

### *Masters of Architecture (Architecture Pedagogy)*

This course aims to develop effective, passionate and motivated teachers in the field of Architectural Education, who demonstrate an innovative, reflective, and research based approach to teaching. Masters in Architecture Pedagogy is a program with a unique course structure and a pool of faculties specialized in various disciplines to support development of holistic learning among future educators.

The course was earlier conceived as one of the pilot courses in M.Arch in our faculty in order to fulfill the requirements of specially trained faculty for teaching Architecture in the country where Architecture Education is growing at a rapid pace.

The teaching curriculum involves a thorough understanding of fundamentals, contemporary trends, and teaching methods in Architecture Pedagogy, with an enhanced emphasis on design. The curriculum helps to develop aspects of critical thinking & inquiry, creativity & innovation, research and investigation, collaboration & civic engagement, and environmental awareness among others.

Students learn under supervised teaching experience, engagement through an active and diverse curriculum, and independent research projects in consultation with faculty members. Rigorous exercises are carried out on current trends in Architecture, Research and Pedagogical processes so that the students develop a knowledge base and a personality well equipped to train the budding Architects.

Masters of Architecture (Architecture Pedagogy)

**M. ARCH ( ARCHITECTURE PEDAGOGY)**  
SCHEME OF EXAMINATION

w.e.f July 2019 Session 2019-20

**SEMESTER -1**

CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
		LECTURE	T/ ST	IA	WR	VV	TOTAL		
MAP-111	Contemporary Architecture	2	2	50	50	-	100	3	4
MAP-112	Review of Architecture Education	2	2	50	50	-	100	3	4
MAP-113	Architecture Pedagogy-I	2	0	25	25	-	50	3	2
MAP-114	Humanities & Built Environment	2	2	50	50	-	100	3	4
MAP-115	Research Methodology	2	2	50	50	-	100	3	4
MAP-116	Architectural Research Studio-I	2	4	75	-	75	150	-	6
MAP-117	Dissertation I	2	2	50	-	50	100	-	4
<b>TOTAL</b>		<b>14</b>	<b>14</b>	<b>350</b>	<b>225</b>	<b>125</b>	<b>700</b>	<b>-</b>	<b>28</b>

**SEMESTER -2**

CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
		LECTURE	T/ ST	IA	WR	VV	TOTAL		
MAP-211	Urban design studies	2	0	25	25	-	50	3	2
MAP-212	Concepts, Criticism & Practices-I	2	0	25	25	-	50	3	2
MAP-213	Architecture Pedagogy-II	2	2	50	50	-	100	3	4
MAP-214	Architectural Communication	2	2	50	50	-	100	3	4
MAP-215	Cognitive Psychology	2	2	50	50	-	100	3	4
MAP-216	Digital Design & Fabrication Studio	2	6	100	50	50	200	3	8
MAP-217	Dissertation-II	2	2	50	-	50	100	-	4
<b>TOTAL</b>		<b>14</b>	<b>14</b>	<b>350</b>	<b>250</b>	<b>100</b>	<b>700</b>	<b>-</b>	<b>28</b>

**SEMESTER -3**

CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
		LECTURE	T/ ST	IA	WR	VV	TOTAL		
MAP-311	Curriculum Design	2	2	50	50	-	100	3	4
MAP-312	Concepts, Criticism & Practices-II	2	0	25	25	-	50	3	2
MAP-313	Design studio pedagogies	2	0	25	25	-	50	3	2
MAP-314	Architectural Journalism	2	2	50	50	-	100	3	4
MAP-315	Practice Teaching	2	4	75	-	75	150	-	6
MAP-316	Architectural Research Studio-II	2	4	75	-	75	150	-	6
MAP-317	Dissertation-III	2	2	50	-	50	100	-	4
<b>TOTAL</b>		<b>14</b>	<b>14</b>	<b>350</b>	<b>150</b>	<b>200</b>	<b>700</b>	<b>-</b>	<b>28</b>

**SEMESTER -4**

CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
		LECTURE	T/ ST	IA	WR	VV	TOTAL		
MAP-411	Professional Practice and Education Manag	2	2	50	50	-	100	3	4
MAP-412	Thesis	4	8	150	-	150	300	-	12
MAP-413	Internship	2	6	100	-	100	200	-	8
MAP-414	Architecture Pedagogy Project	2	2	50	-	50	100	-	4
<b>TOTAL</b>		<b>10</b>	<b>18</b>	<b>350</b>	<b>50</b>	<b>300</b>	<b>700</b>	<b>-</b>	<b>28</b>

**MAP 111:**

**Contemporary Architecture**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To identify the pivotal events, trends and movements that has shaped our understanding and approach to architecture.
- To understand the multidisciplinary approach in architecture
- To critically analyze the issues and challenges in the ongoing practices and formulate an understanding of the same

**METHODOLOGY:**

- Lectures and presentations based on field observations, surveys, web search and library studies.

