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MAR 101:   **Architectural Philosophy**

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

OBJECTIVE:

- To make a base of sound understanding of the fundamentals and theories in Architecture.

- To critically analyze 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:

- Towards Analytical approach of Architecture: the concept and theory of Period, Place, Purpose, People and Philosophy.

- History, Theory, Criticism, Post Mortem and Anti Mortem

- Time, Function and Alterity in Architecture

- Complexity and Contradiction in Architecture

- Building Philosophy – Towards Architecture theory of Conceptualize, Communicate and concretize.

- Architectural Theory and Practice in International and Indian context

- Architectural Development in International and Indian context: 21st century changes with the advent of Foreign Direct Investment in Architecture.

- Ethics of Architecture – Objectivism

READINGS:

- Architectural Philosophy: Repetition, Function, Alterity by Andrew E. Benjamin
- Architectural Reflections: Studies in Philosophy and Practice of Architecture By Colin St. John Wilson, Roger
- Modern Architectural Theory Harry Mallgrave

MAR 102:   **Contemporary Architecture**

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

OBJECTIVE:

- To identify the theories, movements and buildings that have led to 'new' forms in architecture

- To recognize the social and political pressures behind contemporary architecture

METHODOLOGY:

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

CONTENTS:

- Issues critical for present times: globalization, technology, cognitive sciences, the environment, and cultural politics.

- Formal or theoretical resonances of the same in a host of architectural movements: the techno fantasist movements of the 1960s, "post-modern" semiosis, phenomenology, Third World "social modernism", vernacularism, post-modernism, cybernetics, and so on.

- Societal dynamics on the socio- economic and politico paradigms :post-structuralism, and psychoanalysis as well as current debates in globalization, urban geography, mass customization, and post-criticality, among others.

- Transformation of Contemporary Architecture in the Indian scenario – 1920s-1950s, 1950-1980s, 1980-2000, 21st century.

Students will look at buildings, writing and movements as part of the evolving critiques of modernism from the 1950s onwards; in doing so, the students will come to examine the manner in which modernism was both critically unraveled and reinvented at different moments of its aftermath.

READINGS:

Frampton, K. (1980) Modern Architecture: A Critical History. London, Thames & Hudson Jencks, C. (1985) Modern Movements in Architecture. Harmondsworth, Penguin Sharp, D. (1991) Twentieth Century Architecture. London, Lund Humphries

MAR 103: Contemporary Technology

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

OBJECTIVE:

- To understand the contribution made by new materials and technology to contemporary buildings
- To understand the construction process
- Development of strategies for collaboration between disciplines

METHODOLOGY:

- The methodology of imparting information should be lectures and presentations citing examples and case studies.

CONTENTS:

- Statics of Architectural Structures: Structural Morphology, Basic structural elements and force systems.

- Building systems: Performance requirements, Identification and specification of elements

- Sustainable strategies Best practices, Resource Efficiency, upcoming issues and ratings

- Materials: Contemporary, structural and otherwise

- Systems integration

- Building Codes

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MAR 104:   **E I A & Natural Resources**

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

OBJECTIVE:

- To introduce the students with the theory and practice of Environmental Impact Assessments for proposed projects
- To emphasize on the preservation of natural resources.
- To discover the relevance of natural resource management in design and planning of regional areas.

METHODOLOGY:
- Classroom teaching through lectures and presentation.
- Conducting exercises on EIA or introducing the preparation of a report for a project.

CONTENTS:
- **INTRODUCTION**
  - Understanding Ecosystems: General Structure and Function: Types of Biogeochemical cycles; Carbon cycle, Global water cycles, nitrogen cycle
  - Natural elements water, vegetation and land.
- **EIA**
  - from theory to the practical
    - What data is required, how this data should be collected and interpreted, and significance of the data
    - Effectiveness of the assessment methods
    - What issues should be addressed in the terms of reference (TOR)
    - Tools and thumb rules available to evaluate the environmental impact of projects
  - Better understanding of the EIA process – from screening, scoping, data collection to impact assessment as well as the role of public consultation
  - Better understanding of the environmental and social impacts of the industrial and developmental projects
  - Better ability to review EIA reports and identify its strengths and weaknesses
  - Increased ability to play active role in post-EIA monitoring.

