

UNIVERSITY OF MUMBAI



Syllabus

For PhD Coursework In ARCHITECTURE

Programme Code: PhD-AR

(As per Credit Based Semester and Grading System)
with effect from the Academic Year 2025-26

Sr. No.	Heading / Contents	Particulars
1.	Title of the Course	Ph.D. Course Work in Architecture
1A.	Necessity for the Course	Research in Architecture at Doctoral level is now emerging in the country. In Mumbai University, a PhD programme has been introduced only recently, and it is making do with the PhD coursework curriculum of Technology. There is an urgent need for formulating a PhD coursework curriculum that is specifically made for the discipline of Architecture.
2.	Eligibility for Admission	As per University of Mumbai circular No. Exam./Thesis/Univ./VCD/947 of 2018 and/ or guidelines/ordinances published from time to time
3.	Duration of PhD Programme	University of Mumbai circular No. Exam./Thesis/Univ./VCD/947 of 2018 and/ or guidelines/ordinances published from time to time
4.	Passing Marks in Course Work	As per University of Mumbai circular No. Exam./Thesis/Univ./VCD/947 of 2018 and/ or guidelines/ordinances published from time to time
5.	Course work Duration	6 Months or 1 to 2 Semesters
6.	Levels	P.G.
7.	Pattern	Semester
8.	Status	Proposed
9.	To be Implemented	From Academic Year 2025-26

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 BoS(ad hoc)-Chairman-Architecture
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PhD Coursework In ARCHITECTURE

Preamble:

Architecture and architectural production have conventionally been associated with architectural practice. In India, ever since the second quarter of the twentieth century, when several architectural practices emerged in Mumbai (then Bombay), architecture education was seen as a professional program. Professional associations have governed its functioning since.

In recent times, these institutions, most notably the Council of Architecture (COA), constituted by the Government of India under the provisions of the Architects Act, 1972, enacted by the Parliament of India, has recognised that discipline of architecture, even if rooted in practice, still provides immense space and relevance for research and the production of knowledge within the discipline.

In the University of Mumbai, the PhD Program has had a tentative start. The course work of the PhD curriculum presently has been of the curriculum of Technology. There is an urgent need for formulating a PhD coursework curriculum that is specifically for the discipline of Architecture. This syllabus for PhD Coursework in Architecture (As per Credit Based Semester and Grading System), to be put into effect from the Academic Year 2025-26, redresses this lacuna by situating itself in the current pedagogy of architecture and design.

We believe not looking at practice and theory as binary opposites. Theory is not outside of practice, rather in constant interplay with it. Here, new knowledge is produced, that freshens and renews relevance and offers new meaning to our circumstances. As more scholars come forward to carry out Doctoral research, relevant coursework is essential to provide a sound grounding in methodologies, processes, theories and ethics; while exploring wide possibilities of research directions.

The course work prescribed by this syllabus is aimed to equip Doctoral scholars in architecture with advanced research skills specific to the field of architecture. It covers various research methodologies, theoretical frameworks, and practical applications in architectural research. Scholars will be trained in the mechanics of research writing and presentation, including in ethical practices and conventions of attribution. Most importantly, this course work shall familiarise scholars about the concepts and best practices in ethical conduct in research and publication.

An essential objective of this coursework is that scholars are made aware of architectural theory and how its understanding helps unravel the principles and concepts underlying the creation and interpretation of built environments, considering historical, cultural, and social contexts. By applying critical theory, research scholars can critique, reimagine and transform architectural environments to be more inclusive, equitable, and reflective, with spaces that address social justice issues and promote positive change. A scholar is exposed to the philosophy of architecture examining the fundamental nature of architectural practice: questioning what architecture is and what it ought to be.

Architecture has been a significant marker of every period from which it emerges. It is a broad-based discipline, a generalist discipline, that encompasses several areas such as design, art and culture, technology, planning, sociology, habitation, ekistics, information technology, environmental studies, sustainability, and so on, making it ideal for interdisciplinary research. Research in architecture is essential for architectural production to remain up to date and beneficial to our country.