**CONTENTS:**

**Philosophical Discourse**

- Architecture: philosophical discourse and practice
- Philosophical movements and ideas in architecture: idealism and architectural history, phenomenology and architectural experience, structuralism, postmodernism, post-structuralism
- Philosophical issues in architecture: architecture and aesthetics, architecture and ethics, architecture and social & political philosophy; architectural criticism and the effects of contemporary thoughts on society and culture, experience and appreciation.
- The multidisciplinary approach: understanding ideas from outside architecture that have informed current architectural discourse; architecture and representation: conceptualize, communicate and concretize.

**Contemporary Architecture and Issues**

- Global Trends in architecture and analysis (1800-present)
- Transformation of Contemporary Architecture in the Indian scenario
- Issues/Challenges Critical to present times such as globalization, technology, cognitive sciences, the environment, and cultural politics

**Technology and Architecture**

- Review of Concept and Development of Contemporary Technology
- Building Materials: Contemporary and Futuristic, Contemporary Structural Systems
- Contemporary Technology: Sustainable technologies, Construction technologies, Building Integration system, etc.; Implication of contemporary technologies
- Relationship between philosophy, trends and technology

**MAP 112:****Review of Architecture Education**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To understand the diversity and dynamics of profession in Architecture Education.
- To develop an understanding of Architecture education and curriculum.

**METHODOLOGY:**

- Lectures and presentations based on research, observations, surveys, mock classes and library studies.
- Activity/Exercise based learning to understand and experience practical teaching concepts and issues.

**CONTENTS:**

- **Elements & Principles of Architecture Education:**
  - Identification of different disciplines which need to be covered in teaching programs for Architecture.
  - Systematic organization of main disciplines into logical groups to under: Associated description, Allied description, Core description.
  - Elements of Architecture Education
  - Principles of Architecture Education: Communication Skills, Technology application, Visualization.
  - Challenges and approach of Architecture Education
- **Review of Architecture Education in India:**
  - Review of Architecture Education in India as well as in global context. Understanding of formal system of Architecture Education.
  - Programs on Architecture Education in India as well as in global context in Architecture.
  - Transformations in Architecture Education, Causes of Transformations.
  - Analytical study of Architects/Academicians/Scholars to analyze their contribution in the development Architecture Education in Indian as well as in global context.

**MAP 113:****Architecture Pedagogy-I**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<i>TOT</i>		
2	-	25	25	-	<b>50</b>	3	2

**OBJECTIVE:**

- To understand Pedagogy and establish its relation with Architecture.
- To address concerns of classroom teaching practice as well as theoretical and practical issues associated with Architecture Teaching.
- Development of techniques for teaching of Core, Allied and Associated subjects to reach the final stages of the Architecture Education program.
- To develop the understanding of when and how to apply the teaching methods and tactics which would be best to facilitate deeper learning among the students in Architecture.

**METHODOLOGY:**

- Classroom lectures and practical assignments.
- Development of Lesson Plans for core, allied & associated subjects,
- Simulated Teaching

**CONTENTS:**

- A. Pedagogy of Architecture  
Lecture Method, Lecture Demonstration Method, Case Study Method, Problem Solving Method, Discovery Method, Studio Method, Project Method, Survey Method
- B. Research in Architecture
  1. Pure and Applied Research
  2. Action Research
- C. Lesson Planning and Simulated Teaching
- D. Syllabus and Curriculum, Types of Curriculum , Principles of Curriculum Construction
- E. Formal , Non Formal and Informal Education
- F. Planning Teaching Lessons in
  - (a) Core Subjects(Architecture Design, Building Construction and Architectural Drawing)
  - (b) Associated Subjects (Humanities, Management, Psychology, History and Fine Arts)
  - (c) Allied Subjects (Building Services, Structure, etc.)
- G. Planning and Assessment Methods, Tools and Teaching Evaluation, Planning a test, Preparation of Blue Print, Criterion of a test item, Preparing the instruction, Preparing Schedule and Administering the test, and Final Evaluation
- H. Evaluation Techniques, Difference between Evaluation and Assessment, Summative, Formative and Diagnostic Assessment in Architecture
- I. Pedagogical Analysis: Meaning and Definition of Pedagogical Analysis, Need and importance, Pedagogical Analysis of a unit from B.Arch. Syllabus.

**MAP 114:**

**Humanities and Built Environment**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	T/ST	IA	WR	VV	TOT		
2	2	50	50	-	100	3	4

**OBJECTIVE:**

- To understand Architecture through a framework of human sciences (Intensive Humanities).
- To understand how human psychology, society and economics influence built environment and in turn are affected by it.

**METHODOLOGY:**

- Lectures, Presentations, Discussions, Interactive Sessions.