- **NATURAL RESOURCES**
  - Introduction - Settlements in relation to regional landscape resources.
  - Microclimate: Definition and characteristics. The role of Natural Elements
  - Air pollution and Air pollution monitoring and quality criteria
  - Threat natural resources; urban environmental issues such as solid waste management, air quality, conservation of water resources and vegetation cover.
  - Natural resources specific to region types: for example: coastal, hills, deserts and plateau regions etc.

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Semester III

MAR 105:   **Integrated Building Services**

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

INTEGRATED BUILDING SERVICES:

OBJECTIVE:

- To understand the importance of building services in the design of the building.

- Provide students the basic concepts and thorough knowledge and operation of building services in modern, large high rise building complexes.

METHODOLOGY:

- Methodology of imparting information should be lectures and presentations citing examples and case studies.

CONTENTS:

- **HVAC Services:** Basics of Air-conditioning, air condition working, HVAC Comfort Principles, HVAC Components and Systems.

- **Electrical services:** Incoming supply and distribution in buildings, electric safety and risk assessment, concept of fault level, Over current protection.

- **Fire Services:** Basic fire extinguishing system viz water based, pedestal fire hydrant system, total flood gas protection systems, smoke management systems etc.

- **Lighting Services:** Photometry and colorimetry, lighting equipment and systems, lighting calculations, day lighting.

- **Building Acoustics:** Acoustic fundamentals, Acoustic design and planning, vibration.

- Basic principles involved in design of plumbing services, solar water heating and rain water harvesting.

MAR 106:   **Research Methodology**

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

OBJECTIVE:
- To enhance the students' generic research, communication skills and critical analytical ability

METHODOLOGY:
- Lectures, Project work and tutorials.

CONTENTS:

PART (A)

Unit I: Introduction, types of Research

Foundation: Its Nature and Scope, plagiarism

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

A. Sample and Sampling Design: Concepts of Population Sample, Representative Sample, Probability and Non Probability, Techniques of Sampling

B. 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

PART (B): Branch Specific

Unit V: Descriptive Statistics:

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

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

Unit VI: Inferential Statistics (Parametric)

Significance of Statistics, Concept of Null Hypothesis, Level of Significance, T-Test

Unit VII: Inferential Statistics (Non Parametric)

Chi Square Test, Median R Test, Mann-Whitney Test.

Unit VIII: Analysis of Qualitative Data

Editing, Coding of data, Content Analysis

MAR 117   **Dissertation I-(AP)**

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

Objective:
- To develop an understanding of the indigenous & designed knowledge systems around us.
- To understand Architecture Education as a part of the Broader Education System in the Country.

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.

Contents:

A: Theory:

1. **Knowledge Systems**
   Meaning & Definition, Need & Importance, Benefits & Limitations, Information & Knowledge, Generation & Flow, Economic, Societal & Cultural aspects**.**

2. **Knowledge Components**
   Information Sources, Different Types of Knowledge Systems, Process of Knowledge Construction, Knowledge management Tools.

3. **Contemporary Knowledge**
   Concepts of Great Educationists/Reformers who reformed the society and Education with their innovative and effective educational concepts
   Concepts of Great Architects cum Educationists to Architecture Education

B: Dissertation:
- The students are supposed to submit the **synopsis** for the intended topic of research relating to any form or aspect of knowledge systems existing in our societies along with the detailed work methodology

- The consecutive stages of work will be analysed with reference to the submitted work methodology only.

- 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.

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MAR 202   **Intensive Humanities**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	*TOT*		
2	0	25	25	-	**50**	3	2

OBJECTIVE:

- To study the social, economic and psychological factors responsible for shaping and functioning of the Human settlements and hence the built environment.
- To understand the discipline in global and national context.

