D. Murphy
- Landscape Architecture: A Manual of Environmental Planning and Design by John Ormsbee Simonds



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
 Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
 M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
 Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
 (G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M /

Date :

**Schedule for the course**  
**'Landscape and Site Development**  
 Duration - 11th May to 29th May 2020

Date	Time	Description
11 <sup>th</sup> May	2:00pm -4:30pm	● Introduction to Landscape and Site Planning and development
12 <sup>th</sup> May	2:00pm -4:30pm	● Site Analysis and Assessment - Landscape and landforms - Topography
13 <sup>th</sup> May	2:00pm-4:30pm	● Site Analysis and Assessment - Understanding the water systems in landscape
14 <sup>th</sup> May	2:00pm-4:30pm	Discussion on Chosen cases study
15 <sup>th</sup> May	2:00pm-4:30pm	● Landscape Design Principles - Introduction to fundamental principles of landscape design, including scale, proportion, balance, and unity <b>Guest Lecture- Ar. Devyani Deshmukh Upasani</b>
18 <sup>th</sup> May	2:00pm-4:30pm	● Sustainable Site Development - Integration of sustainable design principles in site planning and landscape design -The role of soil in Landscape
19 <sup>th</sup> May	2:00pm-4:30pm	Different types of vegetation used in landscape
20 <sup>th</sup> May	2:00pm -4:30pm	<b>Guest Lecture- Ar. Sunita Punde and Ar. Ravindra Punde</b> ● Case Studies in Landscape Architecture Assignment on case studies given to students
21 <sup>st</sup> May	2:00pm -4:30pm	Discussion and doubt clearing session for assignment
22 <sup>nd</sup> May	2:00pm -4:30pm	Assignment Pre-final
25 <sup>th</sup> May	2:00pm -4:30pm	● Site Planning and Master Planning - Climate responsive landscape
26 <sup>th</sup> May	2:00pm -4:30pm	- Preserving the biodiversity within a landscape
27 <sup>th</sup> may	2:00pm -4:30pm	<b>Guest Lecture- Ar. Shilpa Bakshi Chandawarkar</b> ● Landscape Architecture and Urban Design - Understanding the relationship between landscape architecture, urban design, and the built environment
28 <sup>th</sup> May	2:00pm -4:30pm	Final presentation by students- Part 1
29 <sup>th</sup> May	2:00pm -4:30pm	Final presentation by students- Part 1 Concluding Lecture - Summary



  
 Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2020-21**

**Course 8- Certificate Course on Smart City - A Paradigm Shift Post Pandemic**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

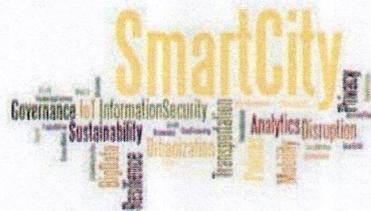
let us defeat corona virus

Duration: 11<sup>th</sup> May to 31<sup>st</sup> May

Online

# Course on Smart City A paradigm shift post Pandemic

An Initiative by Bharati Vidyapeeth College of Architecture, Navi Mumbai  
In Collaboration with ACEDGE



Sumitra Kadam

Shilpa Zahak



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## Online Course on **Smart City: A Paradigm Shift Post Pandemic**

Duration - 11<sup>th</sup> May 2020 to 31<sup>st</sup> May 2020

Timing - 2:00 pm to 4:30 pm

Platform - **Zoom** in collaboration with Acedge

### Course Overview:

The online course "Smart City: A Paradigm Shift Post Pandemic" aims to explore the concept of smart cities and how the COVID-19 pandemic has influenced and reshaped the development of urban areas. Participants will delve into the integration of technology, data, and sustainable practices in urban planning to create resilient and future-proof cities. This course will provide insights into the challenges and opportunities that arise when implementing smart city initiatives in a post-pandemic world.

**Online Course Duration: 11th May to 31st May 2020**

### Course Objectives:

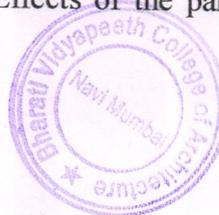
- Understand the concept of smart cities and their significance in a post-pandemic context.
- Explore the relationship between technology and urban planning in the development of smart cities.
- Examine the impact of the COVID-19 pandemic on urban areas and the need for adaptive and resilient city planning.
- Analyze case studies of successful smart city projects and their key components.
- Identify the challenges and opportunities in implementing smart city initiatives in a post-pandemic world.
- Evaluate the role of sustainability and green practices in the development of smart cities.
- Develop strategies for citizen engagement and participation in smart city projects.

### Course Outline:

Introduction to Smart Cities

- Definition and characteristics of smart cities
- Evolution of smart cities
- Benefits and challenges of smart city initiatives
- Case Studies in Smart City Implementation
- Studying successful smart city projects worldwide
- Key components and technologies employed in these projects
- Lessons learned and best practices for implementation

The Impact of COVID-19 on Urban Areas- Effects of the pandemic on cities and urban planning



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.D.I.D., P.G.D.I.D., IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

- Lessons learned from the pandemic for future city planning
- Resilience and adaptability in urban development
- Sustainable Practices in Smart Cities
- Green infrastructure and sustainable urban design
- Energy-efficient buildings and renewable energy integration
- Waste management and circular economy approaches
- Citizen Engagement and Participation
- Importance of citizen involvement in smart city initiatives
- Tools and platforms for citizen engagement
- Co-creation and collaborative urban planning approaches
- Challenges and Opportunities in Smart City Implementation
- Infrastructure and funding challenges
- Governance and policy considerations
- Ensuring equity and inclusivity in smart city development
- Future Trends and Innovations in Smart Cities
- Emerging technologies and their impact on urban development
- Smart mobility and transportation solutions
- Smart healthcare and digital services in cities

### Course Delivery Methods:

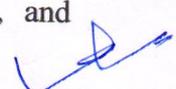
- Lectures and Presentations: Co-ordinator-led sessions providing theoretical knowledge and case study discussions.
- Group Activities and Discussions: Collaborative exercises to analyze real-world scenarios and promote critical thinking.
- Assignments allowing participants to apply concepts learned in the course.
- Guest Speakers: Inviting experts from the industry to share their experiences and insights.
- Readings and Resources: Providing relevant articles, books and reports for further exploration.

### Assessment Methods:

Assessment Method for Architectural Course on 'Smart City: A Paradigm Shift Post Pandemic':

- Group projects and presentations (assessing creativity, feasibility, and application of concepts)
- Case study analysis (identifying key components, challenges, and lessons learned)
- Assignments (application of smart city technologies and sustainable design principles)
- Class participation and discussions (engagement, contribution, and critical thinking)
- Research papers or literature reviews (information gathering, analysis, and



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

presentation)

### Course Coordinators:

**Ar. Shilpa Zabak**, Asso. Prof., BVCOA, M.-9967595836

**Ar. Sumitra Kadam** Asst. Prof., BVCOA, M- 9967915710

### Guest Speakers:

Speaker 1- **Prof. Anil Darshetkar** , Professor, Dr. Baliram Hiray  
College of Architecture, Mumbai

Speaker 2- **Dr. Binti Singh**, Associate Professor, KR VIA, Mumbai

Speaker 3- **Prof. Sreenandini Banerjee**, Program manager- National  
Urban learning platfor, Smart City Fellow, Ministry of Housing and  
Urban Affairs

Speaker 4- **Ar. Ritu Deshmukh**, Principal, Bharati Vidyapeeth College  
of Architecture, Navi Mumbai

### Reference Material:

Books:

- "Smart Cities: A Spatialised Intelligence" by Karima Kourtit, Peter Nijkamp, and Mark D. Partridge.
- "The Well-Tempered City: What Modern Science, Ancient Civilizations, and Human Nature Teach Us About the Future of Urban Life" by Jonathan F. P. Rose.

Online Resources:

- Smart Cities Council (smartcitiescouncil.com): Offers resources, case studies, and news articles on smart city initiatives and best practices.
- United Nations Sustainable Development Goals (sdgs.un.org): Provides information on how smart city development aligns with the UN's sustainable development goals.
- Smart Cities World (smartcitiesworld.net): A digital publication covering the latest trends, technologies, and projects in smart city development.



  
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth

## COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.Did, P.G.Did, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

### Schedule for the online course

**Smart City: A Paradigm Shift Post Pandemic**  
Duration - 11<sup>th</sup> May to 31<sup>st</sup> May 2020

Date	Time	Description
11 <sup>th</sup> May	2:00pm -4:30pm	Understanding what is city? - Elaborating the difference between urban area and rural area - Current challenges faed by indian cities (Housing, infrastructure, land and area development, transport, urban fringes, etc.)
12 <sup>th</sup> May	2:00pm -4:30pm	● Introduction to Smart Cities Definition and characteristics of smart cities
13 <sup>th</sup> May	2:00pm-4:30pm	● Case Studies in Smart City Implementation - Smart cities in world context - Smart cities in Indian context
14 <sup>th</sup> May	2:00pm-4:30pm	Presentation by students
16 <sup>th</sup> May	2:00pm-4:30pm	Guest Lecture- Dr. Binti Singh- Brief overview on the book- ' Smart city in India: Urban Laboratory, paradigm or trajectory written by Dr. Binti Singh and Ar. Manoj Parmar Studying successful smart city projects worldwide
18 <sup>th</sup> May	2:00pm-4:30pm	● The Impact of COVID-19 on Urban Areas - Discussion related to changes in the city during and post pandemic. - Opening different perspective and possibilities of what would the city be like post-pandemic
19 <sup>th</sup> May	2:00pm-4:30pm	Guest Lecture- Ar. Sreenandini Banerjee- Smart India Mission- Building a smart India - Discussion session
20 <sup>th</sup> May	2:00pm -4:30pm	● Sustainable Practices in Smart Cities - Green infrastructure and sustainable urban design, Energy-efficient buildings and renewable energy integration and Waste management
21 <sup>st</sup> May	2:00pm -4:30pm	Guest Lecture- Ar. Anil Darshetkar- Scenarios post-pandemic in relevance to smart city Discussion with students
22 <sup>nd</sup> May	2:00pm -4:30pm	● Citizen Engagement and Participation - Importance of citizen involvement in smart city initiatives
26 <sup>th</sup> May	2:00pm -4:30pm	● Challenges and Opportunities in Smart City Implementation - Infrastructure and funding challenges
27 <sup>th</sup> may	2:00pm -4:30pm	Final presentation by students-
28 <sup>th</sup> May	2:00pm -4:30pm	● Future Trends and Innovations in Smart Cities - Emerging technologies and their impact on urban development
29 <sup>th</sup> May	2:00pm -4:30pm	Smart mobility and transportation solutions
30 <sup>th</sup> May	2:00pm -4:30pm	- Smart healthcare and digital services in cities
31 <sup>st</sup> May	2:00pm -4:30pm	Concluding Lecture - Summary



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.D.D., P.G.D.D., IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## 1.2 Academic Flexibility

1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

AY 2020-21

Course 9- Certificate Course on **Zonal Built Heritage**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D., Navi Mumbai

An Initiative by Bharati Vidyapeeth College of Architecture, Navi Mumbai  
In Collaboration with ACEDGE

Online

Course on

# Zonal Built Heritage

Climate responsive architecture....

A learning from Heritage

co-ordinators :

Duration : 11th may-29th may



let us  
**defeat**  
corona virus



**Renuka Wazalwar**  
Architect/assistant prof.



**Harshada Ponshe**  
Architect/ Associate prof.



**Swapna Deshpande**  
Architect Planer/assistant prof.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

Online Course on  
**'Zonal Built Heritage'**  
Duration - 11<sup>th</sup> May 2020 to 29<sup>th</sup> May 2020  
Timing - 1:30 pm to 4:00 pm  
Platform- Zoom in collaboration with Acedge

**Course Description:**

This online course explores the concept of 'zonal built heritage', focusing on the preservation and conservation of architectural treasures within specific geographic zones. Students will gain a comprehensive understanding of the challenges and strategies involved in safeguarding built heritage within specific regions, considering factors such as cultural significance, historical context, and sustainable development. Through online case studies and theoretical discussions, students will develop the necessary knowledge and skills to contribute to the preservation and conservation of zonal built heritage.