**CONTENTS:**

**Psychology:-**

- Definition ,Branches and Current trends in Psychology,
- Studies in built environment psychology, Human-Environment Interaction
- Environment behavior studies
  - Environment and Human Behavior- Relationship
  - Environmental effects on human behavior
  - Impact of human activities on the Environment
  - Environmental Stressors- Types, Causes and Effects
  - Behavioral Effects of Environmental Stressors
  - Concept of Personal Space and Territoriality
- Nature and Effects of Built Environment

**Sociology:**

- Society – Concept, Meaning, Definition, Approaches-
- Individual and Society, Social Structure- Main Components, Social Structure of India
- Rural-Urban Dynamics and Resultant Migration- Rural-Urban Continuum and differences
- Origin and Growth of Cities, Impact of Automation on Society
- Traditional patterns and trends of change in community
- Urbanization & Urbanism
- Urban Sociological Theories
- Industrialization, Modernization and Globalization
- Technology, Globalization and the Changing Socio-Economic Scenario

*Masters of Architecture (Architecture Pedagogy)*

**Economics:**

- Theory of Demand & Supply, Micro & Macro Economy, Economy of Scale, Urban & Rural Economy
- National Economic Development, Dynamics of Infrastructure Development and Role of Government agencies, Financing and Institutions associated with Housing and Infrastructure Development.
- Real Estate dynamics-Real estate Development-Fundamental Concepts and Techniques
- Urban Policy and Real Estate Markets
- Impact of Globalization on Third World Economy

**MAP 115:**

**Research Methodology**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	T/ST	IA	WR	VV	TOT		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To understand basic concepts of research, its methodologies.
- To enhance the students' generic research, communication skills and analytical ability.
- To identify and define appropriate research topics, research problem and parameters.
- To develop an understanding of the ethical dimensions of conducting research.

**METHODOLOGY:**

- Lectures, group discussions and tutorials.
- Exercises, assignments and development of sample research proposals

**CONTENTS:**

**Unit I: Introduction, types of Research**

- Foundation: Its Nature and Scope
- Scientific Research: Steps of scientific methods and its scope in Architectural research
- Qualitative Research Paradigm: Assumption, Nature and Scope, Action Research, Pure and Applied Researches in Architecture.

**Unit II: Research Methods:** Historical, Survey, Experimental, Case Study, Ethnographic, Visual Research

**Unit III: Research Design: Meaning and Importance**

- Sample and Sampling Design: Concepts of Population Sample, Representative Sample, Probability and Non Probability, Techniques of Sampling
- Tools and Techniques of Research: Characteristics of Good Tools, Questionnaire and Interview, Observation, Tests, Scale and Types

**Unit IV: Preparation of Research Proposal:**

- Research Problems, Research Objectives, Research Questions, Hypothesis, Operational Variables, Review of Related Literature, Research Design, Limitations and Delimitations
- Report Writing, Purpose, Format, Characteristics of Good Research report

**Unit V: Descriptive Statistics:**

- Data: Nature and types, Normal Probability Curve: Skewness and Kurtosis



*Masters of Architecture (Architecture Pedagogy)*

- B. Measures of Central tendencies, Measure of Variability, Measures of Correlation: Pearson's correlation and Spearman's Rho

**Unit VI: Inferential Statistics (Parametric)**

- A. **Parametric:** Significance of Statistics, Concept of Null Hypothesis, Level of Significance, T-Test
- B. **Non Parametric:** Chi Square Test, Median R Test, Mann-Whitney Test.

**Unit VIII: Analysis of Qualitative Data**

Editing, Coding of data, Content Analysis  
Plagiarism and research ethics, Web tools in research

**MAP 116:**

**Architectural research Studio**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<i>TOT</i>		
2	4	75	-	75	<b>150</b>	-	6

**OBJECTIVE:**

- To understand design in terms of social, economic and environmental contexts.
- To gain hand on experience of working on real projects.

**METHODOLOGY:**

- Lectures, presentations, site studies.

**CONTENTS:**

The studio exercises would examine issues of built environment through a research based approach, such as evidence based design and community design. The projects should aim to identify current issues in built environment through primary research; understand its social, economic and environmental contexts; and propose and develop design based interventions.

The studio work may relate to outstation field studies in order to identify real-time issues and possible design interventions. Students are supposed to perform the studio work on the topics assigned in group / individual as specified.

**MAP 117:**

**Dissertation I-(AP)**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	T/ST	IA	WR	VV	TOT		
2	2	50	-	50	<b>100</b>	-	4

**Objective:**

- To develop an understanding about Architecture and Research.
- to understand Architectural designs, systems, components, or processes to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety etc.