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

CONTENTS:

Psychology: Human being as living systems, human behaviour and the built environment,
- Definition and need & Schools of psychology, Current Perspectives & trends in Psychology,
- Biological bases of behaviour: sensory systems, nervous system, motivation & emotion, Stress and anxiety, Consciousness and its altered states, Personality and Individual Differences
- Cognition: Cognitive processes, Sensation and perception, theories of visual perception (gestalt),
- Learning and behaviour, Thinking and language; Intelligence, Sensitivity, Creativity, Logic & Reasoning,
- Psychology in Design & Environment (man-nature interaction, personal space concept, pollution reduction)

Sociology: Man, nature and society; social, religious, political, cultural structure and their impact.

- Origin and Growth of Cities, rural-Urban Dynamics and resultant migration, Impact of industrialization on traditional society, modernization, Urbanisation & Urbanism, rural-urban differences
- Classical and Contemporary theories of Sociology, European and Chicago school of thought
- Society as a total system of relationships between people, Social stratification, Diversity in Indian Society
- Traditional pattern and trends of change in community; Urban problems and issues,
- Technology, Globalization and changing socio-economic scenario, Sociology & Design

Economics: Theory of Demand & supply, Micro & Macro Economies, Economic systems , G.D.P, G.N.P, F.D.I, Migration, Division of Labour, Economies of Scale, Urban & Rural Economies, Cost Benefit Analysis, Feasibility, Viability
- Economic development of the country, dynamics of infrastructure development and the role of government agencies; financing and institutions associated with housing and infrastructure development
- Real Estate dynamics; Real Estate & Cost Index; Poverty line, real estate & nature of shelter of population
- Socio-economic structure of the country, global and local socio-economic processes and policies
- Implications of Globalisation on the Third World Economies, Global and National Organizations

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MAR 203   **Digital applications in Architecture**

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

OBJECTIVE:
- To understand the digital technology and the way it is transforming our built environment.

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

CONTENTS:

Digital Applications
- Introduction, History and Scope of Digital Technologies in Architecture

- **Digital applications used in creating a built environment**: *Applications used from Conception to construction of a built environment at micro and macro level:*

  - **Presentation:** Raster & vector graphics, Colour models, file formats and their usage, presentation techniques in Architectural graphics and Animations.

  - **Visualization as a tool for design:** Visualization of complex forms, Digital Architecture, Parametric designing, Programming and scripting as tool for design.

  - **Designing, Drawing & detailing:** Applications used for design processes and considerations, Softwares used in AEC industry: CAD CAM & BIM applications.

  - **Digital Fabrication & Construction:** Applications and fabrication techniques**.**

  - **Management:** Applications used in conjunction with digital drawing information.

- **Digital applications used in Planning:** Remote sensing, Transport simulation applications etc

- **Digital technologies transforming our built environment:**

  - Building automation & Intelligent building concepts

  - Energy modelling applications

- **Recent trends:** Contemporary examples, role and need of Digital applications in transforming our society and built environment**.**

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Semester II

MAR 204: **Energy Simulation**

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

OBJECTIVE:

- To inform the students about the importance of energy efficiency and its conservation.
- To learn the basic techniques and processes involved in Energy Efficiency and Energy Conservation through various techniques. The study and application of various softwares involved in the process.

METHODOLOGY:

- The methodology of imparting information should be lectures and presentations citing examples and case studies.

CONTENTS:

- **Introduction**
    - LEED
    - Benefits and Advantages
    - Incentive Programs
    - Certification
    - Leed Version
    - Professional Accredation

- **Green Building Concept**
    - Indian Green Building Council
    - Concepts of Green Building
    - Case Study of Green Buildings
    - Energy and Resource saving through Green Buildings
    - Role of TERI

- **Energy Conservation Building code ECBC**
    - Role of Bureau of Energy Efficiency BEE in controlling Energy Scenario in India
    - Application of ECBC in Indian Buildings
    - Analysis of saving of Energy by the application of ECBC

- **Application of Softwares**
    - Introduction of Important Softwares in Energy Modelling of Buildings
    - Application of Visual DOE in Modelling any one building

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MAR 215: Studio-I   **Architecture Education: Concepts & Practices**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
2	6	100	100	-	**200**	3	8

OBJECTIVE:

- To make the students understand the diversity and fast paced dynamics of Architecture profession to be incorporated and adapted in Architecture Education.
- To develop skill in the use of fundamental teaching procedures, techniques and methods of teaching.