**Course Objectives:**

- Understand the concept of zonal built heritage and its significance within specific geographic regions.
- Identify and assess the architectural, cultural, and historical values associated with zonal built heritage.
- Analyze the challenges and threats faced by zonal built heritage, including urbanization, natural disasters, and social factors.
- Explore the principles and best practices of preservation and conservation within zonal contexts.
- Examine the role of stakeholders, including local communities, government agencies, and architectural professionals, in the preservation and conservation process.
- Develop sustainable strategies for the adaptive reuse of zonal built heritage.
- Investigate the relationship between zonal built heritage and tourism, economic development, and community revitalization.
- Foster an appreciation for the value of zonal built heritage and its role in shaping collective memory, identity, and cultural continuity.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

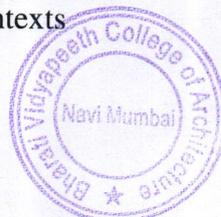
Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

**Course Outline:**

- Module 1: Introduction to Zonal Built Heritage
  - Definition and scope of zonal built heritage
  - Importance of zonal context in architectural preservation and conservation
  - Cultural significance and historical value of zonal built heritage
- Module 2: Challenges and Threats to Zonal Built Heritage
  - Urbanization and its impact on zonal built heritage
  - Natural disasters and their effect on architectural treasures
  - Social, economic, and political factors influencing the preservation of zonal heritage
- Module 3: Principles of Preservation and Conservation
  - Documentation and assessment techniques for zonal built heritage
  - Conservation ethics and approaches
  - Use of traditional and innovative conservation materials and techniques
- Module 4: Stakeholders and their Roles
  - Role of local communities in the preservation of zonal built heritage
  - Government agencies and policies for heritage conservation
  - Professional responsibilities of architects and conservation specialists
- Module 5: Sustainable Adaptive Reuse of Zonal Built Heritage
  - Principles of adaptive reuse in zonal contexts
  - Online Case studies of successful adaptive reuse projects
  - Balancing heritage preservation with sustainable development goals
- Module 6: Research and Documentation for Conservation
  - Research methodologies for zonal built heritage
  - Documentation techniques and archival practices
  - Prioritization of sites for preservation and conservation
- Module 7: Conservation Planning and Policy Development
  - Development of conservation plans for zonal built heritage
  - Integration of heritage policies into urban planning frameworks
  - Balancing preservation goals with contemporary needs
- Module 8: Future Challenges and Opportunities
  - Emerging trends in zonal built heritage preservation
  - Sustainable technologies and materials for conservation
  - Preserving intangible heritage in zonal contexts



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

**Course Delivery:** The course will be delivered through a combination of online lectures, online case studies, discussions, guest lectures, assignments, etc.

**Course Methodology:**

The course will employ a combination of online lectures, discussions, online case studies and assignments. Students will engage in group assignments and demonstrates their understanding of zonal built heritage preservation.

**Assessment Methods:**

Participation in class discussions and activities: 40%

Assignments and exercises: 60%

**Course Coordinators:**

**Ar. Harshada Ponshe**, Asso. Prof., BVCOA, M.-9321057674

**Ar. Renuka Wazalwar** Asst. Prof., BVCOA, M- 7738785873

**Ar. Swapna Deshpande**, Asst. Prof., BVCOA, M-9607327475

**Guest Speakers:**

Speaker 1- **Ar. Kirtida Unwala**, Independent Architectural conservation practice & Conservation Planning Professional.

Speaker 2- **Ar. Parul Zaveri**, Abhikram, Planning, Architecture, Interior and Conservation Consultancy

Speaker 3- **Ar. Vikas Dilawari**, Conservation Architect

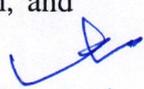
**Reference Material:**

To provide a solid foundation for the course "Exploring Zonal Built Heritage," here are some reference materials that can be used:

Books:

- The Future of the Past: A Conservation Ethic for Architecture, Urbanism, and Historic Preservation by Steven W. Semes



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

- Conservation of Historic Buildings by Bernard Feilden
- Preservation of What, for Whom? A Critical Look at Historical Significance by Michael Holleran
- Conservation Principles, Dilemmas, and Uncomfortable Truths" by David Lowenthal
- The Architecture of Happiness by Alain de Botton
- Preserving the World's Great Cities: The Destruction and Renewal of the Historic Metropolis by Anthony Max Tung



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Schedule for the online course '**Zonal Built Heritage**  
Duration - 11<sup>th</sup> May to 29<sup>th</sup> May 2020

Date	Time	Description
11 <sup>th</sup> May	1:30pm - 4:00pm	● Module 1: Introduction to Zonal Built Heritage - Definition and scope of zonal built heritage - Importance of zonal context in architectural preservation and conservation - Cultural significance and historical value of zonal built heritage
12 <sup>th</sup> May	1:30pm - 4:00pm	● Module 2: Challenges and Threats to Zonal Built Heritage - Urbanization and its impact on zonal built heritage - Relationship between climate and Heritage - Assignment on online case study of Heritage in different climatic zones
13 <sup>th</sup> May	1:30pm - 4:00pm	● Module 3: Principles of Preservation and Conservation - Conservation ethics and approaches
14 <sup>th</sup> May	1:30pm - 4:00pm	Discussion with students and presentation on assignment progress
15 <sup>th</sup> May	1:30pm - 4:00pm	Presentation by the students
18 <sup>th</sup> May	1:30pm - 4:00pm	<b>Guest Lecture- Ar. Kirtida Unwala- Urban Heritage</b> - Discussion with students - Q&A session
19 <sup>th</sup> May	1:30pm - 4:00pm	<b>Guest Lecture- Ar. Parul Zavri- Case study- Urban heritage</b> - Discussion with students - Q&A session
20 <sup>th</sup> May	1:30pm - 4:00pm	● -Module 4: Stakeholders and their Roles - Role of local communities, government agencies and professionals in the preservation of zonal built heritage
21 <sup>st</sup> May	1:30pm - 4:00pm	● Module 5: Sustainable Adaptive Reuse of Zonal Built Heritage - Principles of adaptive reuse in zonal contexts - Assignment on proposal of adaptive reuse
22 <sup>nd</sup> May	1:30pm - 4:00pm	● Module 6: Research and Documentation for Conservation - Research methodologies for zonal built heritage Discussion with students on their proposals
26 <sup>th</sup> May	1:30pm - 4:00pm	● Module 7: Conservation Planning and Policy Development Discussion with students on their proposals
27 <sup>th</sup> May	1:30pm - 4:00pm	<b>Guest Lecture- Ar. Vikas Dilawari on conservation of Flora fountain, Rajabai Clock tower, etc.</b>



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**  
(G.D.D.I.D., P.G.D.I.D., IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

## Criteria 1 - Curricular Aspects

### Key Indicator - 1.2 Academic Flexibility

#### Academic Year 2019-20

<p><b>Course 1 - Certificate Course on AutoCAD</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 2 - Certificate Course on Building with Natural Materials</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 3 - Certificate Course on Performance of Building Envelope</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 4 - Certificate Course on Parametric Modelling</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 5 - Certificate Course on Mitti- Folk arts and Crafts</b> Poster, Notices, Course Curriculum modules with assessment procedure</p>
---



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2019-20**

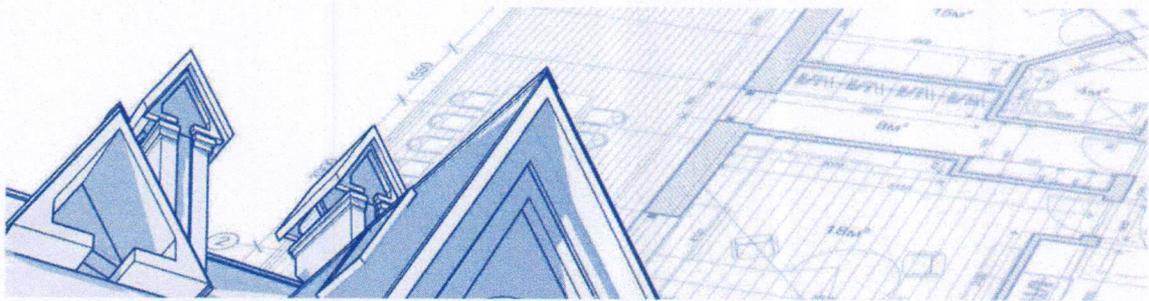
**Course 1- Certificate Course on AutoCAD**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

# CADD CENTRE

Skills Driven. Job Led



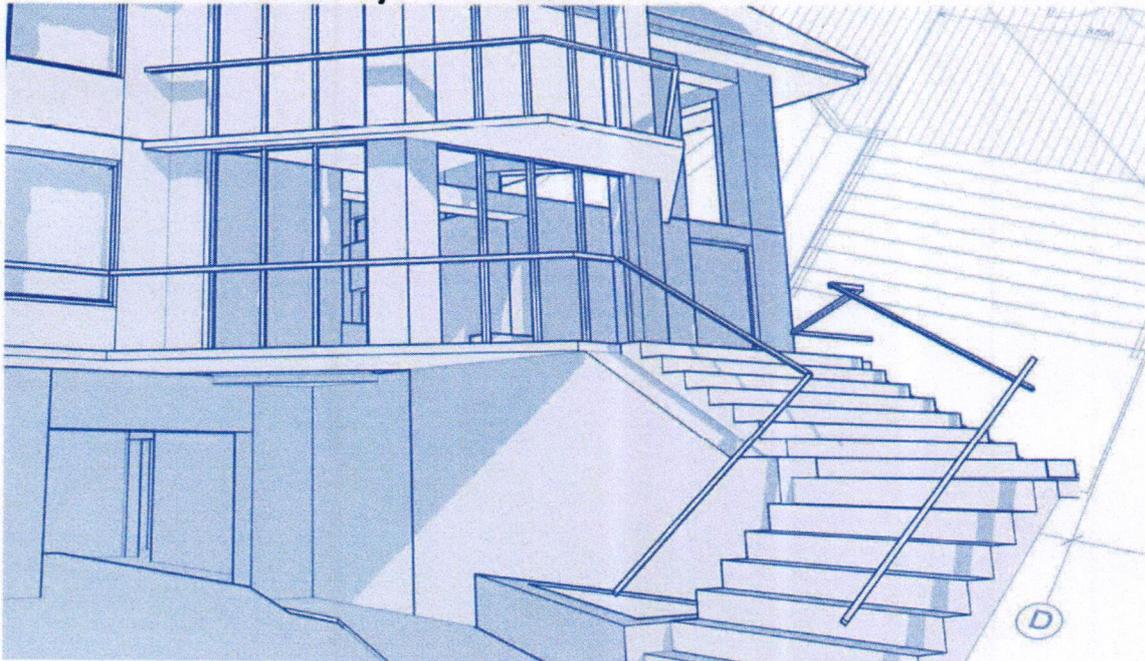
Course On

# AUTOCAD

For 2nd yr Students

COORDINATOR

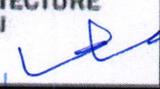
Prof. Tejaswini H.M.



Dates : 8th July 2019 to 26th July 2019

TIMINGS - 2:00 pm to 4:00 pm



Principal   
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



The \_\_\_\_\_ College, The party of the second part shall provide:

- The required number of computer systems with CAD software and other required Infrastructure
- The Class rooms with LCD projector and a Computer with AutoCAD software for the conduct of the theory classes.
- To Schedule the classes during the weekdays.
- To ensure all students attend the training programs scheduled for them.
- The latest version of AutoCAD software and computer systems
- Disciplinary support for the smooth conduct and timely completion of the entire course.

**Participants:**

The participants would be the first year students of all the branches of engineering and architecture.

**Course Contents:**

1. Principals of Engineering Drawing
2. Introduction to AutoCAD
3. Coordinates System
4. Drawing Settings
5. File Management
6. Editing Comments
7. Object properties

**Time Schedule:**

The program will be conducted during the college timings. Depending on the total strength, the students will be divided into batches with a minimum of 20 and a maximum of 60 per batch. The program will be conducted according to the time table drawn up with the mutual consent of both parties.

**Jurisdiction:**

All matters, queries, disputes or differences, whatsoever, arising between the parties touching the construction, meaning, operation or effect of this Memorandum of Understanding or out of or relating to this Memorandum of Understanding or breach thereof shall be settled through arbitration in accordance with the relevant Arbitration Act in force at such time. The Arbitration award shall be binding on both parties.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**Termination:**

Both the college and CADD Centre shall have the rights to terminate this MOU by providing three months' notice. Termination of this MoU for whatever reason shall be without prejudice to the rights of either party and of the students and the ongoing academic programmes.

**Validity:**

This Memorandum of Understanding will be valid for a period of three years. This Memorandum of Understanding shall come into effect from (Date) \_\_\_\_\_

**For For CADD Centre**

**For College/Institute**

**For College / Institute**



*Serpati*

(Affix the Seal)

*[Signature]*

Name & Signature of HOD

*R. Deshpande*

Name & Signature of Authority

Principal (Affix the Seal)



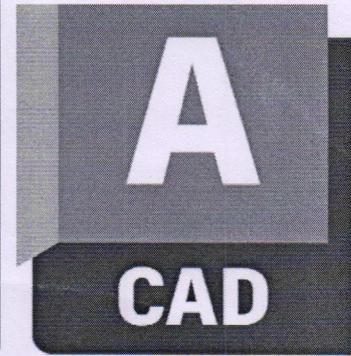
**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



*[Signature]*

**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**AUTOCAD**  
**COMPUTER AIDED DESIGN**



Autodesk AutoCAD is the industry standard software used by architects all around the world to create computer-aided designs (CAD) like architectural drawings, 3D models and technical drawings.

