## School of Planning and Architecture, Vijayawada Direct Admissions 2022- 23 <u>M.ARCH (Landscape Architecture) - Syllabus</u>

**ENVIRONMENTAL SCIENCE FOR ARCHITECTURE:** Natural systems; Complex relationships between the built and natural environments; Impact of pollution on natural and man-made environments; Strategies to transform the built environment to meet the risks of climate change; Biomimicry - the study of natural structures and processes- in helping to solve man-made problems and enabling design; Concepts of urban ecology and landscape urbanism; case studies; integration of Renewable Energy Systems in built environment.

**PRINCIPLES/THEORY OF ARCHITECTURE**: Principles and percepts of issues as related to architectural design in theory and practice; Appreciation of architecture with respect to man and his behavior; Nature and Design; Principles of organization on Nature; Ideas and Intent in design - Intuitive, contextual, Iconic, Experiential, Environmental, Energy based, Symbolic, Modular; Ideologies or philosophies from the practice of architecture through contemporary history; design communication through graphics.

**HUMAN SETTLEMENTS PLANNING**: Elements and characteristics of human settlements; origins; determinants and their evolution through the course of history; Settlements as expression of political aspirations; Various planning concepts in urban, rural and regional level development plans in the context of India; Changing scenario in the context of Globalisation.

**SITE PLANNING:** Site and its content in architectural creations; Influencing factors which governs the siting of a building or group of buildings in a given site; Topography analysis; Scientific techniques of site analysis- case studies; Methodology of preparing a site analysis diagram and mapping; Codes and building regulations; Site utilities and Infrastructure planning. Integration of Renewable Energy systems.

**LANDSCAPE DESIGN:** Man and Nature; Landscape traditions; historical public spaces and gardens; Elements and principles of landscape design; Aspects of outdoor design and site planning in enhancing and improving the quality of building environs, functionally and aesthetically; Site structure relationship; Analytic, artistic and technical aspects of designing open spaces at different scales; Role of Landscape design in sustainability; Overview of ecological balance; Impacts of human activities and the need for environmental protection and landscape conservation.

**URBAN DESIGN:** Urban design as a discipline; Components of a city and their interdependent roles; Determinants of urban form; Evolution of historic urban form.; Theories and illustrations of Urban design and the interpretation of the urban form in different ways and layers; Identity and \_place' making; architectural codes and imageability; contemporary urban issues; sustainable urban design; case studies.

**CLIMATOLOGY:** Climatology as a science for the study of weather conditions averaged over a period of time; the elements of climate; study of human comfort; design of solar shading devices; Heat flow through building envelopes; Air movement due to natural and built form; Design strategies in different climate zones; vernacular and contemporary responses to climate through case studies; assessment of appropriateness of various Renewable Energy Systems based on climatic conditions.

**BUILDING SERVICES:** Study of and design and detailing for water supply, drainage, sewage disposal, garbage disposal, electrification, illumination, fire hazard protection, rainwater harvesting, etc. in buildings and building premises, disaster management systems, intelligent energy conservation systems.