This coursework is formulated, therefore, to hone these essential qualities in a Doctoral research scholar in architecture, to take the first foundational steps into what will be an original research contribution that expands the available knowledge base of architecture, and provides an invaluable resource to contemporary architectural practice.

- **Dr. Smita Dalvi**

Sub-committee for devising PhD coursework in Architecture

Name	Designation	College Name
Dr. Smita Dalvi	Chairperson	Pillai College of Architecture, Panvel
Dr. Rekha Nair	Member	Sir JJ College of Architecture, Mumbai
Dr. Shilpa Sharma	Member	Academy of Architecture, Mumbai
Dr. Binti Singh	Member	KRVIA School of Architecture, Mumbai
Dr. Meghal Arya	Expert Invitee	CEPT University, Ahmedabad

Notes on the Course Work:

1. The PhD coursework in Architecture shall be of 14 credits out of which 12 credits are discipline specific and 2 credits of course on Research & publication Ethics. The course work is required to be completed during the initial one or two semesters of the Ph.D programme
2. Ph.D student has to obtain a minimum of 55% of marks or its equivalent grade/CGPA in the coursework.
3. The 12 Credits are divided further in such a way that 6 credits shall be assigned to Research Methodology. The remaining 6 credits shall be distributed between a Seminar course in which a mini research project will be conducted and presented, and an elective course as recommended or specifically devised by Guide/ Research Centre. This can be from University of Mumbai M.Arch. programmes or a course adopted from SWAYAM-NPTEL platform with credit transfer.
4. 'Research and Publication Ethics' course of 2 credits is a mandatory requirement and is pre-requisite for registration for Ph.D. as per UGC guidelines. For this, the courses from SWAYAM portal can be explored for supplementary learning or for credit transfer.
5. The Research Centre will issue a certificate in the given format upon successful completion of the PhD coursework by the PhD student.

Name of the Research Centre

Certificate

This is to certify that Mr/Ms/Mrs.....

(Surname first)

Has been a regular student of PhD and has attended the course work in Architecture
conducted at the recognised centre/ department from

..... to in the year-

He/she has successfully completed the course as part of the pre-registration coursework
prescribed by the University of Mumbai,

and has securedCGPA inpoint scale

Date:	Sign:	Sign:
Seal:	Name of the Guide/Supervisor:	Name of the Centre Head/Principal:

Proposed Structure for PhD Coursework in Architecture

Course Code	Course Title	Contact Hours	Credits	Examination Scheme			
				Exam	Term Work	Seminar Presentation	Total Marks
PhD-AR 101	Research Methods in Architecture	6	6	100	100	--	200
PhD-AR 102	Academic Writing & Seminar	3	3	--	50	50	100
PhD-AR 103	Choice Based Elective	3	3	--	100	--	100
PhD-AR 104	Research and Publication Ethics	2	2	--	100	--	100
		14	12+2				500

Details of Coursework

PhD-AR 101 Research Methods in Architecture

Course Title	Research Methods in Architecture					
			Marks			
Course Code	Hrs/week	Credits	Theory	Term Work	Seminar Presentation	Total
PhD-AR 101	6	6	100	100	--	200

Course Objectives:

This course aims to equip PhD students with advanced research skills specific to the field of architecture. It covers various research methodologies, theoretical frameworks, and practical applications in architectural research. Students will learn to develop research proposals, conduct literature reviews, and apply qualitative and quantitative research methods. It has the following objectives:

- Understand the principles and methodologies of architectural research.
- Acquire a grounding in theory of knowledge generation in Architecture.
- Develop critical skills in constructing thesis-driven arguments.
- Learn to use design as evidence in research.
- Conduct comprehensive literature reviews.
- Formulate and present research proposals.