With the help of this course, the students will advance from having no prior knowledge of AutoCAD to being able to create their own drawings and designs and edit existing ones. Drawing simple and complicated forms, using properties and layers, editing commands, blocks, annotation, dimensions, hatching, templates, printing, and publishing settings are some of the topics that will be covered in the course.

Engineers, architects, 3D visualizers, and project managers all use AutoCAD, and this course will provide you the knowledge and abilities you need to comprehend what it takes to produce Architectural and /technical drawings.

**COURSE OUTLINE:**

Following Topics will be covered in the 3 week duration:

- ❖ Introduction to Autocad Interface
- ❖ Understand and discuss the uses of AutoCAD
- ❖ Learn the Various Tools used to draw
- ❖ Understand the Working of System



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**CONDUCTOR - CADD Centre**

**FACULTY COORDINATOR-** Prof. Tejaswini H.M.

**DATES** - 8<sup>th</sup> July 2019 to 26<sup>th</sup> July 2019

**TIMINGS** - 2:00 pm to 4:00 pm

**Intended Participants-** 2nd year students of Architecture

**OBJECTIVES**

- To learn to utilize the AutoCAD user interface.
- To understand and perform fundamental tasks using AutoCAD
- To get familiar with the core ideas and functions of AutoCAD.
- To create precise technical drawings with the use of AutoCAD's precision drafting features.
- To display drawings in a thorough and an outstanding way.
- To be ready to utilize this software for advance years.

**LEARNINGOUTCOMES:**

- Develop the ability to use some of AutoCAD's simple yet useful commands efficiently.
- Acquire the competency to use AutoCAD to draft and create building plans



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

## SCHEDULE AND COURSE CURRICULUM

### ● Week 1 : Introduction to Interface - layers, and units

- What is Autodesk AutoCAD? Getting Started.
- An Overview to AutoCAD Interface
- Layout and File Creation
- Units & Accuracy Levels;
- Layers in Autodesk AutoCAD
- Different AutoCAD Menus

### Selection Tools - How to use different tools

- Lines Tools, Construction Tools, Poly line, Rectangle Tools, Circle, Arc, Revision Cloud, Spline, Ellipse
- Function keys

### ● Week 2 : Some fundamental Commands

- 2D Command :
- Trim ,Extend , Offset , Copy, Move , Mirror , Scale , Rotate , join, Stretch, zoom , Layer, Line type, Line weights
- Break , chamfer, Multi line text, Fillet, Hatching, insert blocks, make a block, explode □
- Insert block, make a block , Region ,table

### ● Week 3 :Assignments & Assessment

Drafting a plan, put annotations like dimensions, texts, etc to it, hatching and plotting

For the certificate, the students should have have 75% attendance and produce a well drafted plan complete in all respects.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2019-20**

**Course 2- Certificate Course on Building with natural Material**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B. Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

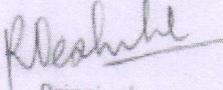
Date :

## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

08/11/2019

### NOTICE

This is to inform all the faculty members interested to conduct the certificate course to remain present for the meeting for discussion regarding introduction of certificate courses in academic year 2019-20 for all the levels, the tentative course titles and structure of certificate courses, at 11 a.m. in Seminar hall.

  
Principal

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

Date: 08/11/2019

Minutes of the meeting

Agenda:

Discussing subject and structure of certificate course to be conducted in academic year 2019-20.

Points Discussed:

1. Certificate courses are to be conducted for all the years' students with the major theme to provide skillsets on allied subjects – year-wise or vertically in the month of December 2019. The duration of courses will be of min. 30 hours.
2. Some of the courses may be conducted year-wise and others in vertical manner.
3. All the faculty were asked to prepare and discuss the topic of interest for certificate course with the principal.
4. The experts in the related fields are to be identified for strengthening the delivery of the course.
5. The course should include theoretical knowledge along-with the hands-on and the outcome in the form of design or any product.
6. Tentative dates were worked for courses and to be finalized after finalizing the availability of the experts.

Principal

S.No.	Name	Sign
1	Varsha Annadate	
2	Vinita Deshmukh	
3	Shraddha Kapadia	
4	Renuka Wazalwar	
5	Tejaswini H.M.	
6	Sumitra Kadam	
7	Madhura Naik	ABSENT 



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,**  
**NAVI MUMBAI**

12/11/2019

**NOTICE**

This is to inform all the course co-ordinators to attend the meeting today at 3pm in Principal's office for final discussion on finalization of number of certificate courses, course dates and duration, course structure and the experts identified.

Principal

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai,



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

Date: 12/11/2019

Minutes of the meeting:

Agenda:

Finalization of number of certificate courses, course dates and duration, course structure and identified experts.

Points Discussed:

1. Four certificate courses were finalized as per the proposals from the coordinators.
  - Mitti- Folk Arts and Crafts - 1<sup>st</sup> year B.Arch and B.Voc students
  - Building with Natural Materials- Design Jatra - Vertical - from 1<sup>st</sup> to 5<sup>th</sup> Year students
  - Parametric Modelling - 5<sup>th</sup> Year students
  - Performance of Building envelope - 5<sup>th</sup> Year students
2. Instructions given regarding scheduled dates and duration. Accordingly, the course details to be worked upon and to be informed to the students.
3. All the coordinators are to obtain approval towards the logistics for the implementation of the course from the principal prior to its commencement.

Principal  
Principal  
Bharati Vidyapeeth  
College of Architecture

Sign: Belpada Complex, Opp. Kharghar Rly. Station, C.B.D., Navi Mumbai.

S.No.	Name	Sign
1.	Varsha Annadate	
2.	Vinita Deshmukh	
3.	Renuka Wazalwar	
4.	Tejaswini H.M.	
5.	Sumitra Kadam	
6.	Madhura Naik	ABSENT 



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar Rly. Station, C.B.D., Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

25/11/2019

### NOTICE

This is to inform all the students that a course on 'Building with Natural Materials' by Design Jatra has been scheduled from 2<sup>nd</sup> to 6<sup>th</sup> December 2019 in the college. All the interested students have to give their names for the same to Prof. Tejaswini H.M. at the earliest.

Principal

**Prof. Ritu Deshmukh**

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,**  
**NAVI MUMBAI**

28/11/2019

**NOTICE**

This is to inform all coordinators for the course 'Building with Natural Material' that a meeting has been scheduled on 29/11/2019 at 9:00 a.m. in Principal's cabin to check the preparation and work done for the course and the arrangement of the Design Jatra team.

Principal

**Prof. Ritu Deshmukh**

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Course on

# “Building with Natural Materials”

By Design Jatra

2nd December 2019 to 6th December 2019

## **COURSE CONDUCTOR**

Design Jatra- : Ar.Shardul  
Patil , Ar. Vinita Kaur and Ar.  
Anushree T.

## **COORDINATOR**

Prof. Tejaswini H.M.&  
Prof. Sumitra Kadam



**TIME : 9AM TO 4 PM**



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

The 'Building with Natural Material, a 5-day course is planned for students who want intense learning in natural materials, techniques and processes through hands-on work experience. Every aspect of Natural Building from the wall systems and finishes is part of this course. Basics characteristics of every ingredient used like different types of mud, lime, bamboo and natural adhesives and insect repellents is explained.

Students are made familiar with the different properties of the material, prepare it and different techniques of using it. Various treatments for natural materials for termite resistance and how to repair mud structures are also covered.

Enhanced with Study through site visits to indigenous & contemporary mud buildings. Inferences from such experiences can strengthen students' confidence in building with Natural Materials.

#### **COURSE CONDUCTOR and TRAINERS**

**Design Jatra-** : Ar.Shardul Patil , Ar. Vinita Kaur and Ar. Anushree T.

#### **COORDINATOR**

Prof. Tejaswini H.M. and Prof. Sumitra Kadam

**DATES** - 2<sup>nd</sup> December to 6<sup>th</sup> December 2019

**TIMINGS** - 9:00am to 4:00 pm

**Intended Participants-** 1<sup>st</sup> year to 5<sup>th</sup> year students of Architecture

#### **OBJECTIVES**

- To understand the importance of natural building materials as the need of the hour.
- To learn different sustainable materials in the market.
- To develop knowledge of alternative building material used in construction.
- To understand the science and behaviour of various building materials
- Utilizing different techniques for construction.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

- Identify the construction materials required for different purposes.
- To acquire procedural knowledge of the simple construction methods of cement, lime and concrete etc.

#### **COURSE METHODOLOGY**

- Theory sessions with lectures and audio-visual presentations.
- Hands-on sessions (for better practical learning about Materials & Techniques).
- Site Visits (to experience the existing Buildings).
- Question and Answer session

#### **TECHNIQUES COVERED IN THE COURSE:**

- Wattle - Timber frame with battens and bamboo is weaved.
- Daub- Layer of Daub, Mixture of mud, sand, cow dung and rice husk is applied on the wattle frame.
- Plaster - Plastering the wattle and daub frame with mud or lime plaster.  
Natural Plasters using admixtures derived from different natural materials.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A, LL.B, Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,  
NAVI MUMBAI**

13/12/2019

**NOTICE**

This is to inform all the enrolled students for a certificate course on "Performance of Building Envelope – enhancing envelope performance for daylighting and energy" that they have to report on 16<sup>th</sup> Dec. 2019 at 8.30am on first floor computer lab for registration and orientation

Coordinators:

1. Prof. Varsha Annadate
2. Prof. Vinita Deshmukh



**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

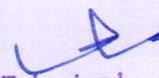
## 1.2 Academic Flexibility

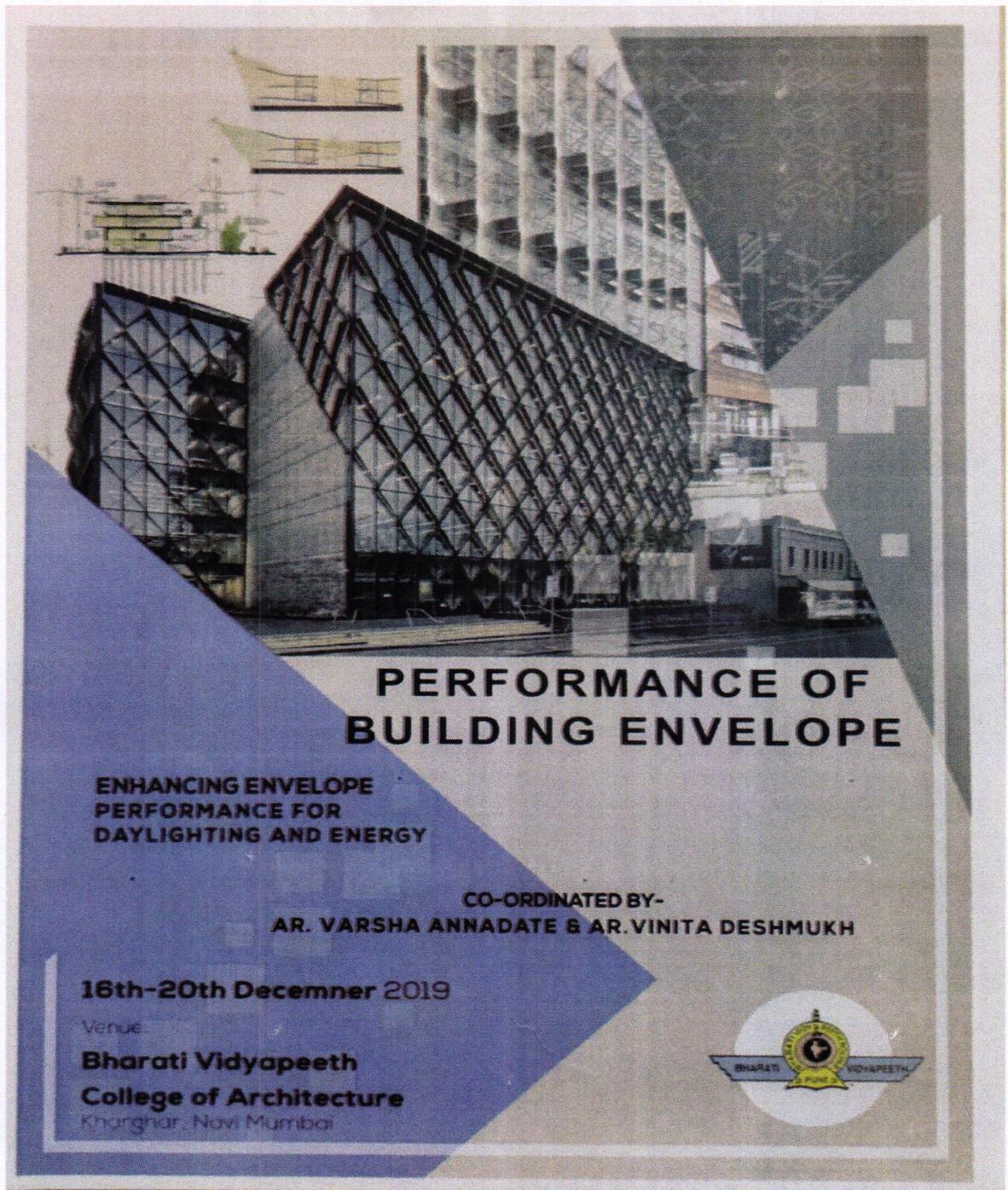
**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2019-20**

