



KALASALINGAM
ACADEMY OF RESEARCH AND EDUCATION
(DEEMED TO BE UNIVERSITY)

Under sec. 3 of UGC Act 1956. Accredited by NAAC with "A" Grade



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KALASALINGAM SCHOOL OF ARCHITECTURE

Master of Architecture in Habitat Design

Curriculum & Syllabus 2018

University Vision

To be a Centre of Excellence of International Repute in Education and Research

University Mission

To produce Technically Competent, Socially Committed Technocrats and Administrators through Quality Education and Research

Department Vision

To advocate a design philosophy that draws inspiration from the rich cultural heritage of India while simultaneously embracing the developments in science and technology to produce architects of international competence.

Department Mission

To educate budding architects who will contribute to the socio economic and cultural development of India and the broader global community through responsible participation in the process of design and construction of the built environment.

Programme Outcomes (PO)

P.O 1 Equip the students on the advance theories of design and its impact on cities of India and globally.

P.O 2. Enable students to assess the social, economical and cultural impact on the various levels of built environment in a habitat and equip them to prepare mitigation strategies

P.O.3 Equip students with know-how and knowledge of various tools, methods and applications used in urban planning and habitat design.

P.O.4 Empower students with the knowledge of environmental impacts consequent of larger habitation development and equip them to provide professionally ethical and ecologically sustainable design solutions.

P.O.5 Enable students to understand the valuable inputs from Urban heritage, Traditional and vernacular knowledge system and application of the same in the holistic design process of Human habitat.

Programme Educational Objectives (PEO):

On completion of the M.Arch degree Programme in Habitat Design, the graduates will acquire:

- **Technical expertise:** Exercise technical know-how and professional wisdom to provide expert service towards the design of large scale habitats.
- **Professional Rigour:** Well seasoned in the field of Habitat Planning and design, empowered by professional ethics and ecological awareness.
- **Organizational Skills:** Show up as lead Architects specialized in Human Habitat design capable of leading and team building large scale projects.

Programme Specific outcomes (PSO):

The Programme Specific Outcomes of M.Arch Habitat Design are:

On completion of the Programme, the students will be able to:

- Think and act with social responsibility in the milieu of nature, culture, heritage and buildings
- Understand the complex network systems that exist in any traditional human habitat
- Identify and differentiate the natural, human constructed and human behavioral built environment from their morphological setup presented in its own way of life
- Use necessary documentation tools such as GIS, CAD and other suitable Digital methods to delineate the area of intervention in problematic urban areas
- Suggest sustainable Urban Planning and Housing Design solutions

- Propose guidelines and controls for developments in new and old urban developments in environmentally sensitive areas
- Apply the methods and techniques for conducting a research in their area of study.
- Demonstrate their field of knowledge by various design approaches based on complexity of issues.
- Deliver quality and innovative design thoughts for new housing developments
- Lead a team of professionals related to planning and design and to work effectively as an individual, and also as a member in multicultural and multidisciplinary teams in the field of urban development
- Effectively communicate about their area of expertise, able to realize and write sound reports on holistic design approaches, make effective technical presentations for various governmental agencies and for the general public

PROGRAMME STRUCTURE

M.Arch (Habitat Design) Course Structure & Credit Distribution

Sl.No	Course Category		Course Credits
1	Programme Core Courses		55
	Core Courses	44	
	Thesis (Project Work)	11	
2	Program elective courses		12
	Major Electives	9	
	Open elective/ Humanities elective	3	
3	Seminar		3
Total Credits			70

Total credits to be earned for completion of M.Arch (Habitat Design) programme = 70

Semester I					
Core Courses					
Course Code	Course Title	L	T	P	C
MHD18R 5101	Human Habitat: Society & Economics	3	0	0	3
MHD18R 5102	Urban Design Theories	3	0	0	3
MHD18R 5103	Planning Theory and Techniques	3	0	0	3
MHD18R 5104	Urban Transportation and Networks.	3	0	0	3
Studio Courses					
MHD18R 5181	Habitat Design Studio - I	0	0	10	5
Major Elective Courses					
MHD18R 5105	Elective I:Smart City Planning	3	0	0	3
MHD18R 5106	Elective I:Healthy Habitats				
MHD18R 5107	Elective I: Habitats of Future				
Total Credits in Semester I : 20					
Semester II					
Core Courses					
Course code	Course Title	L	T	P	C
MHD18R 5201	Urban and Rural Housing	3	0	0	3
MHD18R 5202	Ecology and Sustainable Habitat Systems	3	0	0	3
Studio Course					
MHD18R 5282	Habitat Design Studio – II	0	0	12	6
Major Elective Courses					
MHD18R5204	Elective II: GIS Modelling in Urban Planning	3	0	0	3
MHD18R5205	Elective II: Housing and Community				

MHD18R5206	Elective II: Heritage Habitats: Conservation and Renewal				
Seminar					
MHD18R5209	Seminar : Dissertation	0	0	3	3
Total Credits in Semester II : 18					
Semester III					
Core Courses					
Course code	Course Title	L	T	P	C
MHD18R5301	Infrastructure Planning And Management	3	0	0	3
MHD18R5303	Research Methods	3	0	0	3
Studio Courses					
MHD18R5383	Habitat Design Studio III	0	0	12	6
Major Elective Courses					
MHD18R5304	Elective III: Urban Development And Environmental Laws	3	0	0	3
MHD18R5305	Elective III: Planning Legislation				
MHD18R5306	Elective III: Vernacular Architecture And Planning				
MHD18R5307	Elective III : Environmental Psychology and Behavioural studies				
MHD18R5308	Elective III: Pedagogy: Basics for Architecture Education				
MHD18R5310	Elective III: Anthropology and Architecture				
Total Credits in Semester III : 15					

Semester IV					
Core Courses					
Course code	Course Title	L	T	P	C
MHD18R5401	Real Estate Development And Finance	3	0	0	3
Project Work					
MHD18R5484	Thesis	0	0	22	11
Total Credits in Semester IV : 14					
<p>* Open Elective / Humanities Elective : 1 course for 3 credits can be offered either in Semester II or Semester III based on registration offered by other departments</p> <p>** Total Credits to be earned for completion of programme is 70 credits : Sum total of credits of all semesters + 1 open elective / humanities course (67 credits + 3 credits)</p>					

SYLLABUS FOR M.ARCH (HABITAT DESIGN)

MHD18R5101 HUMAN HABITAT: SOCIETY & ECONOMICS

L T P/S C
3 0 0 3

Objectives: To understand the Spatial, Social and Economic dimensions of the urban fabric and their implications in designing settlements.

UNIT I HUMAN SETTLEMENTS

10

Types and structure of Human settlements and the geographic parameters of topography, climate, natural resources.

UNIT II SOCIAL STRUCTURE IN CITIES & TOWNS

10

Concepts of culture, environment, society, community, groups; Social structure and institutions – continuity and change. And their impact on structure of human habitat, cities and towns.