Course Contents:

1. Introduction to Architectural Research

- Overview of research: objectives and types of architectural research
- Key concepts and terminologies
- Importance of research in architecture, scope, possibilities and challenges

2. Research Methodologies in Architecture and related areas

- Qualitative Research Methods
 - Qualitative research focuses on understanding the meanings, experiences, and perspectives of individuals or groups; meanings and interpretations of artefacts or built environment. It involves methods such as Case Studies, Interviews, Focus Groups, Participant Observations, Ethnography, Grounded Theory, Content Analysis, Visual or Textual Analysis, Spatial Studies, Archival or Historical research etc. to gather rich, detailed data. This type of research is often used to explore social, cultural, artistic and psychological aspects of the built environment. The module should equip scholars with techniques of qualitative data collection and analysis.
- Quantitative Research
 - Quantitative research involves the collection and analysis of numerical data to identify patterns, relationships, and trends. Methods include questionnaire surveys, experiments, statistical analysis, simulation and modelling etc. This form of research is commonly used to study the physical, environmental, and technical aspects of build environment. The module should equip the scholars with necessary statistical concepts for collecting and analysing quantitative data
- Mixed-Methods Research
 - Mixed-methods research combines both qualitative and quantitative approaches to provide a comprehensive understanding of a research problem. By integrating the strengths of both methods, researchers can gain deeper insights and validate findings through multiple perspectives. These methods are suited for applied research, post-occupancy evaluations, building performance studies etc.

3. Theoretical and Epistemological Studies for Architectural Research

- Introduction to Architectural Theory:
 - Architectural theory examines the principles and concepts underlying the creation and interpretation of built environments, considering historical, cultural, and social contexts. Design theory, on the other hand, focuses on the methodologies and processes of design, exploring how designers approach problem-solving, creativity, and innovation in their work.
- Epistemology in Architecture: Understanding knowledge production and validation in architectural research.
 - The nature, origin, and limits of knowledge within the field of architectural practice and theory. How architects and scholars acquire, validate, and apply knowledge in their work. Understanding epistemological principles to critically reflect on methods, assumptions, and the impact of architecture on society and the built environment.
- History of Architectural Thought: Exploration of historical developments in architectural theory.

- The history of architectural thought spanning from ancient civilizations to the 19th and 20th centuries which saw significant transformations with movements like Modernism, which emphasized simplicity and functionalism, and Postmodernism, which questioned traditional narratives and embraced diversity in design. How architectural thought continues to evolve today.
- Critical Theory and Architecture: Introduction to critical theory and its application in architectural research.
 - Critical Theory challenges traditional norms and encourages architects to consider the broader impact of their work on communities and the environment. By applying critical theory, architects can create more inclusive, equitable, and reflective spaces that address social justice issues and promote positive change.
- Philosophy of Architecture:
 - The philosophical underpinnings of architectural practice.

The fundamental nature of architectural practice: questioning what architecture is and what it ought to be. It examines the aesthetic, ethical, and functional dimensions of design, considering how architecture influences and is influenced by human experiences and societal values.

4. Research Process

- Research Process and design
- Literature Review
- Research Proposal Development-- formulation of Research Problem or Hypotheses
- Writing Research Proposal
- Sessional Work for Internal Marking:
- Minor assignments based on the above topics, discussions and debates, comprehensive research proposal for thesis.

Term Work:

- Minor assignments based on the above topics,
 - Discussions and debates,
 - Comprehensive research proposal for thesis.
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PhD-AR 102 Academic Writing and Seminar

Course Title	Academic Writing and Seminar					
			Marks			
Course Code	Hrs/week	Credits	Theory	Term Work	Seminar Presentation	Total
PhD-AR 102	3	3	--	50	50	100

Objectives:

The course intends to equip and train the scholars in the mechanics of research writing and presentation, including in ethical practices and conventions of attribution. The scholars will demonstrate the knowledge of research methods, skills in research and critical thinking acquired in the previous course.