**Methodology:**

- After initial lectures and detailed analysis, the students are supposed to choose a topic of research and perform studies under the guidance of the supervisor.
- Case Studies by students to advance the understanding.
- Internal Report presentation/review

**Contents:**

- After orientation classes and lectures, the student will submit a synopsis of research project for approval.
- The scope of study will be on any particular aspect of Architecture Research such as Environmental behaviour studies, Digital/virtual practices in architecture, Sustainability, environmental concerns etc. or any aspect which shapes it; with case studies from India and abroad.
- Issues such as social, technological, environmental, economic concern can be opted for detailed study of their effect on Architecture and vice versa.
- The students are supposed to discuss the progress of their research work on the finalized topic regularly throughout the semester in their respective classes. Each student is expected to complete and submit a report based on the research conducted.
- The final Dissertation report is to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the research and guidance.

**MAP 211:**

**Urban Design Studies**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	-	25	25	-	<b>50</b>	3	2

**OBJECTIVE:**

- To introduce the notion of urban built environment.
- To be able to comprehend the components of an urban area and its assembly.

**METHODOLOGY:**

- Lectures and Presentations
- Case Studies by the students

**CONTENTS:**

- **CONCEPT:**
  - The Definition of ‘Urban’
  - City – Types & Forms
  - Determinants of Urban Form
  - Component of Urban Structure
    - Character Districts, Tissue, Grain, and Identity etc.
  - Urban patterns: Grid-iron, Radial, Circular and Organic
  - Urban Design Elements
    - Axis, nodes, Streetscapes, Street furniture, Architectural Vocabulary, Building Control, Architectural Control
- **HISTORY:**
  - City in History- Transition & Transformation.
    - Classical Cities, Medieval Cities, Renaissance Cities, Colonial & Post-Colonial Cities
    - Indian City-Planning Concepts & Traditional Knowledge Systems
- **PHILOSOPHIES:**
  - Garden City, City Beautiful, CIAM, Bauhaus
  - Unwin, Geddes, Corbusier, Mumford, Jane Jacobs, Jan Gehl etc.
- **SCHEMES:**
  - Renewal, Regeneration, Redevelopment, Revitalization, Rejuvenation, etc.
  - Integrated Design Approaches
  - Community Design Perspectives

*Masters of Architecture (Architecture Pedagogy)*

- **GOVERNANCE & POLICY:**
  - Master Plan, Zonal Development Plan, Local Area Plan, and Land Pooling etc.
  - Urban Local Bodies, Urban Local Institutions
  
- **TOOLS:**
  - Methods of Urban Design Survey
  - Documentation & Representation
  - Introduction to GIS & its application in Urban Design

**MAP 212:**

**Concepts, Criticism & Practices-I**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<i>TOT</i>		
2	-	25	25	-	<b>50</b>	3	2

**OBJECTIVE:**

- To critically review architecture and its education in Indian and world history.
- To study the evolution of formal and informal architecture education.

**METHODOLOGY:**

- Lectures, Discussions and presentations

**CONTENTS:**

The intent is to understand that both architecture and education exist as a reflection of various forces operating in their context, such as social, anthropological, cultural, economic, environmental and political; and external influences. A further intent is to understand and appreciate the formal as well as informal sources that contribute to building of knowledge resource in architecture and its education.

The subject will aim to develop an understanding of factors contributing to the architecture and education of ancient, medieval and modern India and world until Indian independence and World War-II respectively. The lectures will also deal with the study of relevant informal and formal knowledge sources of Architecture Education in different eras in India and world.

The topics will include:

- Relevant examples from architecture and education of different civilizations in India and world history.
- Study of attempts to create knowledge resources for formal and informal Architecture Education in different times and places.
- Evolution, formalization and modernization of architecture education from 19<sup>th</sup> to 20<sup>th</sup> century.
- Sources of Informal pedagogy such as profession, modern movements in Architecture, public voice, books, journals, magazines, conferences, workshops.

**MAP 213:**

**Architecture Pedagogy-II**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To understand Architecture Education in relation to technology and digitization and the way it has revolutionized Architectural Pedagogy.
- To develop more effective teaching learning practices with the integration of contemporary technologies in Architecture Education.

**METHODOLOGY:**

- Conceptual inputs, Case discussion, Individual exercise, Group exercise

**CONTENTS:**

- **Technology and Architecture Pedagogy:**
  - Educational Technology, its evolution and present scenario
  - Different approaches to Educational Technology; Software Approach, Hardware Approach, System Approach and Multimedia Approach
  - Critical Study of existing educational technologies involved in Architecture Education with their advantages and limitations.
  - Analytical study of new technologies in Architecture Education with their scope, advantages and limitations: – Virtual Reality & Virtual Environments, Digital Studios/classroom, Mobile Applications based Learning, Digital Information Resources
- **Models of Teaching and Learning:**
  - Meaning and Definitions, Characteristic of teaching Models
  - Elements of Teaching Models, Classification of Teaching and Learning Models
  - Role of Teacher and Students in both models
  - Analytical study of contemporary teaching models and their implications in Architecture Pedagogy
  - Study of important Learning models Like Kolb’s experiential learning model, Honey & Mumford’s learning model, Felder-Silverman learning model, Visual, Auditory and Haptic Learning, Constructive Learning, Blended Learning, Cooperative and Collaborative Learning etc.