UNIT III URBAN ECONOMICS & ITS IMPACT

10

Economic base of settlements, Economic growth. Dichotomy of rich – poor in relation to development etc. and their impact on habitat structure Economic issues in urban growth – Trends and patterns of Indian urban growth; Efficiency versus equity. Real Estate setup, market and demand analysis.

UNIT IV SPATIAL & SOCIAL CONFLICTS

8

Social and spatial dimensions in poverty in India. Concept of tradition, traditional social values, effects of technology change, management and characteristics and states of conflict. Struggle for space, density overcrowding, urban stress and gender issues.

UNIT V CONTEMPORARY URBAN SOCIETY

7

Slums and blights. Crime and spatial structure of cities.
Concept of informal sector, concern for urban poverty and its impact on habitat.

Total: 45 Periods

Suggested seminar topics/ term papers

Critical readings of selected essays and commentaries on contemporary urban society and habitat issues in India and developing countries

Reference books suggested:

1. Ralph Thomlinson -Urban structure, social and Spatial character of cities
2. G.Duscan Mitchell -A new Dictionary of Sociology
3. Dr. Naseem A. Azad -Social and Economic Problems
4. Gordon Marshall -Oxford Dictionary of Sociology

MHD18R5102 URBAN DESIGN THEORIES

L	T	P/S	C
3	0	0	3

OBJECTIVE:

To introduce the students to the concept of holistic Habitat Design with Socio economic and Historic determinants and dimensions of urban Design and planning

UNIT I INTRODUCTION TO URBAN FORM 10

Components of human habitat, Evolution of cities and towns in India, Socio economic and Historic determinants of urban growth and urban form. Reading the city. Social structure, cognition, experience and urban form.

UNIT II URBAN DESIGN IN PLANNING AND ARCHITECTURE 10

Dimensions of urban design. Grain texture scale, socio spatial schema etc. Urban design vocabulary. Habitat Design, Urban Design and their relation with planning and architecture. Views of Design of habitat as extension architecture (mega architecture) and as architectural expression of planning.

UNIT III URBAN CONCEPTS 10

Evolution of concepts of urban form and design in different cultures and in India. Utopian concepts. Concepts in urban Design and planning.

UNIT IV URBAN DESIGN APPROACHES 8

Rise of Advocacy Planning, changing role of NGOs and Urban Social Movement in India. Urban design survey - inventories; techniques/approaches to urban design;

UNIT V URBAN DESIGN THEORIES 7

Imageability, townscape and elements of urban design (Gordon Cullen, Kevin Lynch). Historical examples of urban design projects.

Total: 45 Periods

Suggested seminar topics/ term papers

Emerging issues – social and communal conflicts in urban area. Urban design at micro level: campus planning, city centers, transportation corridors, and residential neighbourhood; water fronts.

Reference books:

1. Kevin Lynch- Imageability of City
2. Camillo Sitte -City Planning according to Artistic principles

3. Kevin Lynch -Good City Form
4. Rob Krier -Urban street and Squares
5. Gordon Cullen -Townscapes
6. TSS for Urban Design

MHD18R5103

PLANNING THEORY AND TECHNIQUES

L T P/S C

3 0 0 3

Objectives:

To introduce the basic concept of urban planning in terms of tools and methods and their application in modern context.

UNIT I PLANNING PRINCIPLES

10

Planning terms and definitions. Basic principles of planning of settlements. Aims & Objectives of Physical Planning, Levels of Planning in India, Characteristics of Planning, Models of the Planning Process, Components of settlement structure.

UNIT II URBAN PLANNING

10

Preparation of Urban Development Plans, types, scope, purpose, contents and approaches to the interim and

comprehensive plans: Structure Plan, Master Plan, Zonal Development Plan, and Strategic Planning. Theories of Urban structure, Urban Sub-systems

UNIT III URBAN REGULATIONS

10

Concepts of Urban Land use, Systems affecting land uses and rationale for land use planning, Locational attributes of urban landuses. Legal frame work, Regulations, byelaws, standards and norms and their basis.

UNIT IV URBAN SURVEYING

10

Survey Research Process – Primary & Secondary sources of data, techniques of data collection, analyzing and presenting physical and socio-economic data, questionnaire design, administration of field surveys, Sampling, sample designs, size, types, sources of various data in India

UNIT V PLANNING TECHNIQUES

5

Techniques of understanding spatial structures of cities and towns. Analysis of structure of nodes, roads and networks and spatial structure. Use of aerial and satellite remote sensing for planning. Introduction to GIS

Total: 45 Periods

Suggested seminar topics/ term papers

Theories of Urban Planning, Choice Theory, Advocacy Planning, Action Planning, Mixed planning – Relevance in Indian context

Reference books:

1. Arthur Gallion - Urban Pattern
2. Urbanization and Urban System by Siddhartha N.Mukherjee -Cities
3. Peter Hall -Urban and Regional Planning Planning
4. K.P.Yadav, Vol 1-5- Encyclopedia of Economic Planning and Development

MHD18R5104 URBAN TRANSPORTATION AND NETWORKS L T P/S C
3 0 0 3

OBJECTIVE:

To introduce the fundamentals of urban transport planning, urban networks and multimodal transport systems developed in response to and as an organizing factor of spatial structure of habitat systems.

UNIT I URBAN TRANSPORTATION SYSTEMS 10

Scope of urban transport planning, interdependency of transport & land use , stages - system approach to transportation planning.Urban Transportation systems; classification of transport systems; technological characteristics of transport modes and systems; the nature of demand and supply of transport services.

UNIT II MOBILITY CONCEPT 8

Introduction- Pedestrian and motorized and non-motorized vehicles- Mobility Measures
 Urban Transportation surveys: Definition of study area, zoning, types of surveys, Forecasting traffic in relation planned land use.

UNIT III STAGES IN URBAN TRANSPORTATION 12

Trip Generation- Introduction-Definitions- Trip Purposes-Factors associated with Trip generation and Attraction- Method of analysis- Multilinear Regression Analysis- Assumptions- Applications- Shortcomings (No Numerical Problems)
 Trip Distribution- Introduction-Methods-Growth factor-Uniform growth factor-Average Growth factor-Fratar Methods and synthetic analysis-Gravity Model- Simple Numerical Problems
 Trip Assignment –definition- Applications- Resistance to travel- Minimum travel path tree- Assignment Techniques-All- Or- Nothing- Multiple Route – Capacity Restraint- Diversion Curves

UNIT IV MODALSPLIT 7

Introduction- Factors affecting- Modal Split in the Transportation Planning Process, Public Transportation modes: Systems in India, problems and prospects, present practices in urban transportation. Metro, Mono, and high capacity buses.

UNIT V TRANSPORTATION & PARKING NORMS

8

Parking in transport system, parking surveys, parking norms & standards and new approaches to parking systems. Design of transport infrastructure.

Recent innovations in technologies and its probable impacts on future urban forms. Government transport policies and evaluation of transportation proposals.