METHODOLOGY:

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

CONTENTS

(A) THEORY

- **Nature and Scope of Architecture Education:**
  Nature of Architecture during the Ancient period, Medieval period, Colonial period, 19th Century, 20th century (pre-independence), 20th century : Post-independence 1947-1960, 1960-1970, 1970-80, 1980-1990, 1990-2000, 2000 onwards.

  Interpretation of dynamics of Architecture observed during the studies of their period into the framing of teaching program for the Architecture Education.

- **Elements & Principles of Architecture Education:**
  Identification of main disciplines which need to be covered into the teaching programs for Architecture. Elements of Architecture Education, systematic organization of main disciplines into logical groups to under: Associated description, Allied description, Core description. Principles of Architecture Education: Communication Skills, Technology application, Visualization.

- **Review of Architecture Education in India:**
  Statistical studies about the present Architecture Education in India as well as outside India. Understanding of the formal level of Architecture Education in India as well as outside India. Different programs on Architecture Education being followed in India as well as outside India in Architecture as well as in assorted developments. Making the projection about the needs of the Architecture Education and students, Architects needed to run the country.

(B) PRACTICAL TRAINING

- Observing the Classroom/studio teaching in live classes of B.Arch. and assisting teachers in their academic responsibilities relating to B. Arch programme.

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o Preparation of **mock classes** on the **topics** observed in live classes of B.Arch.

MAR 216:   **Architectural Pedagogy**

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

OBJECTIVE:

- Understand Pedagogy and establish its relation with Architecture.
- Development of techniques for teaching of Core, Allied and Associated subjects to reach the final stages of the Architecture Education program.

METHODOLOGY:

- Classroom lectures and practical assignments.

CONTENTS:

1. Pedagogy of Architecture and Approaches of Teaching
2. Lesson Planning and different Formats
3. Principles of Architecture Curriculum
4. Planning a teaching lesson in Core Subjects , Allied Subject and Associated Subjects
5. Tools and Techniques of Evaluation
6. Action Research based on in actual Classroom situations
7. Pedagogical Analysis

A. Pedagogy of Architecture
   1. Lecture Method
   2. Lecture Demonstration Method
   3. Case Study Method
   4. Problem Solving Method
   5. Discovery Method
   6. Studio Method
   7. Project Method
   8. 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)

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       (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.

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MAR 217: Dissertation-II (AP)   **Architecture Pedagogy in National & International Context**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
2	2	50	-	50	**100**	-	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.

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.

- 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.

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MAR 311:   **Instructional Methodology and Classroom Management**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	*TOT*		
4	0	50	50	-	**100**	3	4

OBJECTIVE:

- To introduce the students with the theory, concepts, and research in the field of institutional learning
- To understand the impact of learner and teacher characteristics and the interaction between the two for the effectiveness of classroom learning.
- To make the students learn the techniques and skill of conducting teaching in the formal classroom, and to equip them with various classroom management techniques.

METHODOLOGY:

- Develops methods/strategies that encourage self-directed thinking and learning in nurturing and supportive learning environments.
- Effective classroom management and communication techniques emphasized.

CONTENTS:

- **Introduction to Instructional Methodology:** Meaning, Definition, Need and importance of Instructional Methodology
- **Instruction and Learning:** Psychology of Instruction, Instructional Theories- Gagne, Instructional Models
- **Instructional Methods and techniques:** Lecture Method, Demonstration Method, Case Study method, Project Method, Programmed Instruction/Learning, Studio method, Instructional techniques- seminar, symposium, tutorial, conference etc.
- **Instructional Media:** Meaning, need and importance, Non-Projected media, Projected Media, Computer- Based Multimedia
- **Classroom Management:** Meaning, need and importance, Classroom Management Process, Approaches to Classroom Management, Organizing effective classroom, Barriers in classroom management, Conceptualizing learning difficulties, Learner characteristics (social, cognitive and affective)

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Semester III

MAR-312   **Psychology of Learning and Development**

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

OBJECTIVE:

- To equip the students with the psychological theories and techniques of learning, development and creativity for development of creative instincts and hence adding to teaching skills.

