NIRMA University Institute of Architecture and Planning Bachelor of Architecture Semester-II

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Course Code	2AR261
Course Title	Architectural Design Studio - II

Course Learning Outcomes (CLO):

At the end of the course, students will be able to:

- Select using basic architectural design concepts, tools and methods.
- Interpret spatial organisation, structure, hierarchy and scale using architectural elements.
- Create design for a particular programme and context.

Syllabus: 15 weeks (8 hours/week)

Total Teaching hours: 120 Hrs

Sr. No.	Syllabus: Topic	Sub Topic	Teaching hours:
1	Design exercises based on 'Learning by doing'.	 To have a short introductory exercise to: Understanding Natural and man-made place Human activity and behaviour in Space Exploration of spatial qualities like spatial enclosure, depth, volume, view, orientation, etc and tectonic characteristics like form, surfaces, material, shape, texture, etc Nature of concepts, ideas and design principles 	32 hours
2	Introduction to studio-based iterative design process	 To develop a design project with specific site and programme of residential or institutional nature. Introduction to requirements of the project like built-up area, utility, activity pattern, open space, etc Introduction to site parameters like landscape, ground morphology, site climate, orientation, etc Integrate learning from programmatic and site analysis Introduction to processes of conceptualization, ideation, diagramming, etc Engage in space making exercises/activities using architectural elements. Explore relationship of part to the whole and whole to the part. 	42 hours

		 Explore relationship between space, order, tectonics, site, use and concept to create a meaningful experience of Architectural space. Undertake appropriate exercises/activities to visualize and represent design learning. 	
3	Design Resolution with Synthesis of design parameters.	 Develop understanding of hierarchy of spaces, nature of architectural spaces and quality of spatial enclosures, etc Achieve synthesis of design criteria and parameters like spatial quality, form, function, response to site, etc Develop architectural language using architectural elements 	23 hours
4	Representation and communication of design	• Use of appropriate graphic and technical representational skills to communicate architectural design comprehensively	23 hours

Suggested Readings:

- 1. Agkathidis, A. (2016). Generative Design: Form-finding techniques in architecture. London: Laurence King Publishing
- 2. Agkathidis, A. (2012). Modular structures in design and architecture. Amsterdam: BISPublishers
- 3. Agkathidis, A. (2017). Biomorphic structures. London: Laurence King.
- 4. Jormakka, K., Schürer, O., & Kuhlmann, D. (2014). Design methods. Basel: Birkhäuser.
- 5. Kim, S., & Pyo, M. (2012). Mobile architecture. Berlin: DOM.
- 6. Tilley, A. R., & Henry Dreyfuss Associates. (2002). *The measure of man and woman: Human factors in design*. New York: Wiley.
- 7. Arnheim, R. (2015). Visual thinking. Berkeley : University of California Press.
- 8. Tait, J. (2018). The architecture concept book. London : Thames & Hudson.
- 9. Karssen, A., & Otte, B. (2014). Model making: Conceive, create and convince. Amsterdam: Frame Publishers.
- 10. Brownell, B. E. (2017). *Transmaterial next: A catalog of materials that will redefine our future*. New York : Princeton Architectural Press.
- 11. Adrover, E. R. (2015). Deployable structures. London: Laurence King Publishing.
- 12. Neufert, E., Neufert, P., & Kister, J. (2012). Neufert. Oxford: Wiley-Blackwell.
- 13. Ching, F. D. K., & Eckler, J. F. (2013). Introduction to architecture. Hoboken: Wiley.
- 14. Pause, M., & Clark, R. H. (2013). *Precedents in architecture: Analytic diagrams, formative ideas, and partis*. Hoboken, N.J: Wiley.
- 15. Ching, F. D. K. (2007). Architecture--form, space, and order.
- 16. Jones, W. (2011). Architects' sketchbooks. London: Thames & Hudson.
- 17. Pandya, Y., & Vastu-Shilpa Foundation for Studies and Research in Environmental Design. (2003). *Elements of space making*. Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design.
- 18. Unwin, S. (2010). Twenty buildings every architect should understand. London: Routledge