Total: 45 Periods

Reference books suggested:

1. Khanna and Justo -Highway Engineering
2. Kadiyali L R.-Traffic Engineering and Transportation Planning
3. Dimitriou H.T.- Urban Transport Planning and Developmental Approach
4. Michael J Bruton,- An Introduction to Transportation Planning
5. John Black -Urban Transport Planning and Design

MHD18R5181 HABITAT DESIGN STUDIO I:

L	T	P/S	C
0	0	10	5

OBJECTIVE:

The Habitat Studies Studio aims at studying and understanding the fabric of an existing habitat and also to understand determinants and causative forces responsible for urban growth and change - the resulting physical manifestations- development process to provide the student with studio skills related to contemporary design issues to fulfill the broad conceptual frame of the courses.

OUTLINE:

Studio: Aims at study of an existing urban fabric and propose interventions

The Studio will be divided to the following modules:

- a) Documentation of a precinct-
 1. Addressing principles of site planning, natural features and environment, typology / morphology, density patterns etc.
 2. Infrastructure and habitat management standpoint
 3. Human network, through ownership, use cycles, associational value etc.
 4. Presentation techniques
- b) Identification of problems and issues.
- c) Compiling the documentation as a report. d) Proposed conceptual interventions.

The Design Workshop: The workshop - is a seminar course cum design conducted by invited professionals as well as faculty who may demonstrate, the design development process of project. Projects may vary in scale and content and should preferably raise urban level or fundamental design issues.

Total: 180 Periods

Studio exercises may be carried out in groups and interventions to be submitted individually. Submissions shall be in the form of drawings and Report. Knowledge of CAD is a prerequisite.

Reference books:

1. Cliff Moughtin -Urban Design – Street and Square
2. Kevin Lynch -Site Planning

SEMESTER II

MHD18R5201	URBAN AND RURAL HOUSING	L	T	P/S	C
		3	0	0	3

OBJECTIVE:

- To draw on the literature to understand the fundamentals to housing practice.
- To highlight the existing housing conditions and related issues and study the various plans and policies for the development of the same.
- To introduce to the students, the institutional framework for development and finance in this field

UNIT I HOUSING AND DEVELOPMENT 9

Importance and Reflections of Housing on Social, Cultural and Economic Development – Role of Central Government and its Public Agencies in Housing Development – National Housing Policy in India – Comparison of Housing Policies and Programmes of Developed and Developing Countries

UNIT II HOUSING SCENARIO IN INDIA 9

Housing Stock and its Adequacy in Urban & Rural Settlements – Housing Quality and its Determinants – Housing Supply and Demand Assessments – External and Internal factors of influence on Housing Development – Trends in Housing Market – Five Year Plans of GOI.

UNIT III HOUSING PROGRAMMES IN INDIA 9

Nature and Type of housing development Programmes - Sites and Services, LIG, MIG, HIG Schemes, - Rural Housing Schemes - Slum Housing Programmes - Cooperative and Private Sector Housing ,

UNIT IV INSTITUTIONAL FRAMEWORK 9

Housing agencies for Policymaking, Programme Formulation, and Implementation, - Objectives and Functioning of agencies like TNHB, TNSCB, CMDA, Cooperatives and other Department

Agencies – Support of the National and State Governments – Housing Programmes announced from time to time.

UNIT V HOUSING FINANCE

9

Formal and Informal Systems of Finance - Financing agencies and their Terms of Lending – Direct and Indirect Incentives for Housing Development - Housing Affordability in relation with demographic, social and economic status.

Total: 45 Periods

Reference books:

1. KavitaDatta and G.A. Jones (1999), „Housing and Finance in Developing, Countries Routledge, London.
2. Annual Report 2010-2011, Ministry of Housing & Urban Poverty Alleviation, Government of India.
3. National Urban Housing and Habitat Policy – 2007, Government of India, Ministry of Housing & Urban Poverty Alleviation, New Delhi.
4. Manual under right to information act, 2005, Government of Tamil Nadu, Tamil Nadu Housing Board, Chennai.
5. Manual under right to information act, 2005, Government of Tamil Nadu, Tamil Nadu Slum Clearance Board, Chennai.
6. Manual under right to information act, 2005, Government of Tamil Nadu, Directorate of Town and Country Planning, Chennai.
7. Manual under right to information act, 2005, Government of Tamil Nadu, Corporate Housing, Chennai.

MHD18R5202 ECOLOGY AND SUSTAINABLE HABITAT SYSTEMS

L	T	P/S	C
3	0	0	3

OBJECTIVE:

Sustainability of cities and the related EIA have become important issues that guide urban development. This course is designed to expose the student to the concerned issues so as to interact effectively with the environmental planner.

UNIT I SUSTAINABLE SETTLEMENTS

12

Concepts of settlement ecology. Settlements as habitat systems of interconnected man made and natural systems. Introduction to concepts of Sustainability. Nature as the primary layer - urban development as the secondary layer. What makes today's cities unsustainable? Nature, built heritage and community networks. Cities as centers of consumption of land, water, energy resources and forest cover.

UNIT II ECOLOGY & HABITAT IMBALANCE

12

Various aspects ecology, ecological footprints, energy and resource depletion connected to development, pollution of soil, water, air and noise and visual pollutions. Destruction of food chains.

Issues of public health and sustainability. Need to reduce consumption. Circular metabolism and linear metabolism. Concepts of equity. Slums as an issue of sustainability.

UNIT III NEW TECHNOLOGIES IN PLANNING

9

Impact of technologies on sustainability I.T. and Biotechnology, Energy research and control of water. Role of EIA in the planning process.

Definitions and need, evolution and objectives, tasks & scope. Methods of EIA advantages and limitations.

UNIT IV ENVIRONMENT IMPACT ASSESSMENT

12

Assessment of impacts on resources and land use. Assessment of social and health impacts. Public participation. Legal framework for EIA.

International and national agencies and pressure groups for environmental and social assessment.

Total: 45 Periods

Suggested seminar topics/ term papers

Water augmentation, Rain water harvesting, waste and waste water recycling, reuse and renewal of habitat resources

Reference books:

1. Dominique Gauzin-muller -Sustainable Architecture and Urbanism
2. Victor Olgay -Design with Climate
3. Givony B -Urban Design in Different Climates
4. P.L.Lombardi -Evaluation of the Built Environment for Sustainability
5. Sudhakar Reddy -Urban Energy Systems
6. B.R.Barthwal -Environment Impact Assessment

MHD18R5282 HABITAT DESIGN STUDIO – II

L	T	P/S	C
0	0	12	6

OBJECTIVE:

The objective of this studio is to sensitize and introduce students to inner city regeneration.

OUTLINE

Study and Design of development /redevelopment / intervention in an existing urban district of a large city

The studio exercises would examine issues of inner city regeneration and interventions through economic, environmental, urban conservation, participatory and infrastructure provision-led objectives.