**Course 3- Certificate Course on Performance of Building Envelope**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# PERFORMANCE OF BUILDING ENVELOPE

ENHANCING ENVELOPE  
PERFORMANCE FOR  
DAYLIGHTING AND ENERGY

CO-ORDINATED BY-  
AR. VARSHA ANNADATE & AR. VINITA DESHMUKH

16th-20th Decemner 2019

Venue

**Bharati Vidyapeeth**  
**College of Architecture**  
Kharghar, Navi Mumbai



## **BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI**

Belpada Education Complex, Opp. Kharghar Railway Station, Sector No. -7, C.B.D. Belapur,  
Navi Mumbai - 400 634.  
Ph: (022) 2757 1451, 2756 4646



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

<b>CERTIFICATE COURSE :</b> <b>BUILDING ENVELOPE:</b> <b>PERFORMANCE OF BUILDING ENVELOPES:</b> <b>Enhancing Building Envelope Performance For Daylighting &amp; Energy</b>	
5 <sup>th</sup> Year B.Arch.	Maximum Marks:50
Total No. Of Students Enrolled: 20 Students	Duration: 5 Days (16TH Dec. To 20TH Dec.2019) Total Hrs:37.5 Hrs.
Course coordinators: Ar. Varsha Annadate, Ar. Vinita Deshmukh	

### Introduction:

A building or any structure breathes through its outer most layer termed as building envelope. It is a medium/layer which separates the conditioned and unconditioned environment of a building including providing resistance to air, water, heat, light and noise transfer. The envelope has to respond both to natural forces and human concerns. The natural forces include rain, snow, wind and sun. Human concerns are safety, security and task success. The envelope provides protection through enclosure and by balancing internal & external environmental forces. To achieve protection, it allows for careful control of penetration of natural forces through the fenestration. It is the most significant contributor to the energy consumption and comfort parameters of any building. It's an engineering system that meshes elements such as structural integrity, moisture control, and temperature control and air pressure boundaries into a single design strategy.

The performance of this layer is based on the optimization of daylight & air changes controlling heat and temperature etc. to make the indoors comfortable for the user of the space.

### Aim and Objective

This course aims to study and understand various aspects of building envelopes and to evaluate the actual daylight and energy performance of the Bharati Vidyapeeth's College of Architecture building envelope using field measurements & simulations.

#### Objectives

The college building has been operating since 17 years; however until now, the building has not been assessed in terms of its daylight performance. This study aims to evaluate the actual daylight performance using both on-site measurements and through simulations. The main objectives are:

- To evaluate the ability of the building envelope to admit daylight within the building.
- To simulate the daylight penetration through the existing envelope comprising of single glazed window panes and solid brick wall based on the empirical data.
- To compare the results of existing conditions and performance of building envelope after adopting passive strategies for enhancement of daylight within spaces.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

The findings of this study should be beneficial to the improvement of daylight in the college building and subsequently reducing the usage of artificial lights and hence reduction in energy consumption.

### SCHEDULE FOR CERTIFICATE COURSE

Topics to be covered: From 16<sup>th</sup> Dec. -20<sup>th</sup> Dec 2019.

Time period for this elective is only of 05 days. The following will be the schedule that we will follow.

Day& Date	1 <sup>st</sup> half Topic ( 9.00 – 12.00NOON)	2 <sup>nd</sup> half Topic (12.30 – 4.30 PM)
16 <sup>th</sup> Dec. 2019 Monday	<ul style="list-style-type: none"> <li>• Understanding Brief &amp; programme.</li> <li>• Introduction to Topic, Knowing Building Envelopes.</li> <li>• Group Making</li> </ul>	<ul style="list-style-type: none"> <li>• Different materials and Performance of Building envelopes by Ar. Garima Kamra.</li> <li>• Introduction to rating System.</li> <li>• Introduction of ECBC 2017, Eco-Samhita.</li> </ul>
17 <sup>th</sup> Dec.2019 Tuesday	<ul style="list-style-type: none"> <li>• Discussion on understanding of key parameters of ECBC 2017.</li> <li>• Study of NZEB (Net Zero Energy Building)</li> <li>• Guest lecture on Daylighting by Prof. Anil Nandedkar.</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding Different Contemporary materials for building envelopes.</li> <li>• Case study by students On different types of Building Envelopes.</li> </ul>
18 <sup>th</sup> Dec.2019 Wednesday	<ul style="list-style-type: none"> <li>• Understanding Technical Terminology Regarding Daylighting &amp; energy by Ar. Sarang Karmarkar.</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to Design Builder Software &amp; radiance</li> <li>• Software Installation</li> <li>• Understanding user interface</li> </ul>
19 <sup>th</sup> Dec. 2019 Thursday	<ul style="list-style-type: none"> <li>• Field observation – finalizing site sections, wall area and openings, U-value calculations.</li> <li>• On-site readings using Lux meter and Hygrometer.</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of Observation &amp; data collected.</li> <li>• Generating Model</li> <li>• Working on Simulation programme.</li> <li>• Generation of final simulated model.</li> </ul>
20 <sup>th</sup> Dec.2019 Friday	<ul style="list-style-type: none"> <li>• Discussion on suggestions for retrofitting of southern and western façade based on final simulated model.</li> </ul>	<ul style="list-style-type: none"> <li>• Thumb rules for Design of an effective Building Envelope,</li> <li>• Final marking</li> </ul>



  
 Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai

## ASSIGNMENTS:

### Exercise. NO. 1 (INDIVIDUAL WORK)

- Understanding & analysis of building envelope of the buildings taken as case studies for thesis wrt following parameters as:
  - Understanding envelope system – different component of structural skin
  - Material analysis
  - Performance of envelope – thermal comfort, Aesthetic appeal, Day-lighting, Air quality.

### Exercise. NO. 2 (GROUP WORK)

- NZEB (Net Zero Energy Building) – Case study analysis
- Sustainable material palette

### Exercise. NO. 3 (GROUP WORK)

- Assessment of day-light & energy with help of Design Builder & Radiance software for BVCOA building (all floors) and two facades (Southern & Western)



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G D DID, P G DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2019-20**

**Course 4- Certificate Course on Parametric Modelling**

  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai





# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

9/12/2019

### NOTICE

This is to inform all the students that a course on 'Parametric Modelling' by Mr. Sai Srimanth from Parakraft has been scheduled from 16th to 20th December 2019 in the college. All the interested students have to give their names for the same to Prof. Madhura Naik at the earliest.

The course curriculum and the other details will be shared shortly.

Principal

Prof. Ritu Deshmukh

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

COORDINATOR

**Prof. Madhura Naik**

COURSE INSTRUCTOR

**Mr. Sai Srimanth (Parakraft)**

**Course On**

# **Parametric Modelling**

**16th December to 20th December 2019**

**TIMINGS - 9:00am to 4:00 pm**



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Parametric design is the most widely used modelling process in contemporary architecture and design.

This course is organized in collaboration with ParaKraft for a duration of 5 days (16th to 20th December 2019) with the agenda to explore the techniques and tools used in Parametric Modelling and Computational Design as a foundation for design optimization.

The purpose of this course is to introduce students to the fundamentals of parametric design using the Rhino Grasshopper plugin. The main components of a parametric design method will be covered, along with using it for design projects. We'll go through Grasshopper's functionality in detail, as well as how to use its user interface to manage and organize data.

The course will cover the fundamentals of programming as well as the significance of the ideas for the development of algorithms. You'll understand how to recognize the various design elements and how to link them together in order to create flexible systems with intelligent parts.

Students with no prior knowledge of parametric design are the target audience for this course.

In the sessions, you will be introduced to several parametric design modelling platforms and scripting environments that will enable rapid generation of 3D models and enable rapid evaluation of parametrically-driven design alternatives.

**COURSE INSTRUCTOR**

**Mr. Sai Srimanth (Parakraft)**

**FACULTY COORDINATOR**

**Prof. Madhura Naik**

**DATES - 16<sup>th</sup> December to 20<sup>th</sup> December 2019**

**TIMINGS - 9:00am to 4:00 pm**

**Intended Participants- 4<sup>th</sup> year and 5<sup>th</sup> year students of Architecture**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

## COURSE CURRICULUM

The curriculum of the course includes the parametric design processes that are used for generation of different formal expressions of a design concept. The term parametric design implies the representation of a design with a series of associative operations, controlled by constraints and parameters. These are defined in parametric software that can generate interactive forms in three-dimensional (3D) space. The realization of such designs is legated by CAM processes essentially known as digital fabrication. With the use of parametric design tools, students/practitioners can study the interactive relationships of architectural designs in the early steps. By enabling the enlarged set of performances assessed impact choices at an early stage, parametric tools enhance interdisciplinary participation and create a visual link between form and numeric performance evaluations, which in turn reduce the investment in poor-performing solutions.

The aim is to enhance skills with respect to the creative design of an advanced-level interactive built environment that pursues the transformation of conceptual design to production, documentation and manufacturing of built environments using contemporary digital mediums. Also, encourage students to enhance understanding of a specific field of interest, and to initiate them towards experimental leanings in the field of Digital architecture and fabrication practice

### OBJECTIVES

- Concepts of computer science with a basic understanding.
- Recognizing the main features of parametric design
- How to use the Grasshopper Interface.
- How Grasshopper manages and organizes information.
- Learn how to build parametric models.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Beipada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

## **SCHEDULE FOR THE 5 DAY COURSE ON PARAMETRIC DESIGN**

DAY 1: 16th December 2019

- Introducing Parametric Modelling
- Basics of Rhinoceros3D and Practicing various examples
- Related to parametric modelling in the field of architecture.

DAY 2: 17<sup>th</sup> December 2019

- Basics of Grasshopper
- Working with Lists and Patterns
- Working with Trigonometric equations in Grasshopper

DAY 3: 18<sup>th</sup> December 2019

- Basics in Graph Mapper
- Modelling a Parametric Vase with Graph Mapper
- Attractor Point (Scaling of circles with Point, MD Slider & Graphmapper)

DAY 4: 19<sup>th</sup> December 2019

- Image Sampler and using it with attractor point for varied heights
- Circles and Simple Cube
- Embroidery & Cloth Folds

DAY 5: 20<sup>th</sup> December 2019

- Modelling the roof of Benz stadium
- Modelling of Voronoi Pattern

### **COURSE METHODOLOGY**

- Theory sessions with lectures and audio-visual presentations.
- Question and Answer session
- Practice training



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rty. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## 1.2 Academic Flexibility

1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

AY 2019-20

Course 5- Certificate Course on Mitti- Folk Art and Crafts

  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai





# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**

(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

16/12/2019

### NOTICE

This is inform all the students of 1<sup>st</sup> year B.Arch. and 1<sup>st</sup> Year B.Voc (ID) that a course on Mitti- Folk Art and Crafts has been organized by the college from 23<sup>rd</sup> December 2019 to 27<sup>th</sup> December 2019.

Principal

**Prof. Ritu Deshmukh**

Principal

Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



Principal

Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

19/12/2019

### NOTICE

This is to inform all 1<sup>st</sup> Year class teachers for B.Arch. And B.Voc. that a meeting has been scheduled on 20/12/2019 at 3:00 p.m. in the conference hall to understand and check the preparation and work done for Mitti course and the arrangement of the artisans for the same.