*Masters of Architecture (Architecture Pedagogy)*

- **Assessment Through Digital media:**
  - Scope of Media/Technology in Assessment and evaluation
  - Understanding Assessment in digital context
  - Introducing technology/media enhanced Assessment in Architecture Education
  - Designing effective assessment (Formative & Summative) using digital media
  - Facilitating peer and self assessment/evaluation
- **Digital Architecture Pedagogy:**
  - Use of soft wares in Core, Allied and Associated subjects in Architecture Education
  - Use of Mobile Applications for teaching
  - Digital Visualization and Thinking, Design and Drafting
  - Digital Games based learning In Architecture
  - TPACK & SARM
  - Course management softwares



**MAP 214:**

**Architectural Communication**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To equip the students with written, verbal and visual skills
- To acquaint students with the current trends in communication skills

**METHODOLOGY:**

- Lectures, assignments and activities

**CONTENTS:**

- **Communication:**
  - Concept, Process and Elements of Communication
  - Psychology of Communication and its application
  - Models of Communication, Factors and Barriers
  - Types of communication, Verbal Communication, non-verbal, written communication
- **Academic writing:**
  - Content writing for documents such as dissertation, reports, proposals, book review
  - Formatting, page composition, editing write-ups
  - Referencing and checking for Plagiarism
- **Visual Communication:**
  - Digital media, mobile and web based communication.
  - Data visualization: Info graphics, informatics
  - Illustration techniques –drawings, schematic diagrams, mind maps, sketches
  - Fundamentals and Techniques of photographing, post processing
  - Movie making and video editing
- **Verbal Communication:**
  - Speaking skills, types, qualities of good speaking
  - Vocal errors, Tone scale: effective tone, Speech therapy
  - Body language, Personal and social distances
  - Elements of Public speaking, 10-20-30 rule

**MAP 215:**

**Cognitive Psychology**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To impart students an insight into the role of cognition in Architecture Pedagogy.

**METHODOLOGY:**

- Lectures, discussions and presentations.

**CONTENTS:**

**Introduction**

- Meaning, definition , scope & significance
- Approaches: Psychodynamic ,Humanistic, Behaviorist and Cognitive
- Cognitive Psychology-Origin, Meaning and Definition

**Thought Process in Design**

- Thinking Styles, thinking processes.
- Concept formation- Role of concepts in thinking process

**Problem solving, Reasoning and Decision-making**

- Steps & approaches & Obstacles in the process Problem solving
- Cognitive Strategies-Algorithms and Heuristics
- Scaffolding- Learning and Problem solving
- Logic & Reasoning
- Decision-making- Impediments to Problem solving

**Intelligence**

- Concept & Theories of Intelligence
- Measurement and Assessment of Intelligence
- Concepts and Models of Emotional Intelligence (EQ)
- Individual Differences

**Learning and Motivation**

- **Learning**- concept of Learning, Principles of Learning and applications
- Domains of Learning, Factors affecting Learning, Learning theories
- Learning Styles
- **Motivation**-Basic Motivational Concepts, types of motivation
- Approaches to Motivation- Abraham Maslow's Hierarchy of Needs theory
- Enhancing Motivation

*Masters of Architecture (Architecture Pedagogy)*

**Personality**

- Concepts & Determinants of Personality
- Personality Trait and Type theories, Psychodynamic approach
- Personality Assessment-Psychometric and Projective tests

**Creativity and Innovation**

- **Creativity**- Concept and Characteristics of Creativity
- Creativity Techniques
- Strategies for Creative Thinking, Creative thinking process- Stages in creative thinking
- Creativity and Intelligence-relationship), Creativity and Problem-solving
- Assessment of Creativity-Techniques for measuring creativity
- Creativity and its application in architecture
- **Innovation**-Meaning, Definition and Characteristics of Innovation
- Models of Innovation & Strategies for enhancing innovation
- Difference between Creativity and Innovation

**MAP 216:**

**Digital Computation and Fabrication Studio**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<i>TOT</i>		
2	6	100	50	50	<b>200</b>	3	8

**OBJECTIVE:**

- To introduce the concept of digital design and fabrication
- To introduce the concept of energy modelling and analysis in design

**METHODOLOGY:**

Lectures, presentations, Assignments, live project work

**CONTENTS:**

**Fundamentals**

- Introduction, History and Scope of Digital Technologies in Architecture
- Digital design media
- CAD Models: Presentation, visualization, drafting, modelling
- CAD vs. BIM