The project definition, programme development, design and development process, and implementation framework to form integral part of the project structuring.

Direct involvement of user groups and decision making agencies as part of the project to target appropriate development strategies. Feedback and interactive sessions to achieve workable economic and environmental regeneration objectives

Finally -to diagnose implications of suggested interventions on the larger urban fabric, to re-examine values in terms of social, physical, and the progressive nature of change.

Study should include model making and virtual models and use of graphics to highlight layers of interactive spaces and networks.

Studio exercises may be carried out in groups and interventions to be submitted individually. Submissions shall be in the form of drawings and Report.

Total: 220 Periods

Suggested seminar topics/ term papers

Understanding Residential layouts, in terms of patterns, housing densities, and utility network and community facilities. Slums and squatters settlements - problems and possibilities.

Reference books:

1. Geoffrey Broadbent -Emerging concepts in urban space design
2. Land Development Handbook, Planning Engineering and Surveying by Dew, Berry and Davis
3. Urban Design – Green Dimensions by Cliff Moughtin

SEMESTER III

MHD18R5301 INFRASTRUCTURE PLANNING AND MANAGEMENT

L	T	P/S	C
3	0	0	3

OBJECTIVE:

To develop an insight amongst the students on, urban infrastructure development & management and its impact on qualitative and quantitative aspects of urban built environment.

UNIT I INFRASTRUCTURE PLANNING

10

Concepts in urban infrastructure- Social and physical infrastructure

Urban social infrastructure - qualitative and quantitative techniques of assessing requirements, Planning Amenities and institutions. Urban physical infrastructure with emphasis on Water supply, sewerage, Solid waste, Storm water.

UNIT II FUNDING AGENCIES FOR INFRASTRUCTURE DEVELOPMENT 10

Public and private sector role in resource mobilization and infrastructure development and related issues. Financing systems, sources of finance, leasing and contracting methods, pricing and financing, major National and international agencies involved in infrastructure provisions.

UNIT III INFRASTRUCTURE MANAGEMENT STRATEGIES 10

Introduction to urban management. Evolution and structure of urban development bodies. Concepts of decentralization of development and management.

Managing Infrastructure development, corporatization and related goals, decentralized and people led infrastructure provisions, social goals and equity, environmental and economic issues and assessments etc. related to physical infrastructure.

UNIT IV NEW METHODOLOGIES IN INFRASTRUCTURE MANAGEMENT 15

Quality control mechanisms, institutions and instruments of resource mobilization, lessons from success and failure, new opportunities and initiative in infrastructure development and management.

Case studies from Asian cities of successful and innovative infrastructure provisions, and equitable economic development, management and maintenance schemes.

Total: 45 Periods

Suggested seminar topics/ term papers

Case Studies and best practices in India and abroad

Reference books:

1. Eduardo Vasconcellos -Urban Transport, Environment and Equity
2. B.G.Hutchinson -Principles of Urban Transport Systems Planning

MHD18R5303**RESEARCH METHODS**

L	T	P/S	C
3	0	0	3

OBJECTIVE:

To introduce the students to the meaning, concepts and methods of Research.

To aid the students in adopting skills in writing Technical papers and help in conducting research.

Unit 1: SCIENTIFIC RESEARCH 10

Types and Methods- Science & Common sense, Empirical research, Normative research - Aims, steps, types and methods of Scientific Research Concepts, Constructs and Variables-Hypotheses Construction, nature, types of Hypothesis, Difference between Proposition, Hypothesis and Theory-Testing Hypothesis

Research Design

Unit 2: RESEARCH FORMULATION 10

Formulation of research problem and Questions-Meaning, Goals, Characteristics of Research Design-Design for different types of Research, Cross-sectional, Trend, Cohort and Panel Studies-Sampling-Purposes, Principles, Advantages, Types, Sample size-Techniques of Data Collection

Unit 3: RESEARCH QUESTIONNAIRE 10

Questionnaire and Interview Schedule-Meaning, Format, Formulation, Types, Pre- testing, Advantages,-Limitations, Interview: Functions, Characteristics, Types, Conditions of successful Interview, The Interviewer &the Respondent, Process of Interviewing, Merits & Limitations- Observation: Characteristics, Purpose, Types, Process, The Observer, Problems, Advantages, Limitations,-Recording of Observations, Schedule

Unit 4: CASE STUDY 15

Case Study Purpose, Types, Sources of data Collection, Advantages, Criticisms Data processing and Analysis-Tabulation, Diagrammatic Representations and Analysis, Measurement and Scaling Techniques-Statistical Techniques: Measures, Mean, Median, Mode writing a Research Paper-Scientific Writing, Format: Preliminaries, Text, References & Conclusion-Research Ethics

TOTAL: 45 PERIODS

Reference books:

1. Research Methods- Ram Ahuja
2. Dr Kothari- Research Methodology: Methods & Techniques
3. Fred N Kerlinger- Foundations of Behavioral research
4. Kumar- Research methodology

MHD18R5383 HABITAT DESIGN STUDIO III

L T P C
0 0 12 6

OBJECTIVE:

- Students will use Internet and library resources provided to develop a thorough understanding of the facilities and standards required in the design problem.
- Students will understand the problems associated with the environment.

DESIGN PROJECT PLANNING AND DESIGN FOR TOURISM IN ENVIRONMENTALLY SENSITIVE AREAS

Hill and coastal areas are environmentally fragile due to their location, topography and natural vegetation. They are especially vulnerable in our country where the population density is very high and the environmental bye laws are not stringent. Environmental analysis of such areas and their development for tourism requires inter disciplinary approach involving remote sensing, Geographical information systems, environmental modelling techniques, ecological sustainability and socio economic factors. Scholars will be encouraged to conduct case studies of

such environmentally susceptible hill / coastal areas and analyze the same using Satellite imagery, GIS software, environmental modelling techniques and field surveys. Moreover analysis of these areas for tourism development and land suitability will be carried out in order to develop a broad framework for planning and development. Students would be encouraged to investigate the special building rules and byelaws prevalent for hill / coastal areas from an ecological perspective. Both hill & coastal areas are rich in resources such as scenic areas, views and vistas .Hence while planning for the optimized development of these areas scholars have to consider the visual impact assessment as an integral part of environmental impact assessment, so as to conserve hill sites and coast. It can be inferred that this exercise would advocate a balanced approach between conservation, sustainability & development.

TOTAL PERIODS 220

REFERENCES

1. Robert Kay & Jacqueline Alder -Coastal planning & Management – E& F spon New York - 1999
2. James Steel – Ecological Architecture –A critical history, Thames and Hudson ,London 2005.
3. Anna Ray Jones -Sustainable architecture in Japan –Green buildings of Nikken Sekkei - John wiley & sons, W.Sussex 2000
4. Saudra Mendler & William Odell –A guide book to Sustainable design, John wiley & sons USA, 2000.3
5. George F.Thompson & Frederick R.Steiner -Ecological design &Planning , John wiley & sons , Canada 1997.