Principal

Prof. Ritu Deshmukh

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Course on

# Mitti- Folk arts and Crafts

For  
1st yr students

Dates

**23rd December 2019  
to  
27th December 2019**

**TIMINGS- 9:00 a.m. to 4:00 p.m.**

## Mitti Initiative

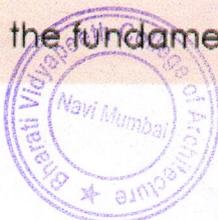
Mrs. Shoma Banerjee

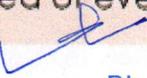
## COORDINATOR

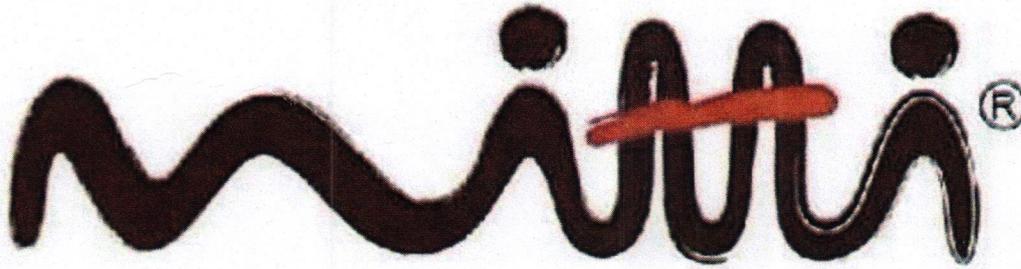
Ar. Renuka Wazalwar  
Asst. Professor, BVCOA



"The idea of beauty is the fundamental idea of everything." - Leo Tolstoy



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



## INTRODUCTION

**“The idea of beauty is the fundamental idea of everything.”- Leo Tolstoy**

Art and Architecture are inextricable as there are many commonalities between the two. Therefore, art appreciation in architecture education enhances critical thinking and admiration of art and their body of work, improves the creative process and adaptability, and boosts confidence in exploring the representation of ideas in visual language.

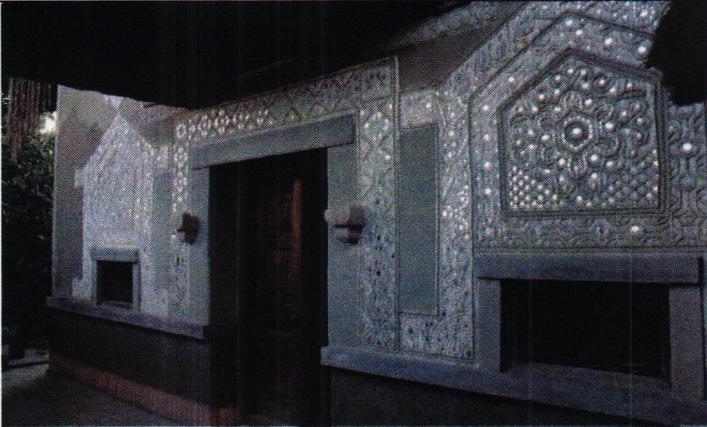
To promote, emphasize and inculcate the vast art and culture of India, Bharati Vidyapeeth College of Architecture, Navi Mumbai conducts a course on the theme, viz. **Mitti- Folk arts and Crafts** where 1<sup>st</sup> year students collaborate with the master artisans from all over India and learn the different art forms. This bond is useful to nurture the appreciation for art thus preserve the country's heritage.

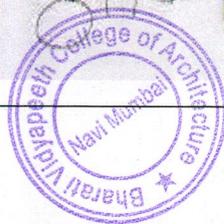
This 5-day architectural course aims to introduce 1st-year students to the rich and diverse arts and crafts of India. The course will focus on exploring the architectural heritage of India, including traditional craftsmanship, historical influences, and cultural significance. Through lectures, interactive workshops and hands-on activities, students will gain a comprehensive understanding of India's artistic heritage and its impact on contemporary design.



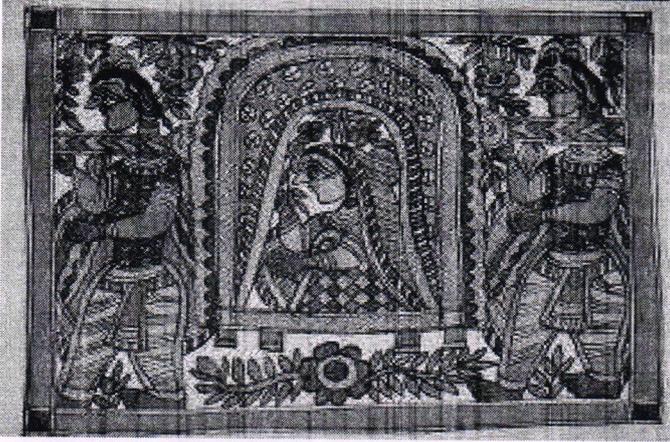
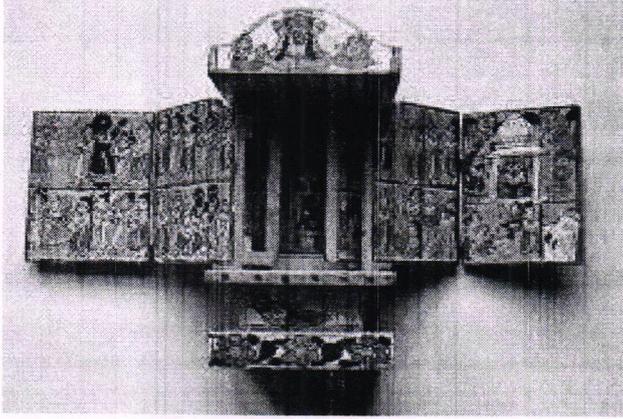
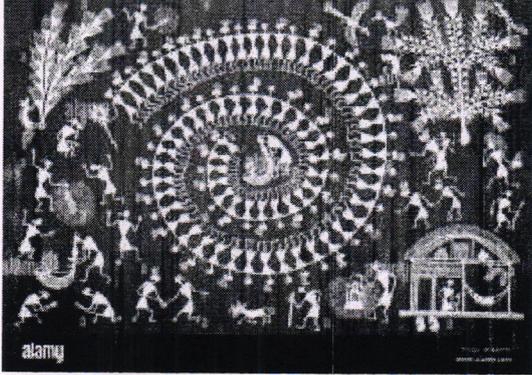
  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, D.B.D, Navi Mumbai

The different art forms in the course -

Art forms	Reference
<p><b>Lippan Art , Kutch, Gujarat</b></p> <p>Mud mirror work</p>	
<p><b>Gond Art, Madhya Pradesh</b></p> <p>Tribal art form depicting nature and its significance</p>	
<p><b>Chitrakathi Art, Pinguli, Maharashtra</b></p> <p>A story telling art</p>	
<p><b>Wire Art, Faridabad</b></p> <p>An up-cycling, eco- friendly art made with discarded electrical wire and plastic tapes</p>	



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

<p><b>Madhubani Art, Bihar</b> A folk art depicting wedding rituals, mythological stories and nature.</p>	
<p><b>Kawad Art, Bassi, Chittorgarh, Rajasthan</b> Wooden shrine with multiple foldable panels with the main deity at the core.</p>	
<p><b>Warli Art, Dahanu, Maharashtra</b> A tribal art depicting nature and village life.</p>	

**COORDINATOR AND CONDUCTOR**

Ar. Renuka Wazalwar  
Asst. Professor, BVCOA

Mrs. Shoma Banerjee  
Mitti Initiative

**DATES** - 23<sup>rd</sup> December 2019 to 27<sup>th</sup> December 2019 (Duration of the course is 35 hours during 5 days)

**TIMINGS** - 9:00 a.m. to 4:00 p.m.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

## OBJECTIVES

- To understand the the different art forms in India and its importance in Architecture
- To create awareness for skill based knowledge systems
- Dissemination of the skill to the future generation
- To establish cohesion between tradition and progression
- To develop new paradigms of pedagogy and practice in the field Architecture with incorporation of these art forms in a new way

**Intended Participants-** 1<sup>st</sup> year students of Architecture and B.Voc. (ID)

**Support Staff-** People practicing these art forms where the instructors

- Lippan Art ,Artisan- Mr. Ashwin Marvada Jura
- Gond Art, Artisan- Mr. Surender Tekam
- Chittrakathi Art, Artisan- Mr. Chetan Gangavane
- Wire Art, Artisan- Mrs. Sashi Bala
- Madhubani Art, Artisan- Mrs. Anju Chaudhary
- Kawad Art, Artisan - Mr. Dwaraka Prasad
- Warli Art, Artisan- Mr. Dilip Bahatho

## SCHEDULE AND COURSE CURRICULUM

### ❖ Day 1- 23rd December 2019: Introduction to Indian Arts and Crafts

- Welcome and Course Overview
- Influence of Arts and Crafts on Architecture: Understanding the interplay of culture and design
- Basics of Traditional Indian Art Forms (e.g. Madhubani, Warli)
- Art in Architecture: Understanding inter- relationship between art and architecture, Different approaches and perspectives on Art and Handicraft, its importance in Interiors, Exploring Applications, Different handicrafts as mentioned, Documenting the Knowledge and Skills, Discourse

- ❖ **Day 2- 24th December 2019:** Traditional Knowledge Systems and the Ingenious skills and materials of the communities who practice these art-forms, Material exploration, Discourse and hands-on practice



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

- ❖ **Day 3- 25th December 2019:** Significance and Scope of these art-forms in Creative and Cultural Industries, Case studies, Role of these art-forms in creating/enhancing Interior-Architecture, Discourse and hands-on practice
- ❖ **Day 4 - 26th December 2019:** Overview of the Craft Sector Today, Issues and Challenges, Policies and Reforms, Gaps, Discourse and hands-on practice
- ❖ **Day 5 -27th December 2019:** Continuity and Revival: Education and Training, Innovation and Development and Dissemination of the knowledge system, Interventions-Product design, Discourse and hands-on practice and Exhibition

### **COURSE CERTIFICATE and ASSESMENT PROCEDURE**

This course is for all the first year students of B.Arch. And B.Voc. ID to enroll and learn from. For the certificate, the students have to attend the course and produce a handicraft product for which they have enrolled for.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G. D. DID, P.G. DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

## Criteria 1 - Curricular Aspects

### Key Indicator - 1.2 Academic Flexibility

#### Academic Year 2018-19

5	<p><b>Course 1- Certificate Course on Earth Architecture, Auroville</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 2- Certificate Course on Biomimicry and Tensegrity</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 3 - Certificate Course on Mitti- Folk arts and Crafts</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 4 - Certificate Course on Building Skin for High-rise Smart Facade: Collaborative Design Approach</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 5 - Certificate Course on Mind Mapping and Design Thinking</b> Poster, Notices, Course Curriculum modules with assessment procedure</p> <p><b>Course 6 - Certificate Course on Parametric Design Thinking</b> Poster, Notices, Course Curriculum modules with assessment procedure</p>
---	---



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## 1.2 Academic Flexibility

1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

AY 2018-19

Course 1- Certificate Course on Earth Architecture



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

# Summer School @ Auroville

7th May to 17th May 2018

## Course on Earth Architecture

**Course-Conductor**

Ar.Shubha Mishra

**Course-Coordinator**

Ar.Tejaswini H.M



**BHARATI VIDYAPEETH**  
COLLEGE OF ARCHITECTURE  
NAVI MUMBAI



Principal

Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai

Course on  
**'Earth Architecture'**  
By  
CEASID - Centre of Earth Architecture and Sustainable Integrated  
Development, Auroville

Course Coordinator: Ar. Shubha Mishra  
Faculty Coordinator: Prof Tejaswini H.M.

Course Duration:  
7<sup>th</sup> May to 17<sup>th</sup> May 2018

Location: Auroville, Tamil Nadu

**Course Description:**

The 'Earth Architecture' course by CEASID - Centre of Earth Architecture and Sustainable Integrated Development course offers a comprehensive exploration of Auroville's unique architectural approach, with a focus on earth architecture and sustainable development. Auroville, an international township in Tamil Nadu, India, is renowned for its commitment to sustainable practices and innovative architectural solutions. This course provides students with a deep understanding of the principles, techniques, and challenges involved in earth-based construction and sustainable integrated development within the context of Auroville.