**Computational Design**

- Roles of Computing in Architectural Design
- Study of Computational models
- Foundations in computational geometry
- Design models: Formation models, Generative models, Performance model
- Computation design styles, parametricism
- Scripting and Algorithms: principles of algorithmic design, visual programming
- Artificial Intelligence

**Fabrication**

- Prototyping, Additive and subtractive manufacturing
- Materiality
- Digital production and fabrication

**Performance Models**

- Concepts in energy modelling and analysis of sources, such as electricity, HVAC, Acoustics, day lighting, wind etc.
- Green Building Concepts, LEED, BREEAM, IGBC, GRIHA
- ECBC and its application in Indian Buildings

**MAP 217:**

**Dissertation-II**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	-	50	<b>100</b>	-	4

**OBJECTIVE:**

- To create understanding of the diversities of Architecture Education in National and International context.

**METHODOLOGY:**

- Orientation and Research, along with discussions with the supervisor and site visits as required.
- Case Studies by students to advance the understanding.
- Internal Report presentation/review

**OUTPUT:**

- After orientation classes and lectures, the student will submit a synopsis of one research project for approval. Each student is expected to complete and submit a report based on the research conducted.
- The research should relate to any aspect of Architectural Pedagogy in National and International context.
- Issues such as social, technological, natural, environmental, economic concern can be opted for detailed study of their effect on Architecture Pedagogy and vice versa.
- The students are supposed to discuss the progress of their research work on the finalized topic regularly throughout the semester in their respective classes. Each student is expected to complete and submit a report based on the research conducted.
- The final Dissertation report is to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the research and guidance.

**MAP 311:**

**Curriculum Design**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	T/ST	IA	WR	VV	TOT		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To understand the theories and approaches to curriculum design
- To understand the process of Architecture curriculum development

**METHODOLOGY:**

- Lectures, Discussions, Assignments and Presentations
- Case Studies by the students

**CONTENTS:**

**Curriculum Design**

- Need, Importance and Definitions, Syllabus and Curriculum design
- Elements and Principles of Curriculum Design, Types of curriculum design
- Approaches to Curriculum Design
- Models and Theories of Curriculum Design
- Process of curriculum development

**Curriculum Design in Architecture**

- Historical Background of Curriculum Development in Architecture: Study of curriculum development of Architecture Schools in global context
- Study of Norms and guidelines from Council of Architecture (CoA), AICTE, UGC.
- Study of different disciplines involved in Architecture Curriculum Design
- Case studies and Curriculum Mapping
- Technology and Curriculum Design

**Curriculum Assessment and Evaluation**

- Curriculum Assessment & Evaluation: Meaning, Definition and Importance
- Approaches to Curriculum Evaluation
- Models of Curriculum Evaluation
- Case based studies of Architecture curriculum Assessment and Evaluation, Making changes in Curriculum design

**MAP-312**

**Concepts, Criticism & Practices-II**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	-	25	25	-	<b>50</b>	3	2

**OBJECTIVE:**

- To critically review architecture and its education in contemporary Indian and world history.
- To study the evolution of formal and informal architecture education in contemporary times.

**METHODOLOGY:**

- Lectures, Discussion and presentations

**CONTENTS:**

The intent is to understand that both architecture and education exist as a reflection of various factors operating in their immediate context, such as social, anthropological, cultural, economic, environmental and political; and external influences. Understanding architecture and education as a product of these influences will help to understand the broader dimensions of these disciplines, and their intersections. A further intent is to understand and appreciate the formal as well as informal sources that contribute to building of knowledge resource in architecture and its education.

The subject will aim to develop an understanding of factors contributing to the architecture and education of contemporary India and world in the post-independence and post-World War-II phase respectively. The lectures will also deal with the study of relevant informal and formal knowledge sources of Architecture Education in contemporary times.

The topics will include:

- Contemporary trends in architecture education
- Diverse school of thoughts in Architecture Education
- Study of government and private schools in Architecture
- Current areas of architectural research such as environment behavior studies, digital and virtual practices, sustainability and environmental concerns.
- Academic and Professional perspectives
- Sources of Informal pedagogy such as profession, modern movements in Architecture, public voice, books, journals, magazines, conferences, workshops, and digital media.