SEMESTER IV

MHD18R5401 REAL ESTATE DEVELOPMENT AND FINANCE

L T P/S C
3 0 0 3

Objective:

To familiarize students to the Real-estate market mechanisms and their implications on the process of city development and resource mobilization.

UNIT I : INTRODUCTION TO REAL ESTATE

10

Introduction and history of Real-estate Development. Real-estate market and assessment techniques, economic cycles, demand and supply, values and rental structure, and advertising etc.

UNIT II : REAL ESTATE FINANCING AGENCIES

10

International investments and the packaging, implications on Real estate market, public-private participation, and Real-estate. development agencies etc.

UNIT III :REAL ESTATE REGULATIONS

15

Real estate laws, rent control laws, and other legal framework.

Investment and risk assessment techniques market surveys and research, rating system in Real-estate market etc.

UNIT IV : DEVELOPMENT & MAINTENANCE

10

Infrastructure development and quality control post development management and maintenance in Real-estate development. Case studies of good practices in development of Real estate

Total: 45 Periods

Suggested seminar topics/ term papers

Documentation of Real Estate practices in Indian and foreign markets

Reference books:

1. The Economics of Commercial Property Markets Michael Ball, Colin Lizieri, Bryan D. Macgregor
2. Real Estate Market Analysis: A Case Study Approach by Adrienne Schmitz

PROGRAMME ELECTIVES

MHD18R5105

ELECTIVE I: SMART CITY PLANNING

L T P C
3 0 0 3

Objective: To introduce the students about upcoming challenges in the urban planning process and resulting environments in par with the technology changes and urban systems

Unit 1: SMART CITIES – INTRODUCTION

9

City Smartness: the Energy Dimension of the Urban System - Urban Performance and Energy - Energy and Spatial Planning- Integrated Approaches- Technological Change and Innovation for Sustainable Cities
Ontological Approaches

Unit 2: SMART ENERGY

9

Energy supply -Thermodynamics - New Paradigm of Sustainability in Planning Science and Practice Parking Planning and energy saving – Measurement index of Sustainability -Urban Transformation
The Landscape Assessment and New Energy Facilities

Unit 3: TERRITORIAL POLICIES

9

Integrated Approach -Territorial Policies- Urban Energy Saving strategies- Planning for the Conservation of Historic Districts-Cities Dealing with Energy Issues and Climate-Related Impacts- Approaches, Strategies and Tools for a Sustainable Urban Development

Unit 4: REGIONAL LOCAL DEVELOPMENT STRATEGIES

9

Evolved Frameworks for the Integrated Development of Territorial Services - Role of Energy and Climate Change Policies -Selected Examples from a Spatial Planning Perspective - Regional Local Development Strategies Benefiting from Open Data

Unit 5: SMART CITIES: CONTEXT, POLICY AND GOVERNMENT 9

Renewable Energy Sources and their Contribution-Mobility Projects and Practices-Geodesign - Regulations issues - Using Citizen-Provided Information to Build Purposeful Knowledge for Planning: Principles, Requirements, Examples

Total no. of Periods 45

Suggested Books:

1. Smart Energy in the Smart City, Editors: Papa, Rocco, Fistola, Romano (Eds.), Springer Publications, ISBN 978-3-319-31157-9
2. Low-Carbon Smart Cities: Tools for Climate Resilience Planning Kwi-Gon Kim, Springer Publications, 1st ed. 2018 edition (July 10, 2017)

References:

Smart city guidelines Govt. of India
Smart cities mission
Ministry of Housing and urban affairs

MHD18R5106	ELECTIVE I: HEALTHY HABITATS	L T P C
		3 0 0 3

Objectives:

To introduce the students to the concept of quality and Healthy environments and urban planning and design process involved to ensure healthy habitats for its citizen

Unit -1: INTRODUCTION – HEALTH AND CITY PLANNING 9

Urban form and health- Design and public realm- Health, people friendly environment -Health and urban context

Unit-2: COMMUNITY DESIGN AND HEALTH 9

Social and economic environment-Community design- air quality- Social Capital- social inclusion-Community Design for Physical Activity- conducive environment

Unit-3: BUILT ENVIRONMENTS AND HEALING 9

Transportation and Land Use- Healthy Workplaces- Open space and green infrastructure- Design considerations

Unit-4: STRATEGIES FOR HEALTHY PLACES 9

Behavioral Choices and the Built Environment- Community Engagement- assessment- Sanitation: water and waste-E-waste- management

Unit-5: HEALTH IMPACT ASSESSMENT

9

Tools for measurement- Role of W.H.O- Natural and built environment interventions and case studies from developing nations

Total no of periods 45

Suggested Books:

1. Making Healthy Places, Designing and Building for Health, Well-being, and Sustainability
Island Press, ISBN-13: 978-1597267274 , ISBN-10: 1597267279
2. Toward the healthy city, People, Places, and the Politics of Urban Planning, Jason Corburn
The MIT Press, Cambridge, Massachusetts, London, England

References:

1. Hidden cities: unmasking and overcoming health inequities in urban settings
Kobe, World Health Organization / WHO Centre for Health Development & United Nations
Human Settlements Programme, 2010.
2. Hosking, J., Mudu, P., and C. Dora. "Health Co-Benefits of Climate Change Mitigation-
Transport Sector: Health in the Green Economy." World Health Organization, (2011).
Global Age-friendly Cities: guide
3. Healthy Habitats: Urban Planning for Healthy Cities by Hugh Barton and Marcus Grant
WHO Collaborating Centre for Healthy Urban Environments, Institute of Sustainability,
Health and Environment, University of the West of England, UK

MHD18R5107 ELECTIVE I: HABITATS OF FUTURE

L T P/S C
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OBJECTIVE:

To sensitize on the alternative scenarios available and possible for sustainable habitats of future

Unit1: EVOLUTION OF URBAN SETTLEMENTS

10

Evolution of urban settlements, economic systems, political power structure and city formations. Industrial revolution and urbanization. Contemporary cities - New urbanism, Infrastructuralism, Everyday urbanism, Adhoc urbanism as futures. Cities within cities

Unit2: NEW TECHNOLOGIES AND CITY FORM

10

Wired cities globalised cities and controlled districts, pricing, exclusion and information highway and the break down of National boundaries. Neonomadism. Search for identities by globalised communities and neo classicism, vernacular architecture and regionalism

Unit3: IDENTITY AND BREAKDOWN 10

Future as the future of people - parallels in human development and urban development-Loss of place, breakdown of identities and formation of new class structure-Biotechnology and the loss of rural identities-The fusion of town and country.