**Course Objectives:**

- Understand the philosophy and principles of sustainable integrated development in Auroville.
- Explore the significance and applications of earth architecture in Auroville's context.
- Gain knowledge of sustainable construction materials, techniques, and technologies used in earth-based architecture.
- Examine case studies of earth-based architectural projects in Auroville and world over and their impact on the community.
- Foster an understanding of collaborative and participatory approaches in sustainable integrated development.
- Reflect on the challenges and future prospects of sustainable architecture and integrated development.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

### **Course Outline:**

#### **Module 1: Introduction to Auroville and Sustainable Integrated Development**

- Overview of Auroville: its history, vision, and guiding principles
- Sustainable integrated development: principles and objectives
- Understanding the cultural, social, and environmental context of Auroville

#### **Module 2: Earth Architecture in Auroville**

- Significance and benefits of earth architecture in sustainable development
- Earth as a construction material: properties, characteristics, and suitability
- Traditional and contemporary earth construction techniques and technologies
- Case studies of earth-based architectural projects in Auroville

#### **Module 3: Sustainable Construction Materials and Techniques**

- Exploration of sustainable materials and construction techniques in Auroville
- Introduction to rammed earth, stabilized earth, and compressed earth block construction
- Energy-efficient strategies in earth-based architecture: passive design, natural ventilation, and solar techniques

#### **Module 4: Social and Cultural Factors in Sustainable Integrated Development**

- Socio-cultural dynamics within Auroville's diverse community
- Designing for community engagement and inclusivity
- Incorporating local traditions, aesthetics, and cultural values in architectural projects
- Balancing innovation with cultural preservation

#### **Module 5: Design Workshop: Sustainable Architectural Solutions**

- Collaborative design exercises focusing on sustainable architectural solutions
- Site analysis and planning exercises for sustainable integrated development
- Integrating earth-based construction, passive design strategies, and cultural considerations

#### **Module 6: Challenges and Opportunities in Sustainable Architecture**

- Identifying challenges and barriers in sustainable architecture and integrated development
- Exploring innovative solutions and future prospects
- Examining the role of education, research, and collaboration in advancing sustainable practices



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Module 7: Field Visit and Case Studies

- Field visit to Auroville to observe and analyze sustainable architectural projects
- In-depth case studies of selected earth-based buildings and integrated development initiatives
- Analysis of the social, cultural, and environmental impact of these projects



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

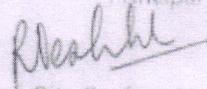
Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,**  
**NAVI MUMBAI**

21/10/2018

**NOTICE**

This is to inform all the faculty members interested to conduct the certificate course to remain present for the meeting for discussion regarding introduction of certificate courses in academic year 2019-20 for all the levels, the tentative course titles and structure of certificate courses, at 11 a.m. in Seminar hall.

Principal  
  
Prof. Ritu Deshmukh

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**

(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV/COA/N.M./

Date :

Date: 21/10/2018

Minutes of the meeting

Agenda:

Discussing subject and structure of certificate course to be conducted in academic year 2018-19.

Points Discussed:

1. Certificate courses are to be conducted for all the years' students with the major theme to provide skillsets on allied subjects – year-wise or vertically in the month of December 2018. The duration of courses will be of min. 30 hours.
2. Some of the courses may be conducted year-wise and others in vertical manner.
3. All the faculty were asked to prepare and discuss the topic of interest for certificate course with the principal.
4. The experts in the related fields are to be identified for strengthening the delivery of the course.
5. The course should include theoretical knowledge along-with the hands-on and the outcome in the form of design or any product.
6. Tentative dates were worked for courses and to be finalized after finalizing the availability of the experts.

Principal

Principal

Bharati Vidyapeeth

College of Architecture

Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

S.No	Name	Sign
1	Varsha Annadate	
2	Vinita Deshmukhi	
3	Renuka Wazalwar	
4	Kamakshi Vaidya	
5	Dipanwita Chakraborty	
6	Tejaswini H.M	
7	Sumitra Kadam	
8	Madhura Naik	ABSENT



Principal

Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

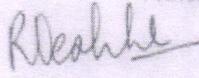
Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,  
NAVI MUMBAI**

25/10/2018

**NOTICE**

This is to inform all the course co-ordinators to attend the meeting today at 3pm in Principal's office for final discussion on finalization of number of certificate courses, course dates and duration, course structure and the experts identified.

Principal  
  
Prof. Ritu Deshmukh

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

Date: 25/10/2018

Minutes of the meeting:

Agenda:

Finalization of number of certificate courses, course dates and duration, course structure and identified experts.

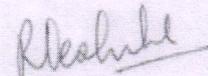
Points Discussed:

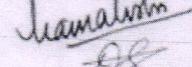
1. Five certificate courses were finalized as per the proposals from the coordinators.

- Mitti- Folk arts and crafts - 1<sup>st</sup> year B.Arch and B.Voc. Students
- Biomimicry and tensgrity- -3<sup>rd</sup> and 5<sup>th</sup> year B.Arch. Students
- Mind mapping and Design thinking- 2<sup>nd</sup> year B.Arch. students
- Parametric Design Thinking - 3<sup>rd</sup> and 5<sup>th</sup> year B.Arch. Students
- Building skin for high rise smart facade- 5<sup>th</sup> year B.Arch. Students

2. Instructions given regarding scheduled dates and duration. Accordingly, the course details to be worked upon and to be informed to the students.

3. All the coordinators are to obtain approval towards the logistics for the implementation of the course from the principal prior to its commencement.

  
Principal

S.No.	Name	Sign
1	Varsha Annadate	
2	Vinita Deshmukh	
3	Renuka Wazalwar	
4	Kamakshi Vaidya	
5	Dipanwita Chakraborty	
6	Tejaswini H.M.	
7	Sumitra Kadam	
8	Madhura Naik	ABSENT



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G D DID, P.G DID, IIA, M. Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2018-19**

**Course 2- Certificate Course on Mitti- Folk Art and Crafts**

  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai





**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,**  
**NAVI MUMBAI**

26/11/2018

**NOTICE**

This is inform all the students of 1<sup>st</sup> year B.Arch. and 1<sup>st</sup> Year B.Voc (ID) that a course on Mitti- Folk Art and Crafts and 3<sup>rd</sup> and 5<sup>th</sup> year students that a course on 'Biomimicry and Tensegrity' has been organized by the college from 3<sup>rd</sup> December to 7<sup>th</sup> December 2018.

The first year students have to give their names to Prof. Renuka Wazalwar and the 3<sup>rd</sup> and 5<sup>th</sup> Year students have to give their names to Prof. Tejaswini H.M. at the earliest.

Principal

**Prof. Ritu Deshmukh**

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

Course on  
**Mitti - Folk Arts and Crafts**

3rd December 2018  
to  
7th December 2018

Mitti Initiative  
Mrs. Shoma Banerjee

Co-ordinators:  
Ar. Renuka Wazalwar

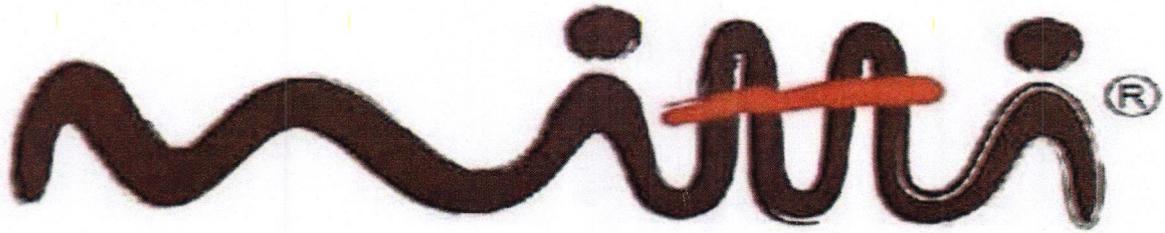


"The idea of beauty is fundamental idea of everything"  
- Leo Tolstoy



Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai





## INTRODUCTION

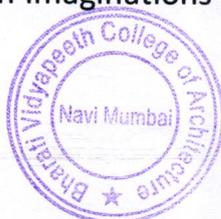
*"India's way is not Europe's;  
India is not Calcutta and Bombay.  
India lives in her seven hundred thousand villages."  
- Mahatma Gandhi*

India is a country rich in culture and heritage having a plethora of handicrafts and folk arts which are diverse and different in different parts of the country. Architecture is the field of creating built environments that are functional and aesthetically pleasing. The interior design being the integrated element of space design, the handicrafts and arts play an important role in attaining aesthetically appealing spaces and adds to the design value of the space.

To know about these handicrafts and folk-arts not only by its manufacturing techniques, but also the history, traditions and beliefs behind them, Bharati Vidyapeeth College of Architecture (BVCOA), Navi Mumbai offers a certificate course on the theme viz. "Mitti-Folk Arts and Crafts" for 1st year students. This course also intends to inculcate a sense of national identity and pride and learn the potential, these things have for architectural use. It will encourage students to explore and experiment to incorporate these handicrafts and folk-arts as architectural professionals.

The college provides a platform to the artists to interact with our students thus providing opportunity to learn the folk art and crafts of their choice first hand from the master crafts persons. In the process, students interact with the crafts persons and exchange their design ideas, stories with each other.

The idea behind this is to make students learn the traditional techniques and designs from the artisans, add their own imaginations and come up with the modern and unique

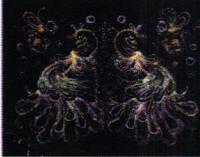
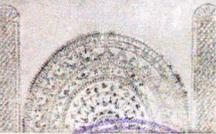


  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Beipada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

designs in respective art forms., thus celebrating our heritage and unleashing their creativity in their own way.

This course is conducted for all the first year students of B.Arch. And B.Voc. ID and is based on the Indian Art forms such as Wood carving, Sanjhi, Copper bell making, Rogan, Madhubani painting, Orrisan pattachitra and Lippan kaam.

The different art forms in the course -

Art forms	Reference	Support staff/ Artisans Name (People practicing these art forms were the instructors)
<b>Wood Carving</b> craft from West Bengal		Mr. Biswajit
<b>Sanjhi</b> <i>Stencils of Mathura</i>		Mr. Suryakant Bondwal
<b>Copper Bell</b> <i>Ringing in the herds of Kutch</i>		Mr. Faisal Khan
<b>Rogan</b> <i>Steady hands of Kutch</i>		Mr. Abdul Gafur D Khatri
<b>Madhubani Painting</b> <i>From the walls of Mithila</i>		Mrs. Anju Chowdhary
<b>Pattachitra</b> <i>Myths and scrolls from Odisha</i>		Mr. Mukut Joshi
<b>Lippan kaam</b> <i>Mud and mirrors</i>		Mr. Gani Fakir Mammad



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar

**COORDINATOR AND CONDUCTOR: Principal Ritu Deshmukh**

Ar. Renuka Wazalwar, Ar. Aastha Khare, Ar. Sumitra Kadam, Ar. Trupti Kamat

Asst. Professors, BVCOA.

Mrs. Shoma Banerjee- Mitti Initiative

**DATES** - 3<sup>rd</sup> December 2018 to 7<sup>th</sup> December 2018

**TIMINGS** - 9:00 a.m. to 4:00 p.m.

**INTENDED PARTICIPANTS-** 1<sup>st</sup> year students of Architecture and B.Voc. (ID)

**OBJECTIVES**

- To comprehend the many Indian folk art and craft styles and their significance in architecture.
- To increase public understanding of knowledge systems that are based on skills.
- Transferring the ability to the next generation.
- To create new pedagogical and practical paradigms in the area of architecture that include diverse creative forms in novel ways.

**SCHEDULE AND COURSE CURRICULUM**

- **3<sup>rd</sup> Dec. 2018 - Day 1:** Art in Architecture: Knowing the connections between art and architecture, the many methods and viewpoints used to study art and craft, and the significance of these things in interior design Investigating Applications many crafts, as previously indicated, Keeping a record of one's knowledge and skills Discourse
- **4<sup>th</sup> Dec. 2018 - Day 2:** Exploration of materials, dialogue with the artisans, and practical application of traditional knowledge systems, inventive skills and materials of the communities who perform these art forms
- **5<sup>th</sup> Dec. 2018 - Day 3:** Case studies, the importance and scope of various art forms in the creative and cultural industries, these arts' contributions to interior architecture, discourse, and practical application.
- **6<sup>th</sup> Dec. 2018 - Day 4:** Overview of the current craft industry, problems and issues, policies and reforms, gaps, discussion, and practical application.
- **7<sup>th</sup> Dec. 2018 - Day 5:** Continuity and Revival: Education and Training, Innovation and Development, Knowledge System Dissemination, Interventions-Product Design, Discussion, Practical Application, and Exhibition

**COURSE CERTIFICATE and ASSESMENT PROCEDURE**

For the certificate, the students have to attend all the 5 days and produce a handicraft product for which they have enrolled for.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :

**Dr. Patangrao Kadam**  
M.A.,LL.B.,Ph.D

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal

**Prof. Satish Dhale**  
(G D DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

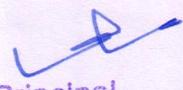
## 1.2 Academic Flexibility

### 1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years

**AY 2018-19**

**Course 3- Certificate Course on Biomimicry and Tensegrity**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,**  
**NAVI MUMBAI**

29/11/2018

**NOTICE**

This is to inform all the coordinators of courses 'Mitti- Folk arts and crafts' and 'Biomimicry and Tensegrity' that a meeting has been scheduled on 30/11/2018 at 9:00 a.m. in the principal's cabin to understand and check the preparation and work done for both the courses and the arrangement of the artisans and the course conductors.