Course Contents:

- Writing for clear and effective communication
- Basics of academic writing
- Types of academic writing and their structures
- Literature Review
- Importance of attribution, citation and referencing styles
- Ethical Practices and conventions of research writing
- Tools for academic writing
- Mini Research Project

Research Scholars will carry out a mini research project on a topic selected in consultation with their supervisor. Research scholar is expected to conduct a systematic inquiry into the topic using appropriate research methods. The outcome of the research will be in the form of written report/paper, clearly demonstrating skills of academic writing. The report shall include objectives/ problem statement/ hypothesis, literature review, description of methodology adopted, findings/analysis, and conclusions. The course will conclude with the scholar making a presentation in the form of a seminar. Internal and external examiner will evaluate both the written report and the seminar presentation.

Term Work:

- Writing a Scientific Research Article / Research Paper
 - Presentation of the paper in the form of a seminar
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PhD-AR 103 Choice Based Elective

Course Title	Choice Based Elective					
			Marks			
Course Code	Hrs/week	Credits	Theory	Term Work	Seminar Presentation	Total
PhD-AR 103	3	3	--	100	--	100

This course is to be suggested by guide/supervisor in specific domain area of research undertaken by the research candidate. Research candidates can undertake this course in consultation with guide/supervisor in any recognised PG Centre affiliated to the University OR selected from the Swayam-NPTEL portal. The scholars will be required to attend the classes of the selected course and complete the specified coursework and examination as applicable. The credits earned thus will be credited to the scholar towards this course.

Alternatively, the research centre can float electives on topics of their choice based on their specific research interest or undertakings. Such elective courses will be open to Doctoral and Masters students (of any discipline) as well. The centre will devise appropriate course content and method of internal evaluation.

PhD-AR 104 Research & Publication Ethics (2 Credits)

Course Title	Research & Publication Ethics					
			Marks			
Course Code	Hrs/week	Credits	Theory	Term Work	Seminar Presentation	Total
PhD-AR 104	2	2	--	100	--	50

Objectives:

The course intends to familiarise the scholars about the concepts and best practices in ethical conduct of their research activities and publication thereof. This is pre-registration mandatory course work, a course on Research and Publication Ethics (RPE), as per UGC Circular D.O.No.F.1-1/2018(Journal/CARE) of Dec 2019. RPE is to be conducted by the Research centre/department.

Course Contents:

- Philosophy of Ethics
- Ethical Scientific and Research Conduct- definitions and best practices
- Ethics of Publication—definitions and best practices
- Research and Publication Misconduct and their types
- Databases and Research Metrics

Term Work:

The pedagogy of the course can follow a variety of modes such as class room teaching, guest lectures, group discussions, and practical sessions. There will be an end of the term examination based on the course contents.

Selected books and references for the coursework:

- David C. Wang and Linda N. Groat. .
- Kothari, C. R. (2009). *Research Methodology – Methods and Techniques*, New Age International Publishers.
- Ewing, R. and Park, K. (2020). *Basic Quantitative Research Methods for Urban Planners*, Routledge Taylor & Francis.
- Silva, A. E., Heasley, P., Harries, N., Broeck, P. V. (2015). *The Routledge Handbook of Planning Research Methods*. Routledge Taylor & Francis.
- Thomas E. Scruggs, Margo A. Mastropieri. (2006). *Applications of Research Methodology*, Elsevier.
- Wang, X. and Hofe V. R. (2007). *Research Methods in Urban and Regional Planning*, Springer.
- Sattrup, P. A. (2012). *Architectural Research Paradigms: an overview and a research example*. Proceedings of Symposium: When Architects and Designers Build / Draw / Write a PhD.
- Kruf, Hanno-Walter. (1994). *A History of Architectural Theory, From Vitruvius to the Present*. Princeton Architectural Press.
- Nesbit, Kate. (1996). *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995*. Princeton Architectural Press.
- Wiryomartono Bagoes. (2022). *Architectural Humanities in Progress: Divulging Epistemology, Ethics, and Aesthetics of the Built Environment and Habitation*. Springer.
- Kate I. Turabian. *A Manual for Writers of Research Papers, Theses, and Dissertations*.
- Doshi, Balkrishna. (2019). *Writings on Architecture and Identity*. ArchiTangle.
- Mehrotra, Rahul. (2011). *Architecture in India Since 1990*. Pictor Publishing.