Unit4: CASE STUDIES AND SEMINARS 15

Case studies and seminars on future city proposals, utopian ideas and emerging perspectives on energy-form-new territorial concepts, upcoming challenges and issues in the new planning models-Industrial practice -Role of educational Institutions- citizen awareness and inclusivity

TOTAL: 45 PERIODS

Suggested seminar topics/ term papers:

Future trends and examples

Each student shall select topics with in the area of syllabus and present two term papers as seminar

Reference books:

1. Christopher Alexander -Network Cities
2. Geoffrey Broadbent- Emerging Concepts in Urban Design

SEMESTER II

MHD18R5204 ELECTIVE II : GIS MODELLING IN URBAN PLANNING

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OBJECTIVE:

To examine the role and application of Geographic Information Systems in environmental design, community charities and other urban design projects.

UNIT I

INTRODUCTION 6

GIS – Spatial data, non-Spatial data, Plan, Map, Scale, Map Projection, GPS, GCP collection, Spectral signature curve, Image processing – Geo coding / Geo referencing, GIS software, Two tier architecture, Three tier architecture, Thin client, Thick client

UNIT II

DATABASE CONCEPTS 9

Data structures, Databases, Files, Types of Tables, Table operations, Creating a Table, Accessing Records in a Table, Manipulating records in a Table, Modifying Table structure, Reports, Advantages of database, Primary key and data access, Composite primary key, Defining a primary key, Sorting, Indexing, Master Detail relationships, Types of relationships, Foreign key, Deleting, updating and adding records to linked tables, ER Diagram, Data Model – Physical, logical and conceptual.

UNIT III

SPATIAL DATA

9

Comparative methods for obtaining images, Aerial Photograph, Satellite Imagery – High resolution imagery – LISS, PAN, MSS – Ortho rectification, Digitization – Layers, Digital Elevation model, Digital Terrain Modelling, Existing maps – Problems and Issues, Rubber sheeting, Digitization, overlay, union, intersection.

UNIT IV

INTRODUCTION TO GIS SOFTWARE

9

Arc Info – Coverage – Arc, Node, Tics, Add, get, put, Map extent, edit, Topology creation – Clean, Build, Tables
– Creating tables, updating tables, join, drop item, Export, Import, overlay, union, intersection, buffer.

UNIT V

MODELLING GIS PROJECTS FOR URBAN AREAS

12

Preparation of Land use map, Land use suitability analysis, Screen design, Visual Basic application using Map objects.

TOTAL: 45 PERIODS

REFERENCES:

1. Information systems for Urban Planning – Robert Laurini
2. Modelling our world – ESRI Press
3. An Introduction to Data base Systems – C.J.Date
4. Fundamentals of Data base Management System by Elmasri & Navethi
5. ESRI (1992) Understanding GIS, The Arc Info Methods, ESRI, USA

MHD18R5205

ELECTIVE II: HOUSING AND COMMUNITY.

L T P/S C

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OBJECTIVE:

To understand the role of housing and its importance in habitat design. To explore the policy aspects and finance mechanism in housing.

Housing concepts, definitions and components of housing. Role of housing in socio-economic development of the nation, housing in relation to non-residential components of settlement.

Housing norms and standards. Housing stress diagrams, stressed communities.
Social impacts of planned housing. Role Of NGOs and self help groups.
Sustainability of social and public housing – planning, design, Materials, Technology.

The role of government as a developer, financier and policy maker to be critically assessed in the era of privatization in housing sector. Housing scenario in India, National Housing policy, Role of HUDCO, State Housing Boards.

Housing Finance- Role of NHB and other financial Institutions. Mechanisms for housing loans for various income groups & industry. Role of private sector in housing infrastructure development.

Impact of globalization. Effect of global capital participation in housing and urban infrastructure sector with case studies from selected areas of global housing research

Suggested seminar topics/ term papers

Evaluation of Housing policies of different countries/ states

Scope and Role of Various Agencies

1. P K Sarkar -Housing laws in India – Problems and Remedies
2. Secure Land Tenure for the Urban poor in Developing Countries
3. Kavita Datta and G.A.Jones - Housing Finance In Developing Countries
4. Cedric Pugh - Housing and Urbanization

L T P/S C
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OBJECTIVE:

To equip students to deal with conservation and recycling along with related design issues of existing urban environment, old cities, natural and urban heritage areas.

UNIT I : INTRODUCTION TO CONSERVATION 10

Interactive session of History heritage and cities, traditional water systems.
Introduction to conservation, historic and inner city areas and other Natural elements.
Concepts and approaches to conservation in India and other countries.

UNIT II : CONSERVATION ACTS 10

Socio-economic development, tourism infrastructure development, and role of urban conservation. Institutional Aspects of Conservation - Charters - World Heritage legislation and Sites Conservation Acts Legislation Archaeological Acts Institutional framework for conservation in India and other countries.
Historic overview of recycling cities.

UNIT III : RENEWATION, REGENERATION & REUSE. 10

Conservation Area practice, adaptive reuse, upgradation programs in old areas, infill design.
Financial and Implementation framework for urban conservation and Adaptive Reuse Projects.
Urban recycling and brown field projects, urban renewal and development strategies for regeneration of inner cities areas.

UNIT IV : URBAN CONSERVATION & MANAGEMENT 15

Conservation management, community participation, economic regeneration, upgrading infrastructure, financing and implementation framework for redevelopment and revitalization projects. Legislation frameworks and institutional framework for special areas, urban conservation, and urban recycling. Recent successful practices in urban conservation and regeneration in India and other countries.

Total: 45 Periods

Suggested seminar topics/ term papers

Case studies of adaptive reuse and Inner city revitalization.

Reference books:

1. Alan Dobby -Conservation and Planning
2. Herat – The Islamic City (A study in Urban Conservation)
3. Bernard Feildan- Conservation of Historic Buildings

ELECTIVE III:
MHD18R5305 URBAN DEVELOPMENT AND ENVIRONMENTAL LAWS
L T P/ S C
3 0 0 3

OBJECTIVE:

To familiarize the student with legal terminology and legal frameworks that applies in urban context of Environmental Protection

Unit1: FUNDAMENTALS OF ENVIRONMENTAL LAWS 9

Introduction to laws, concepts – sources of law, meanings terms of law, legislation, ordinance, bill, act, regulations and bye – laws

Unit2: EVOLUTION OF PLANNING LEGISLATION IN INDIA 9

An overview of legal tools connected with urban planning & development, Town and Country Planning, Improvement Trust and Development Authorities etc

Unit3: REGIONAL PLANNING LEGISLATION 9

Objectives, contents and procedures for preparation and implementation of Regional plans, development plans, Town Planning Schemes, Area Plans etc. Legislation related to use and control of land, land acquisition

Unit4: LAND DEVELOPMENT LEGISLATION 9

Significance of land development control – objectives and legal tools, critical evaluation of Zoning, sub division regulations, building regulations and byelaws. Development code Legislation on Conservation of natural resources including Mining and Forestry Acts, Conservation and Management of Ancient Monuments and Archaeological sites and ruins.