Principal

**Prof. Ritu Deshmukh**

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D., Navi Mumbai



**Principal**  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D., Navi Mumbai



Course on

# Biomimicry & Tensegrity

3rd December 2018 to 7th December 2018

**Course Conductors :**

Ar. Chetan Shivaprasad &  
Ar. Shreya Sen

**Faculty Coordinators:**

Ar. Tejaswini H.M. &  
Ar. Sumitra Kadam

Venue: Seminar hall and courtyard



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

# Biomimicry and Tensegrity in Architecture

- **Course Coordinators:**

Ar. Chetan Shivaprasad and Ar. Shreya Sen

- **Faculty Coordinators:**

Ar. Tejaswini H.M. and Ar. Sumitra Kadam

- **Venue: Seminar hall and courtyard**

- **Date- 3<sup>rd</sup> December 2018-7<sup>th</sup> December 2018**

- **Course Description:**

The Biomimicry and Tensegrity course explores the fascinating intersection of biology-inspired design and the principles of tensegrity in architectural practice. Biomimicry, the practice of emulating nature's patterns and strategies, offers a wealth of inspiration for sustainable and innovative architectural solutions. Tensegrity, a structural concept based on the balance of tension and compression, provides a framework for creating lightweight and efficient structures. This course delves into the theoretical foundations, practical applications, and design processes associated with biomimicry and tensegrity in architecture.

- **Course Objectives:**

- ◆ Understand the fundamental concepts and principles of biomimicry and tensegrity.
- ◆ Explore the historical background and significant examples of biomimetic and tensegrity-inspired architecture.
- ◆ Analyze and evaluate the ecological and structural advantages of biomimetic and tensegrity-based designs.
- ◆ Develop the skills to apply biomimicry principles in architectural design processes.
- ◆ Apply the principles of tensegrity to create lightweight and adaptable architectural structures.
- ◆ Enhance critical thinking and problem-solving abilities through hands-on biomimetic and tensegrity design projects.

The students will be assessed based on their assignments, presentations, thus evaluating their understanding, application, and communication skill.



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

● **Course Outline and schedule:**

3 <sup>rd</sup> December 2018, Monday	<b>Module 1-Introduction to Biomimicry</b>
	Definition and principles of biomimicry Historical examples of biomimetic architecture Case studies of successful biomimetic designs Biomimicry in sustainable architecture
	<b>Module 2- Biomimetic Design Strategies</b>
	Biomimetic design process and methodology Biological systems and their architectural analogies Strategies for adapting biological principles into design solutions Biomimicry in material selection and fabrication techniques
4 <sup>th</sup> December 2018, Tuesday	<b>Module 3- Case Studies in Biomimetic Architecture</b>
	Exploration of exemplary biomimetic architectural projects Analysis of design strategies employed in biomimetic buildings Environmental and energy-related benefits of biomimetic design Social and cultural implications of biomimetic architecture <b>Hands on activity related to Biomimicry</b>
5 <sup>th</sup> December 2018, Wednesday	<b>Module 4- Introduction to Tensegrity</b>
	Definition and principles of tensegrity Historical examples of tensegrity structures Structural advantages of tensegrity in architecture Tensegrity as a design philosophy
	<b>Module 5- Tensegrity in Architectural Design</b>
	Integrating tensegrity principles into architectural concepts Tensegrity systems and their applications in building design Structural analysis and engineering considerations in tensegrity design Tensegrity in adaptive and responsive architecture
6 <sup>th</sup> December 2018, Thursday	<b>Module 6- Tensegrity Case Studies</b>
	Examination of significant examples of tensegrity-inspired architecture Evaluation of the functional and aesthetic aspects of tensegrity structures Tensegrity in large-scale architectural projects
	<b>Module 7- Biomimicry and Tensegrity Integration</b>
	Exploring the synergy between biomimicry and tensegrity Case studies of biomimetic tensegrity structures Future directions and emerging trends in biomimicry and tensegrity
7 <sup>th</sup> December 2018, Friday	<b>Module 8- Design Workshop</b>
	Hands-on design project integrating biomimicry and tensegrity principles Concept development and iterative design process Collaborative group work and design critique sessions Presentation and discussion of final design proposals



  
**Principal**  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2018-19**

**Course 4- Certificate Course on Building Skin for High-rise Smart Façade:  
Collaborative Design Approach**

  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai





**Building Skin for Highrise  
Smart Facade: Collaborative  
Design Approach  
3rd-7th December 2018**

This course will offer deeper insights into smart way  
of facade design instead of looking at it only from  
the aesthetic & pleasure point of view.

Coordinators:

Ar. Varsha Annadate Ar. Smita Gupta  
Ar. Vinita Deshmukh Ar. Shilpa Zambak



**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,  
NAVI MUMBAI**

Belpada Education Complex, Opp. Kharghar Railway Station, Sector No. - 7, C.B.D. Belpada,  
Navi Mumbai - 400 614.

Ph : (022) 2757 1451, 2756 4646



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., LL.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

**BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE,**  
**NAVI MUMBAI**

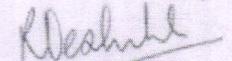
24/11/2018

**NOTICE**

This is to inform all the final year students that our college is arranging for a certificate course on "BUILDING ENVELOPE: SMART FAÇADE: COLLABORATIVE DESIGN APPROACH" from 3<sup>rd</sup> to 7<sup>th</sup> December 2018 in college premises. The course will be conducted from 9.00am to 4.30pm. The course will be for maximum 40 students and enrollment will be given on first come first basis. Interested students should enroll by 25/11/2018. For further details contact the coordinators.

1. Prof. Varsha Annadate
2. Prof. Vinita Deshmukh

Principal

  
Prof. Ritu Deshmukh

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



# Bharati Vidyapeeth COLLEGE OF ARCHITECTURE

Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M. /

Date :

## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

30/11/2018

### NOTICE

This is to inform all the enrolled students for a certificate course on "BUILDING ENVELOPE: SMART FAÇADE: COLLABORATIVE DESIGN APPROACH" that they have to report on 3<sup>rd</sup> Dec. 2018 at 8.30am on first floor computer lab for registration and orientation.

Coordinators:

1. Prof. Varsha Annadate
2. Prof. Vinita Deshmukh.



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**CERTIFICATE COURSE :**  
**BUILDING ENVELOPE:**  
**SMART FAÇADE : COLLABORATIVE DESIGN APPROACH**

5<sup>th</sup> Year B.Arch.

Maximum Marks:100 (Passing:50Marks)

Total No. Of Students Enrolled: 32  
Students

Duration: 5 Days (3<sup>rd</sup> Dec. To 7<sup>th</sup> Dec.2018)  
Total Hrs:30 Hrs.

Course coordinators:

Ar. Varsha Annadate, Ar. Vinita Deshmukh, Ar. Smita Gupta & Ar. Shilpa Zabak.

**Introduction:**

Change is the essential component of any development/progress. It is the need of the time to suit the demands of the progressive world. Building envelopes or building facades are no exception to this i.e the process of change. Building facades reflects/expresses the need, demand & cultural background of the society in the particular period of time and provides sensory pleasures. They are designed to meet the aesthetic and environmental need of the people. With the technological advancement the designs of the facades have changed drastically from static to smart facades.

Creativity and innovation are the key elements of any education. It is evident from the varied designs of building envelopes, materials and construction techniques used for its construction. Architectural students are required to be well versed with the current practices in façade design along with the use of various materials & construction technology involved.

**Intent**

This course will offer deeper insights into smart way of façade design helping to control the indoor environmental conditions instead of looking at it only from the aesthetic & sensory pleasures point of view.

The objective of this class is to change the design approach for the building façade design considering the complexity and multiple functions associated with this element.

The things we would like to change and reset, in the class is as follows.

- Understanding & learning the role of various factors like human perception, context, design tool, typology, function, materials etc
- Change the tendency to look at a façade design as a vertical face of building only & Introduce the ways to use the big vertical face in a smart way as a
  - energy potential façade walls & solar panels



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rty. Station, C.B.D, Navi Mumbai

- Sustainable façade: building elements & sustainability, green wall etc
  - Bio inspired façade design
  - Material oriented design approach i.e. best out of waste(3R) approach
  - Parametric/kinetic/interactive design approach
- 
- Understand & learn the various technological aspects for designing the façade in a smart way.
  - Inspire a student to learn more techniques & design a smart façade for a building



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

## SCHEDULE FOR CERTIFICATE COURSE

Topics to be covered: From 3<sup>rd</sup> Dec 2018 – 7<sup>th</sup> Dec 2018.

Time period for this course is only of 5 days. As time is too short, the following schedule will be followed including expected outputs.

Day& Date	1 <sup>st</sup> half Topic 9.00am to 12.30pm	2 <sup>nd</sup> half Topic 1.30pm to 4.30pm	Marks
3 <sup>rd</sup> Dec. 2018 Monday	<ul style="list-style-type: none"> <li>Understanding Brief &amp; programme.</li> <li>Introduction to Façade/Skin and its typologies by Ar. Varsha Annadate.</li> <li>Lecture on Mind mapping for understanding &amp; defining the scope for façade design by Ar. Vinita Deshmukh.</li> <li>Learning from case study video for understanding the fabrication of facade cladding of Hotel Morpheus by Architect Zaha Hadid.</li> </ul>	<ul style="list-style-type: none"> <li>Group formulation.</li> </ul> <p><b>Exercise 1</b></p> <ul style="list-style-type: none"> <li>Mind mapping for facades to be designed for dissertation proposal.</li> <li>Short listing of case studies and finalization of building (high rise) to be selected for detailed analysis with respect to its modularity, planning and structural system.</li> </ul>	15
4 <sup>th</sup> Dec. 2018 Tuesday	<ul style="list-style-type: none"> <li>PPT Presentation on Living Facades by Ar. Smita Gupta.</li> </ul>	<p><b>Exercise 2</b></p> <ul style="list-style-type: none"> <li>Exercise on reading existing building Facade (Abstraction method).</li> <li>Identifying &amp; analyzing the elements on facade like Scale &amp; proportion, Light &amp; shadow, Solid &amp; voids, Play of lines, Water body, Colours, Surrounding context etc.</li> </ul>	<u>20</u>
5 <sup>th</sup> Dec.2018 Wednesday	<p>Lecture by Ar. Pankaja Bagul on "Parametric /Dynamic design approach for building façades.</p>	<p><b>Exercise 3</b></p> <ul style="list-style-type: none"> <li>Group exercise on application of parametric as a design tool for</li> </ul>	<u>25</u>



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

		Pavillion design.	
<b>6<sup>th</sup> Dec. 2018 Thursday</b>	<ul style="list-style-type: none"> <li>• Lecture on Intelligent facades by Ar. Shilpa Zabak.</li> <li>• Lecture on Kinetic facades by Ar. Varsha Annadate.</li> <li>• Review &amp; discussion on design of facades/skin for high rise building.</li> </ul>	<ul style="list-style-type: none"> <li>• Design discussion.</li> <li>• Guest lecture on Façade systems by Mr. Govindrajan from BES Consultants, Mumbai.</li> </ul>	•
<b>7<sup>th</sup> Dec.2018 Friday</b>	<ul style="list-style-type: none"> <li>• Design review &amp; discussion.</li> </ul>	<b>Exercise 4</b> <ul style="list-style-type: none"> <li>• Final design for façade for high rise building with working model.</li> <li>• Guidelines for compilation of all exercises.</li> </ul>	<b>30</b>
Final submission of A4 size book and A2 size sheets and model for exhibition.			
Performance			10
Total			100



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

**ASSESSMENT PROCEDURE AND ASSESSMENT SHEET:**



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online  
MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2018-19**

**Course 5- Certificate Course on Mind-mapping for Design Thinking**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai



**BHARATI VIDYAPEETH COLLEGE  
OF ARCHITECTURE**

*10th December 2018  
to  
14th December 2018*

Course on

**Mind Mapping for Design**

**Thinking**

**For 2nd Year Students**



**Coordinators:**

Prof. Kamakshi Vaidya

Prof. Dipanwita

Chakraborty



Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

## Mind Mapping for Design Thinking

### **Introduction:**

The Mind-mapping course explores the powerful technique of mind mapping as a tool for enhancing creativity, organizing ideas, and fostering design thinking in the field of architecture. Mind-mapping offers a visual and structured approach to brainstorming, problem-solving, and conceptualizing architectural projects.

### **Aims:**

Learning Mind mapping for design thinking.