**MAP-313:**

**Design Studio Pedagogies**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	T/ST	IA	WR	VV	TOT		
2	-	25	25	-	50	3	2

**OBJECTIVE:**

- To study researches in the field design
- To understand models of design studio pedagogy

**METHODOLOGY:**

- Lectures, Discussions and presentations

**CONTENTS:**

**Introduction and history**

- Introduction to the meaning of design, philosophies and related terms
- Theory and criticism of design
- Evolution of design research
- First and second-generation design methods

**Approaches to Design**

- Design theories
- Phases of Design
- Design cognition: perception, problem solving, creativity
- Design methods: tools, techniques, processes
- Design thinking: Phenomenology, meta-ethics, social responsibility, emotions, judgment, epistemology

**Design studio models**

- Pioneering typologies in design studio education
- Digital design studios (Virtual/ energy based models)
- Critical enquiry, Process oriented design pedagogy, Interchangeable pedagogies

**Design Assessment and Evaluation**

- A review of traditional evaluation techniques Crits, Desk crits, Pin-up reviews, Design juries
- Design Assessment methods

**Current trends in design research**

- Design styles, design innovation
- Design empathy, design ethics
- Design as a tool for social innovation/ change, human-centered design



**MAP 314:**

**Architectural Journalism**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To understand the importance of journalism in Architecture
- To explore journalism as a tool for knowledge building in architecture education and profession

**METHODOLOGY:**

- lectures, presentations, field studies, project work

**CONTENTS:**

The subject builds further on the knowledge acquired in second semester in Architectural communication, and emphasizes a project-based approach to learning.

**Introduction:**

- Concepts and theories in Journalism, mediums of journalism
- Architectural journalism: meaning, scope and current trends
- Techniques and processes
- Plagiarism and copyright issues

**Architectural Criticism**

- Introduction, meaning, need and scope
- Criticism as a tool for learning
- Critical review of built environment, articles, blogs, books etc.

**Written documentation**

Writing articles for magazines, journals, events, reports etc.

**Photographic Video documentation**

- Photographic and video documentation of built environment and issues relevant in Architecture
- Interview of renowned academicians, professionals to create new pool of knowledge

**Social and interactive Media**

Social and mobile networking: Websites, wikis, video sharing, webcasting, blogging, microblogging, messengers Development and maintenance of e-magazine, web resources etc. for students

**PROJECT**

The students are supposed to work individually on a topic of their choice and develop a project report in writing, along with its photo and video documentation. The students are also supposed to develop online content for share it with a wider audience, and analyze and report their experiences on the final outcome.

**MAP 315:**

**Practice Teaching**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b><i>TOT</i></b>		
2	4	75	-	75	<b>150</b>	-	6

**OBJECTIVE:**

- To give sufficient practical exposure for conducting teaching
- To develop skills and techniques for teaching in Architecture.
- Assimilating of Allied and Associated subjects with the core subjects in Architecture.

**METHODOLOGY:**

- Lectures, Discussions, Assignments and Presentations
- Observation of live classes

**CONTENTS:**

**Planning of Teaching**

- Programming the teaching schedule
- Development of Teaching Lessons/Lesson Plans
- Pedagogical analysis of various subjects B.Arch. Curriculum.
- Planning of assessment methods

**Practical**

Practice teaching will consist of three phases:

- In the first phase, students will observe B Arch classes to understand the teaching learning process in core subjects.
- Second phase will be for simulation teaching. Students will practice teaching in their own classes.
- Third phase is for feedback and discussion, Peer review and Assessment

**MAP 316:**

**Architectural Research Studio-III**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	4	75	-	75	<b>150</b>	-	6

**OBJECTIVE:**

- To gain experience of working on real-time issues in urban built environment.
- To understand a research based approach to design.

**METHODOLOGY:**

- Lectures, presentations, site studies.

**CONTENTS**

The studio exercises would examine issues of architecture & urban built environment through a research based approach, such as evidence based design and participatory design. The projects should aim to work on current issues in urban built environment; understand its social, economic and environmental contexts; and explore design based interventions through primary and secondary research data.

The studio work may relate to outstation field studies in order to identify real-time issues and study possible design interventions. Students are supposed to perform the studio work on the topics assigned in group / individual as specified:

**MAP 317:**

**Dissertation III**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	-	50	<b>100</b>	-	4

**OBJECTIVE:**

- To engage students in further research on any particular component of Architecture Pedagogy.

**METHODOLOGY:**

- Orientation and Research, along with discussions with the supervisor and site visits as required.
- Case Studies by students to advance the understanding.
- Internal Report presentation/review

**OUTPUT:**

- After orientation classes and lectures, the student will submit a synopsis of one research project for approval. Each student is expected to complete and submit a report based on the research conducted.
- The research should relate to any or some aspects in detail of one or a group of subjects from Architectural Curriculum.
- Issues such as social, technological, natural, environmental, economic concern can be opted for detailed study of their effect on Architecture Pedagogy and vice versa.
- The students are supposed to discuss the progress of their research work on the finalized topic regularly throughout the semester in their respective classes.
- The final Dissertation report is to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the research and guidance. Students are also required to do the presentation in Audio Visual format, apart from hard bound reports, sheets/drawings.