Unit5: COSTAL ZONE REGULATIONS 9

Coastal Zone Regulations, Transfer Development Rights – Concepts and related issues Environment Management Systems (ISO – 14001 and its planning implications, Need of ISO, case study of ISO certified industry, Environmental and Financial Benefits of ISO

TOTAL: 45 PERIODS

Suggested seminar topics/ term papers

Environment versus Development – Approaches and Analysis
Energy conservation issues and need of Energy Audit and related topics

Reference books:

1. Government of India, UDPFI Guidelines.
2. The tamil nadu town and country planning act, 1971
3. National Building Code
4. The GAIA Atlas of Cities by Herbert Girardet
5. Design Guidelines for Urban Open Space

MHD18R5106 ELECTIVE III: PLANNING LEGISLATION

L T P/S C
3 0 0 3

Unit 1: PLANNING LEGISLATION: 9

General Concept of Law: Source of law (i.e. custom, legislation and precedent), meaning of terms of law, legislation, ordinance, Bill, Act, Regulations and Bye-laws. Significance of law and its relationship to urban planning benefit of statutory provisions- eminent domain & police powers

Unit 2: INDIAN CONSTITUTION: 9

Concept and contents, provisions, regarding property rights, Legislative Competence of state and central Government to enact town planning legislation.- Evolution of Planning legislation. An over view of legal tools connected with Urban Planning and Development, Town and Country Planning Act, Improvement Trusts Act, Urban Planning and Development Authorities Act - objectives, content, procedures for preparation and implementation of regional plans, Master Plans and Town Planning schemes.

Unit 3: PLANNING LEGISLATION –ACTS AND AMENDMENTS: 9

Concept of Arbitration; Betterment levy; development charges and public participation in Statutory planning process; Concepts of Structure Plan; local plan/and action plan under the English law.

Unit 4: ENVIRONMENTAL LAWS 9

Environment Protection Act 1986- Land Acquisition Act 1884 - Basic concept, procedure for compulsory acquisition of property and determination of compensation- Urban land (Ceiling and Regulation) Act 1976 – objectives, contents and planning implications-Significance of Land Development Control – objectives, contents and legal tools, critical evolution of zoning, subdivision regulations, building regulations and bye-laws, Development Code, Zoning law and law relating to periphery control 73th and 74 th Constitutional Amendment Act, 1992.

Unit 5: CASE STUDIES 9

Relevant case studies of the above regarding EP Act 1986, Air (Prevention and Control of pollution) Act, Water (Prevention and Control of pollution) Act, Mines and Mineral Act, Factories Act, Pesticides Act, Indian Forest Act, Wildlife Act, Ancient Monuments and Archaeological Sites and Remains Act, Hazardous Waste Management and Handling Rules / Biomedical Rules / Solid Waste Management Rules, Environment Tribunal Act, Climate change Protocols and Conventions, MOEF Guidelines and Notifications, Appellate Authority Act, Other related Notifications on environmental safety

References:

1. City Planning Legislation, by Crawford Andrew Wright 1873-1929, Hardpress Publishing ISBN-10: 131342353X, ISBN-13: 978-1313423533
2. Environmenat law in India, by Mohammed Naseem , Publishers : Kluwer Law International

MHD18R5306 ELECTIVE III: VERNACULAR ARCHITECTURE AND PLANNING

L T P C

3 0 0 3

OBJECTIVES

Knowledge about vernacular building technologies and their use in Contemporary buildings, use of natural materials and energy efficient systems ,application of these technologies to current building practices.

UNIT I

INTRODUCTION

9

Traditional principles of planning, primitive forms , symbolism, color, folk art etc., in the architecture of rural and tribal India ; deserts of Rajasthan , Kutch and subterranean architecture of Gujarat.

UNIT II

VERNACULAR BUILDING TRADITIONS–NORTH INDIA

9

Wooden houses, Mansions (Havelis) Gujarat and Rajasthan – Shekawati Havelis, Havelis at Jaisalmer ,House boats (Dhungas), Kashmir – materials of construction and constructional details – settlement planning

UNIT III

VERNACULAR BUILDING TRADITIONS – SOUTH INDIA

9

Wooden houses, palaces and theatres & family homes (Tharavads) in Kerala, constructional details such as joinery and elements of climate control. Chettinad houses and palaces in Tamilnadu – Lime plaster work, Heritage tiles, Wooden pillars – constructional details –Principles of planning, proportion and religious practices and social customs in relation to settlement planning.

UNIT IV

COLONIAL INFLUENCES

9

Colonial influences on the Traditional Architecture of Christian houses, Colonial architecture of Goa – concept of a Bungalow, evolution of the verandh and other colonial elements of design & style. Architecture of Bengal and

Victorian villas. Chisholm and Henry Irwin and the evolution of Indo Sarcenic architecture European construction techniques in such buildings and the influence of the vernacular traditions.

UNIT V SECULAR ARCHITECTURE

9

Medieval period – citadels, palaces, towers, gateways, public buildings etc in the towns of Jodhpur, Jaisalmer, Jaipur, Udaipur & Gwalior. Planning principles elements of style, climate control and constructional details of the same- with case studies from selected topics

TOTAL PERIODS 45

REFERENCES

1. Carmen Kagal ,VISTARA- The Architecture of India ,Pub –The Festival of India, 1986.
2. V.S.Pramar Haveli – wooden houses and Mansions of Gujarat, Mapin publishing pvt ltd, Ahmedabad, 1989
3. Kulbushan Jain and Minakshi Jain –Mud Architecture of the Indian Desert Aadi centre, Ahmedabad, 1992.
4. G.H.R.Tillotsun – The Tradition of Indian Architecture continuity, controversy and change since 1850, Oxford university press, Delhi 1989.
5. Suzaneeslein and Stafford Clief, Indian style , Clarkson N.Potter inc , NewYork, 1999.

MHD18R5307 ELECTIVE III: ENVIRONMENTAL PSYCHOLOGY

L T P/S C
3 0 0 3

Objectives: To introduce the students about interdisciplinary social science approaches and to explore ways that people experience environments and make decisions about them, both as individuals and also in the social contexts where environmental decision making is institutionalized

UNIT I INTRODUCTION TO ARCHITECTURAL PSYCHOLOGY 09

Introduction to the discipline, its importance in the field of Architecture Understanding the principle of psychology– Form, perception, attention, concepts, types of concepts ,physical settings and varied emotions. Creative Thinking :Process of creativity, visual and creative thinking ,types of thinking, directed thinking, Convergent thinking divergent ,articulation of masses and spaces ,sense and sensation modalities –language of architecture and its role in creativity, like rhythm ,harmony ,balance and other visual traits.

UNIT II ENVIRONMENTAL AND HUMAN RESPONSE 09

Environmental variables-fixed feature variable, semi- permanent feature variable, ambient feature variable and human comportsment, human adaptation to the given environment ,collective behavior and spatial orders ,effects of color and behavior in built environment.

UNIT III CONCEPT OF BEAUTY AND HUMAN ATTITUDE**09**

Philosophies of beauty ,aesthetics and physio -psychological association to it and the human mind, simulated by 'pull' and 'push' factors of the environment physical manifestation and emotional impact .attitudes towards typical physical settings from ,space and attitude relations.