METHODOLOGY:

- The methodology of imparting information should be lectures, discussions and seminars.

CONTENTS:

- **Introduction to Educational Psychology**
o Definition, Nature and Scope of Educational Psychology: The Learner, Learning Process, Learning Experience, Learning environment, Significance of Educational Psychology to the teacher.

- **Learning**
o Meaning and Definition, Domains of Learning: Cognitive, Affective and Psychomotor
o Learning Process and Its Aspects, Factors Affecting Learning
o Learning Theories and Their Educational Implications: Behaviorist, Cognitivist and Humanist

- **Human Development**
o Meaning, Types of Development, Principles and characteristics of growth and development
o Dimensions of Development, Phases of development

- **Motivation**
o Meaning and Definition, Intrinsic and Extrinsic Motivation, Approaches to Motivation
o Theories of Motivation: Maslow's hierarchy of needs, encouraging Motivation in Classroom

- **Intelligence**
o Meaning and Definition, Development of Intelligence, Measurement and assessment of Intelligence
o Theories of Intelligence and Their Educational Implications
o Individual differences

- **Personality**
o Meaning and Definition, Development of Personality, Classification or Types of Personality

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o Theories of Personality and Their Educational Implications: Alport's trait approach theory, Raymond B Cattell's Factor Analysis Theory and Psychoanalytic Theory of Sgund Freud

MAR 313:   **Thought Processes**

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

OBJECTIVE:

- To develop the student's ability to find innovative solutions to problems through an understanding of thought processes.

METHODOLOGY:

- The methodology of imparting information should be lectures, discussions and seminars.

CONTENTS:

- **Human Memory**
  - Memory: Structure & Processes, Sensory memory, Short-term and Long-term memory

- **Thinking and language**
  - o Types of thought Processes, theory of constraints, Thought process in design

- **Intelligence**
  - o Measures of intelligence: patent creation, research & development
  - o Igniting innovation, Organizational supports that enhances creativity & innovation.

- **Creativity**
  - o Meaning nature and concept of creativity, Constitutes of creativity, Characteristics of creativity, Originality, flexibility, Creativity & Intelligence.
  - o Theories of creativity, Traditional and modern views of creativity, Creativity techniques
  - o Assessment of creativity**,** Encouraging and promoting creativity- Nickerson creativity technique**,** Creativity and architecture: trends and scope.

- **Innovation:**
  - o Meaning, nature & concept of innovation, Characteristics of innovation, Models of innovation, Creativity and innovation [difference], Innovative practices [architecture]
  - o Theories of innovation, Barriers/failures in innovation, Stages, Problem solving: factors, stages, methods, Factors that facilitate creativity and innovation
  - o Factors that interfere with innovation and problem solving.

- **Logic & Reasoning,**
  Deductive reasoning, Inductive reasoning, Abductive reasoning, adaptive reasoning

- **Problem-solving:** Gestalt theory, Problem space theory, Individual differences

Semester III

MAR 314:   **Educational Technology**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
2	0	25	25	-	**50**	3	2

OBJECTIVE:

- To understand Architecture Education in relation to technology and digitization and the way it has revolutionized Architectural thinking.

METHODOLOGY:

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

CONTENTS:

- **Introduction to Educational Technology**
- Educational Technology and its Components
- Systems approach & Multimedia approach in Educational Technology

- **Communication and Classroom Interaction**
- Concept, Process and Elements of Communication
- Psychology of Communication and its application in Educational Technology
- Models of Communication, Factors and Barriers
- Classroom Interaction, Classroom Interaction Analysis -Flander Interaction category system.

