

SYLLABUS :-

Course Overview: This is an orientation course which introduces the students to the scope of the discipline, the multi-disciplinary nature of architectural practice and its association with related disciplines, the role of the architect as a professional, and the process of architectural design. It also initiates them to fundamental principles of design, structural systems, and an architectural vocabulary. The theoretical discussions are illustrated through evidences of application of the concepts/principles/elements/strategies in famous architectural examples, in turn exposing the students to a gamut of exemplary works of noted practitioners. Learning Objectives: 1. Understand architecture as a profession, its relationship with other associated disciplines, the various branches of specialization, the roles and responsibilities of an architect, and the architectural services to be rendered 2. Understand the fundamental principles of design, in terms of generative, organisational, and perceptual principles for form and space, and user-environment relationships 3. Understand the process of architectural design, the geo-climatic, physical, socio-cultural, and techno-economic considerations, methods of analyses and approaches of design conception and synthesis 4. Get acquainted with a vocabulary of architectural elements, and acquire conceptual ideas regarding structural systems Course Curriculum: Module 1 : Architecture as a profession and role of an architect The various working definitions and scope of the discipline; the responsibilities of an architect following Council of Architecture, India; elementary introduction to specialisations and allied disciplines Module 2 : Generative, organisational, and perceptual principles for form and space Elements of form and their properties: point, line, plane, volume; analysis of form on the basis of generative processes; space perception and enclosure; scale and proportion; compositional principles of symmetry, balance, harmony, rhythm, pattern, contrast, juxtaposition, dynamism; principles of gestalt; types of spatial organisation; colour theory: additive and subtractive colour systems, hue, saturation, value, warmth and key, colour pairing, schemes, and adjacency effects, colour psychology and cultural perception Module 3 : Process of architectural design and associated considerations Formulating a design brief; site-related design determinants like soil, topography, vegetation, sun, temperature, wind, precipitation, views and sound, regulatory instruments, and their implications on form, material, method, etc.; types of relevant data and methods of analyses; paradigms of design conception: canonical, iconic, pragmatic, analogical; elementary introduction to requirements of construction and operation Module 4 : Introduction to architectural elements and structural systems Architectural elements: types of doors, windows, shading devices, arches, vaults, domes, sloping roofs, staircases, masonry; various components of a building explored through a typical skin section; types of loads on buildings, and fundamental structural types: form-active, surface active, vector-active, section-active,

hybrid Reading List: 1. Ballantyne, A. (2002). Architecture: A very short introduction. Oxford University Press. 2. Braodbent, G. (1973). Design in architecture: Architecture and the human sciences. John Wiley and Sons. 3. Ching, F. D. K. (1996). Architecture: Form, space and order. Van Nostrand Reinhold. 4. Ching, F. D. K., and Eckler, J. F. (2012). Introduction to architecture. John Wiley and Sons. 5. Di Mari, A., and Yoo, N. (2017). Operative design: A catalogue of spatial verbs. BIS Publishers. 6. Engel, H. (1997). Structure systems. Hatje Cantz Verlag. 7. Fleming, J., Honour, H., Pevsner, N. (1998). The Penguin dictionary of architecture and landscape architecture. Penguin Books Ltd. 8. Krause, J. (2004). Design basics index. HOW Design Books. 9. Morioka, A., and Stone, T. (2006). Colour design workbook: A real-world guide to using colour in graphic design. Rockport Publishers.