UNIT IV APPLICATION OF PSYCHOLOGY IN ARCHITECTURE DESIGN**09**

Evaluation of the satisfactory levels of a residential building. Parameters to provoke desired emotions in the built environment application of the knowledge in the design of a residence, community, neighborhood in all stages of design

UNIT V THE PSYCHOLOGY OF SUSTAINABLE BEHAVIOR / GREEN INTERVENTIONS**09**

The green organizational imperative- Green work performance- The psychology of going greenGreen recruitment, development and engagement-Maslow's Hierarchy of Needs-Herberg'sTheory. The Cycle of organizational Change and Progression -Challenges to sustainability and participation.

TOTAL: 45 PERIODS**Reference books suggested:**

1. Morgan T. of Clifford, "Introduction to Psychology", Tata McGraw–Hill publications New York, 1983
2. Kayem,S.M., "Psychologyin relation to design", Dowden, Hutchinson and Ross, 1973
3. Hall E.T."The Hidden Dimension" New York, Doubleday, 1966.
4. Canter D.V & Lee.T. Psychology and the built Environment", Architectural Press, London, 1974.
5. Proshansky. H.I Hleson. W.H."Environment Psychology-people and their physical settings", Newyork, Holt, Rinchatand Winston, 1976
6. Proshansky, H.M. 1987. "The field of environmental psychology: securing its future." 'Handbook of environmental psychology.' D. Stokols and I. Altman. New York, John Wiley & Sons.
7. Bakker, A.B. & Leiter, M.P. Work engagement; A handbook of essential theory and research. Hove: Psychology Press 2010.

**MHD18R5308
EDUCATION****ELECTIVE III: PEDAGOGY: BASICS FOR ARCHITECTURE****L T P/S C
3 0 0 3**

Objectives: Pedagogy is an art and science of teaching and learning. Objective of this subject is to understand Pedagogy of Architecture.

UNIT I ARCHITECTURE PEDAGOGY**10**

Understanding meaning of Architecture and Peculiar Requirements of Architecture Education, Architecture Pedagogy and Andragogy, Creative Thinking and Critical Thinking. Decision-making and Problem-Solving

UNIT II MODELS OF TEACHING

10

Models of Teaching: Blooms Taxonomy and its relevance to education, Advanced Organizer, Concept Attainment model, Simulations.

UNIT III SYNECTICS

10

Synectics as a model of teaching. The essence of creativity in synectics. Use of synectics in the design studio. Various thinking skills, tools and techniques adopted by architects for deriving design ideas

UNIT IV TECHNIQUES OF TEACHING-LEARNING

15

Techniques of teaching-learning: Maxims of teaching and its application to subjects of architecture, concept mapping, creating concept maps. Basic aspects of classroom management. Architecture Design Decision Models

TOTAL: 45 PERIODS

Reference books suggested:

1. S. K. Mangal (2009)“Essential of educational technology”, PHI Learning Pvt. Ltd., 2009.
2. Bruce Joyce and Marsha Weils,“Models of Teaching”, Pearson; 9 edition (April 14, 2014)
3. Klausmier and Ripple (1971)“Learning and Human Abilities” Harper &Row, New York.
4. Eames Charles & Ray, ‘An Eames Anthology’, Yale University Press, Edited by Ostroff Denial.
5. Ashraf Salama, (1995)“New Trends in Architecture Education”, Raleigh, N.C.: Tailored Text, 1995.

MHD18R5310 ELECTIVE III: ANTHROPOLOGY AND ARCHITECTURE

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Objectives: To understand the relationship between society and the making of the built environment.

- To understand phenomenology and the role of meaning in built form.
- To look at place making from the architectural as well as urban design point of view.

UNIT I RELATIONSHIP BETWEEN CULTURE, SOCIETY, ANTHROPOLOGY AND ARCHITECTURE

06

Concepts of culture, society, politics and anthropology – relation between society and built environment – introduction to cultural anthropology view of architecture.

UNIT II ANTHROPOLOGY OF TRADITIONAL ARCHITECTURE

10

Architecture as a Process – kinship and house societies – perceptions of built form – conceptions of space – symbolism and technology – study of the above through case study of traditional architecture in India, Asia and Africa.

UNIT III ANTHROPOLOGY AND PLACE MAKING

15

Conditions of modernity – Fragmentation of society – Heidegger and notions of dwelling – C Noeberg Schultz and notions of Genius Loci Rapoport and studies on the meaning of built environment – Joseph Rykwert and the idea of house – Bollnow and idea of space – Jan Pieper and the notions of sacred space

UNIT IV AN OVER VIEW OF URBAN ANTHROPOLOGY

06

Meaning of urban studies and urban anthropology – role of cities – urban ethnography, primary units, major components and units of integration – anthropology and contemporary urban issues.

UNIT V SEMINAR

08

Students would make presentations exploring the relevance and impact of anthropological studies on contemporary architecture and design through readings/case studies. The proposal must be discussed with course faculty prior to presentation.

TOTAL: 45 PERIODS

OUTCOME:

A comprehensive understanding of architecture and urbanism as expressions of particular societies in time and place.

Reference books suggested:

1. Roxanna W asterson; The living House Anthropology of Architecture in S E Asia; Oxford Press.
2. Claire Melhuish (ed); Architecture and Anthropology – AD Vol 66 No 11/12, Nov - 1996
3. Joseph Rykwert; On Adams house in Paradise; MIT Press 1987
4. O F Bollnow; Mann, Bensch and Raum, Stuttgart; 1963.
5. Joseph Rykwert – Idea of a Town: The Anthropology of Urban Form in Rome; 1976.
6. Nold Egenter; The review of the Primitive in Architecture – Architectural Anthropology – Research Series Vol. I and II; Structura Mundi; 1992 and 1996.
7. Edwin James; Anthropology of the City; Prentice Hall; 1977.
8. J Carstern and S H Jones; About the house: Levi Strauss and Beyond

SEMINAR

MHD18R5209 – SEMINAR: DISSERTATION

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Seminar is a course patterned on the self study mode wherein a student studies a habitat in a holistic approach based on a selected case study from their own area of interest.

Objective:

The intent of the seminars is to explore the complex nature of a 'successful' habitat that attempts to identify and evaluate examples of Habitat design process that are followed by the experts in the industry, anticipating the future.

The seminar will deal with the key trends that will shape the future form and function of cities, and about the changes that would influence the role of a designer

After this study, the students will be able to identify the working process of these habitats and the process of habitat formation from both physical and social perspectives.

MHD18R5484

THESIS

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The Thesis is a self organized project work undertaken by the student to demonstrate his design skills. It provides a forum to discuss work in progress with members of staff and invited critics. At the end of which a student is required to present a complete Design project developed by him from conception to design execution which will be assessed through a series of critical juries.

Total: 280 Periods