- **Emerging trends in Educational Technology**
- Personalized system of instruction (PSI) -Programmed Learning
- CCTV, Computer Assisted Instruction (CAI)
- Modern trends in multimedia – Virtual Reality & Virtual Environments/classroom
- Educational Satellite, Interactive Video, Tele and Video conferencing
- Web 2.0 in Education, E-learning, e-teaching, digital conferences
- Course management soft wares

- **Digital Architectural Pedagogy**
- Use of sofwares in Core, Allied and Associated subjects in Architecture Education
- Effective Integration of Digital Courses, Digital Tools
- Digital Visualization and Thinking, Design and Drafting
- Games based learning In Architecture.

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MAR 315:   **Education Management**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
2	0	25	25	-	**50**	3	2

OBJECTIVE:
- To understand the Management of Architecture Education and related government policies.

METHODOLOGY:

- The methodology of imparting information should be lectures, research and discussions.

CONTENTS:

- **Architecture education as a system**

  o Education as a System: an overview
  o National Policy on Higher Education, Policy development and implementation.
  o Educational legislation, reform policy and analysis
  o Role of UGC, AICTE, COA, IIA in Architecture Education
  o Informal education: methods and techniques,
  o Finance in educational system

- **Principles & Techniques of Mgmt for Educational administrator**

  o Stages in the management process in an educational organization: basic elements of management process (decision-making, problem solving, human relations, and communication).
  o Concepts and practices relating to planning: process, procedure, techniques, strategic planning, operational planning in educational organizations
  o Directing: leadership, delegation.
  o Decision: policies, strategies and decisions in an educational organization, process of decision making, behavioral dimension of decision making.
  o Problem solving: approaches and techniques for creative problem solving, implementation and evaluation of decisions.

MAR 316:   **Practice Teaching**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
2	6	100	-	100	**200**	-	8

OBJECTIVE:

- To give sufficient practical exposure for conducting teaching methodology.
- To develop skill in the use of fundamental teaching procedures, techniques and methods of teaching different types of subjects

METHODOLOGY:

- After proper understanding of teaching fundamentals, the students will engage themselves in assisting class co-ordinators in their respective classes, which may include giving lectures and demonstrations, conducting exercises, evaluation and assessment.

CONTENTS:

- o Need and importance of practice teaching.
- o Stages in Practice teaching- primary stage, preparation of lesson, qualities of a good lesson, teaching in classroom, evaluation and assessment.

MAR 317: Dissertation III (AP)   **Core, Allied and Associated subjects**

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

OBJECTIVE:

- To create understanding of the details of Architecture Curriculum and analyse them in detail

METHODOLOGY:

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

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 subject in the Architectural Curriculum,

- 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.

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MAR 412:   **Thesis (AP)**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
2	14	200	-	200	**400**	-	16

OBJECTIVE:

- This is aimed to reflect the culmination of the development of skill, knowledge and systematic approach bound research and exploration as well as development of presentation skills and techniques

METHODOLOGY:

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

OUTPUT:

- The student must submit to the Dean/Co-ordinator synopsis of at least three different research projects explaining the topic, scope and methodology out of which one synopsis would be selected.

- The Co-ordinator will assign a supervisor to guide the study. The student will be required to conduct the studies under his guidance. Regular progress will be monitored and Internal Assessment will be carried out in four steps which will be decided by the Co-ordinator.

- The student will be required to conduct in depth research and submit the final outcome in the form of reports which will be judged by a jury as appointed by the Co-ordinator. Students are also required to do the presentation in Audio Visual format, apart from hard bound reports and drawings.

*Masters of Architecture **(Architectural Pedagogy)***

MAR 413:   **Internship**

CLASSES/ WEEK		MARKS				EXAM HOURS	CREDITS
L	*ST*	*IA*	*WR*	*VV*	***TOT***		
0	8	100	-	100	**200**	-	8

OBJECTIVE:

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

METHODOLOGY:

- The students will engage themselves 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.