### **Objectives:**

- To enable students to apply mind mapping to conceptual development of architectural design.
- To be able to conceptualize alternatives and decision making.
- Understand the concept and principles of mind mapping and its relevance to architecture.
- Explore the mind mapping techniques and their applications in design thinking.
- Develop skills to create effective mind maps for architecture
- Utilize mind mapping to enhance creativity, idea generation, and problem-solving in architectural design processes.
- Foster effective communication and collaboration through the use of mind maps in architectural presentations and discussions.

**Coordinator: Prof. Kamakshi Vaidya and Prof. Dipanwita Chakraborty**

**Dates: 10<sup>th</sup> Dec. 2018, Monday to 14<sup>th</sup> Dec.2018, Friday**

**Participants: 2nd Year Students**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

- **Schedule and course curriculum:**
  - Module 1: Introduction and Background to Mind Mapping
    - Definition and principles of mind mapping
    - Historical overview of mind mapping techniques
    - The relevance of mind mapping in architecture
    - Benefits of using mind maps in architectural design
  - Module 2: Mind Mapping Techniques and Strategies
    - Core elements and structure of a mind map
    - Generating ideas and organizing thoughts using mind maps
    - Techniques for visualizing architectural concepts and relationships
    - Using keywords, images, and symbols in mind mapping
  - Module 3: Mind Mapping in Design Thinking
    - Integration of mind mapping in the design thinking process
    - Problem-solving and ideation techniques using mind maps
    - Mind mapping for concept development and iteration
    - Applying mind mapping in architectural programming
  - Module 4: Collaborative Mind Mapping
    - Collaborative mind mapping techniques and tools
    - Conducting brainstorming sessions using mind maps
    - Facilitating group discussions and decision-making with mind maps
    - Sharing and presenting collaborative mind maps in teams
  - Module 5: Mind Mapping for Communication and Presentation
    - Using mind maps to communicate design ideas effectively
    - Creating visual presentations using mind maps
  - Module 6: Design Workshop
    - Hands-on design project integrating mind mapping techniques
    - Applying mind maps to develop design concepts and solutions
    - Critique sessions and peer reviews of mind map-based design proposals
    - Presentation and discussion of final design projects
- **Assessment Procedure:** The assessment was made based on the following criteria:

Application of Mind Mapping to better understanding and problem solving.

Case 1-Understanding self

Case2 – School as memory

Case 3-Travel Planner



  
 Principal  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



**Bharati Vidyapeeth**  
**COLLEGE OF ARCHITECTURE**  
Affiliated to the University of Mumbai



Founder :  
**Dr. Patangrao Kadam**  
M.A., L.L.B., Ph.D.

Belpada Complex, Opp. Kharghar Rly. Station,  
Sec.7, C. B. D. Belapur, Navi Mumbai- 400 614 - India

Principal  
**Prof. Satish Dhale**  
(G.D.DID, P.G.DID, IIA, M.Sc.ID, M.Arch)

Ref. No. : BV / COA / N.M./

Date :

## 1.2 Academic Flexibility

**1.2.1 Number of Add on / Certificate / Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. during the last five years**

**AY 2018-19**

**Course 6- Certificate Course on Parametric Design Thinking**



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai

209

# Parametric Design Thinking

---

## Computation and Design Course

### 17th-21st December 2018



## BHARATI VIDYAPEETH COLLEGE OF ARCHITECTURE, NAVI MUMBAI

Belpada Education Complex, Opp. Kharghar Railway Station, Sector No. - 7, C.B.D. Belapur,  
Navi Mumbai - 400 614.

Ph.: (022) 2757 1451, 2756 4646



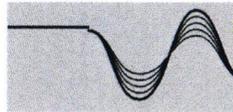
*(Signature)*

Principal

Bharati Vidyapeeth  
College of Architecture

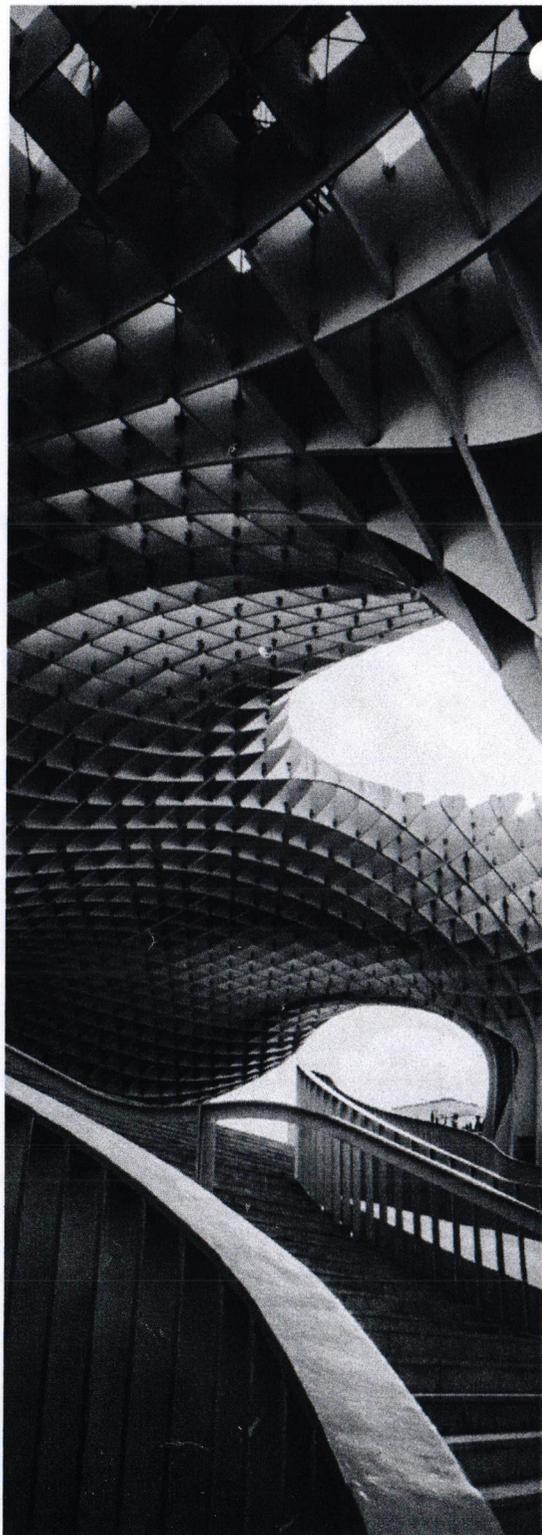
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D. Navi Mumbai



 <b>01. Introduction</b>	<b>02. Aim &amp; Objective</b>	<b>03. Methodology</b>	<b>04. Design Tools</b>	<b>05. Installation Design</b>
Brief introduction through case studies about parametric design thought process.	Understanding concepts and setting objectives for the course.	Interaction with instructors to enable student learning.	Introduction to various modelling tools to aid design and fabrication.	Final iteration of design concept explained.
<b>04</b>	<b>05-07</b>	<b>08</b>	<b>09-10</b>	<b>11-15</b>



  
**Principal**  
 Bharati Vidyapeeth  
 College of Architecture  
 Belpada Complex, Opp. Kharghar  
 Rly. Station, C.B.D, Navi Mumbai



# Introduction

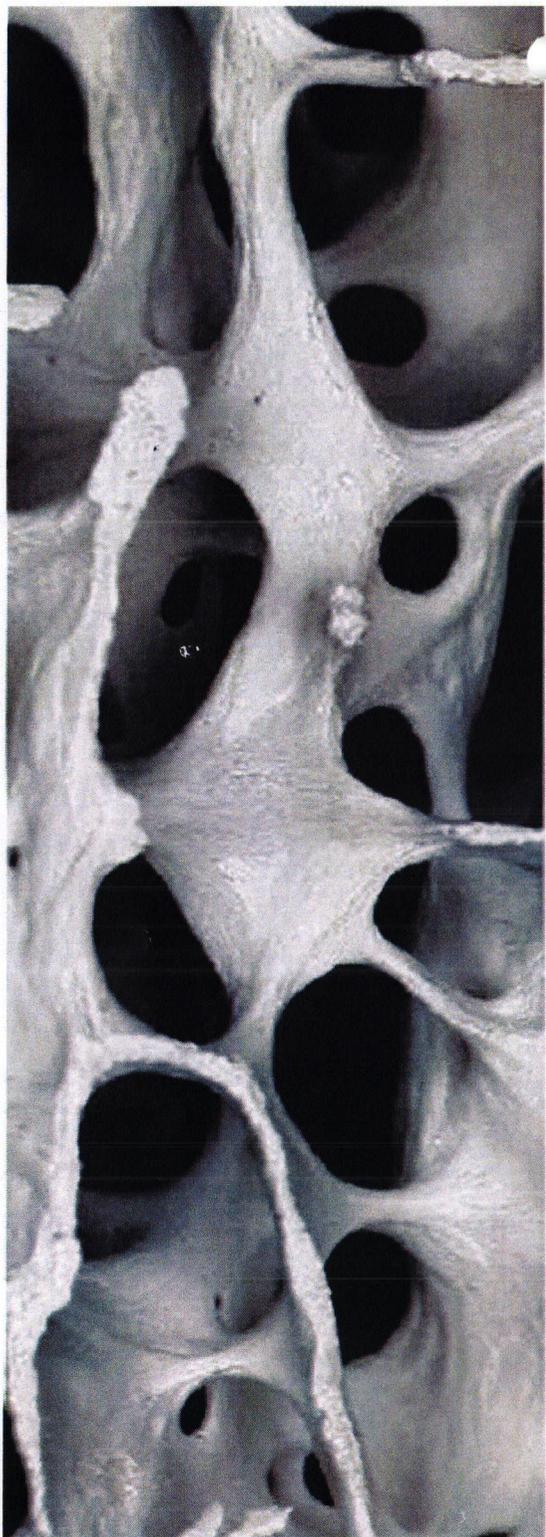
With so much competition all around the world and the coming in of digital technologies and software it is of utmost importance to be aware of latest trends and technologies in the architectural world all over the globe. Parametric Design is one such trending approach and most researched upon terminologies. Parametric design is a process based on algorithmic thinking that enables the expression of parameters and rules that, together, define, encode and clarify the relationship between design intent and design response.

Parametric design is a paradigm in design where the relationship between elements is used to manipulate and inform the design of complex geometries and structures.

The term parametric originates from mathematics (parametric equation) and refers to the use of certain parameters or variables that can be edited to manipulate or alter the end result of an equation or system. While today the term is used in reference to computational design systems used by architects such as Zaha Hadid, Bjarke Ingles, Frank O Gehry etc, there are precedents for these modern systems in the works of architects such as Antoni Gaudí, who used analog models to explore design space.

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai





# Aim and objective

## Aim

To design an architectural installation keeping the concept of “Distruption” in mind using Parametric modelling softwares(Rhino+Grasshopper).

## Objective

The purpose of this design is to test the understanding of software skills of students using softwares taught during the course.

Through the course, the students insight on designing will gain a new perspective which was unexplored before. The objective is to change the design approach of students and think in a more non-conventional way.

This will be achieved by the following:

1. Understand the term Parametric Architecture
2. Understand and learn how to approach towards non conventional designs
3. Teach students a parametric software (rhino+grasshopper) in order tounderstand the designing of complex designs.

Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rail Station, B.D, Navi Mumbai



# Program

Day	Schedule
DAY 1: 17 December 2018 Introduction to Parametric Design Thinking	<ul style="list-style-type: none"><li>•Presentation on parametric architecture</li><li>•Brief introduction to Rhino+Grasshopper</li><li>•Intro to Rhino 6 Interface</li><li>•Basic commands</li></ul>
Day 2: 18 December 2018 Rhino Modeling Course	<ul style="list-style-type: none"><li>•Revision of Day 1</li><li>•Surface Manipulative commands</li><li>•Assignments- 2D &amp; 3D compositions</li><li>•Introduction to Grasshopper</li></ul>
Day 3: 19 December 2018 Grasshopper Basics & algorithms	<ul style="list-style-type: none"><li>•Interface   Material &amp; Command Library</li><li>•Basic components ( rhino components on grasshopper)</li><li>•Developing ones own algorithms</li><li>•Introduction of design brief for installation</li></ul>
Day 4: 20 December 2018 Digital Fabrication Techniques	<ul style="list-style-type: none"><li>•Introduction to fabrication techniques</li><li>•Working on the design of the architectural installation</li><li>•Developing fabrication drawings</li></ul>
Day 5: 21 December 2018 Building the Installation	<ul style="list-style-type: none"><li>•Hands-on work with building the installation &amp; Review</li></ul>



  
Principal  
Bharati Vidyapeeth  
College of Architecture  
Belpada Complex, Opp. Kharghar  
Rly. Station, C.B.D, Navi Mumbai