**MAP-411:****Professional Practice & Educational Management**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	50	-	<b>100</b>	3	4

**OBJECTIVE:**

- To understand methods of management and administration in Architecture Education
- To acquaint the students with the Pedagogical process of professional Practice

**METHODOLOGY:**

- Lectures, research and discussions.

**CONTENTS:**

- **Administrative framework of Architecture Education :**
  - National Policies on Higher Education, Policy development and implementation.
  - Educational legislations, reforms and policies
  - Role of UGC, AICTE, COA in Architecture Education
- **Professional Practice:**
  - **Architects' Act 1972:** Detail study of the Act, Council of Architecture; procedures of membership
  - **Code of Professional conduct:** Clauses governing conduct of professional architect.
  - **Tender and Contract:** Types of building contract, Preparation of tender documents, inviting and opening of tenders, preparation of comparative statement, general conditions of contract, interim certificates, defect liability period, retention amount and virtual completion.
  - **Architectural Competition:** Types, need and procedure of conducting such competitions.
  - **Arbitration:** Arbitration, Arbitration and Conciliation Act 1996, Arbitrator, Umpire, Nature of arbitration. Appointment, Conduct, Powers and duties of arbitrators and umpires, Procedure of arbitration and preparation of awards.
  - **Valuation:** Valuation of immovable properties, elements of valuation and factors affecting valuation; Techniques of valuation of landed and building property; Value classification and types of valuation.
- **Principles & Techniques of Management in Education:**
  - Introduction to Educational Management & Administration, Concepts and principles of organisation, administration and leadership.
  - Elements of Management process in an educational organization (decision-making, problem solving, human relations, and communication).
  - Study of existing Organisational models in architecture education and other related disciplines.
  - Planning: process, procedure, techniques, strategic planning, operational planning in educational organizations

*Masters of Architecture (Architecture Pedagogy)*

- Directing: leadership, delegation.
- Decision: policies, strategies and decisions in an educational organization, process of decision making, behavioural dimensions.
- Problem solving: approaches and techniques for creative problem solving, implementation and evaluation of decisions, theory of constraints.

**MAP-412:**

**Thesis (AP)**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
4	8	150	-	150	<b>300</b>	-	12

**OBJECTIVE:**

- To reflect the culmination of the development of skill, knowledge and systematic approach bound research and exploration in Architecture Pedagogy.

**METHODOLOGY:**

- Orientation and Research, along with discussions with the supervisor and site visits as required.

**OUTPUT:**

- The student must submit to the Coordinator synopsis of at least three different research projects explaining the topic, scope and methodology out of which one synopsis would be selected.
- The Coordinator will assign a supervisor to guide the study. The student will be required to conduct studies under his/her guidance. Regular progress will be monitored and Internal Assessment will be carried out in internal jury stages.
- The final thesis report is to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the research and guidance. Students are also required to do the presentation in Audio Visual format, apart from hard bound reports, sheets/drawings.

**MAP-413:**

**Internship**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	6	100	-	100	<b>200</b>	-	8

**OBJECTIVE:**

- To give sufficient practical exposure for conducting teaching methodology.
- To develop the skills in teaching procedures, techniques and methods of teaching.

**METHODOLOGY:**

- The students will be engaged in full-fledged teaching experience and academic works.

**OUTPUT:**

- The subject aims to culminate all teaching procedures, techniques and experiences learned and practiced in array of subjects undertaken during the course.
- The students will be assessed according to the teaching preparations, teaching content, teaching style, innovative methods used and overall impact as a teacher. The students will have to maintain a log book to keep track of works done, and will be assessed on the basis of every class by their respective supervisor.
- Students are required prepare an internship report at the end of the semester comprising of their internship progress: teaching schedule, internship log, all lesson plans, lectures/presentations and any other relevant data required for the said report. Apart from internship report students are also required to prepare a presentation in audio visual format.



**MAP-414:**

**Architecture Pedagogy Project**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
<i>L</i>	<i>T/ST</i>	<i>IA</i>	<i>WR</i>	<i>VV</i>	<b>TOT</b>		
2	2	50	-	50	<b>100</b>	-	4

**OBJECTIVE:**

- To develop knowledge resources for us in Architecture Education
- To learn the ability to disseminate knowledge in Architecture Pedagogy

**METHODOLOGY:**

- Lectures, research, and working on project outcome

**CONTENTS:**

The project will be perceived as a continued live project to develop useful and user-friendly resources for students of Architecture. The project will act as an outreach project for the benefit of fraternity of Architecture Education in general.

The students are supposed to identify a component of architectural curriculum and perform research for their project. The scope of work should be decided along with discussion with the faculty. The work will then be documented, and converted into print and digital media for dissemination of knowledge resource.

The students are also supposed to work on the process of dissemination of knowledge and ensure its outreach.