

Bachelors in Arts with With Community Science
Category-V

**DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-RMDA 9-HSC:
SPACE PLANNING AND SUSTAINABILITY**

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Space Planning and Sustainability	4	3	0	1	Class XII	NIL

Learning Objectives

- To understand the fundamentals of space planning.
- To acquire knowledge regarding materials, building construction techniques and technologies.
- To comprehend sustainable parameters in space design.

Learning Outcomes

The students would be able to:

- Comprehend the concept of design applicable to interior spaces.
- Understand the application of materials and finishes to create aesthetic and sustainable interiors.
- Comprehend the concept of sustainability and green rating systems.

THEORY
(Credits 3; Hours 45)

UNIT I: Basic Concepts in Space Planning

10 Hours

This unit will develop understanding regarding the concept of space planning and designing.

- Concept of space as a resource, characteristics of space
- Principles of planning spaces
- Zoning
- Types of houses: Independent houses and Apartments.
- Contemporary Housing - Service Apartments, Senior living.
- Building bye-laws – NBC and MPD

UNIT II: Construction Features in Building Design

15 Hours

This unit will acquaint students with various elements of building construction important for developing a strong structure.

- Site selection
- Conventional and non-conventional building materials, sustainable building materials
- Structural components of a building (Material and Types) – Foundation, Walls,

- Flooring, Roofs, Doors and Windows, Staircase.
- Basic building services
- Landscaping
- Earthquake resistant structures
- Home Automation

UNIT III - Concept of Space Design

15 Hours

This unit will introduce students to the area of space design such as elements and principles of design, furniture and furnishings and wall treatment.

- Introduction to Elements and Principles of design.
- Concept of Colour in Interior Design - Colour Theories, Colour Psychology, Colour Schemes, Colour Forecasting.
- Energy Efficient Lighting Systems.
- Furniture - Types, Selection criteria, Arrangement
- Furnishings - Home Furnishing, Window treatment, Floor Coverings
- Wall treatment
- Use of sustainable materials in space design

UNIT IV: Sustainable Built Environment

5 Hours

This unit will introduce students to the concept and application of sustainability in built environment.

- Introduction to the sustainable built environment
- Green building rating guidelines in India – GRIHA and LEED
- Concept of Smart Cities

PRACTICAL (Credits 1; Hours 30)

1. Introduction to building terminologies, Concept of Scale, building constructions symbols
2. Evaluation of floor plans on the basis of principles of space planning
3. Preparation of floor plans
 - a. Multipurpose rooms/ studio apartment (Computer aided / manual)
4. Identification and characteristics of different building materials
5. Case study of a Green Building
6. Project on Landscaping / Home Automation.

Essential Readings

UNIT I

This unit will develop understanding regarding the concept of space planning and designing.

- **Goel S., Seetharaman P. Kakkar, A.** (2015). *Manual on Interior space designing*, Elite publishers.
- **Kumar, S.** (2008). *Building Construction*, Standard Publisher.
- **Rao, M.P.** (2020). *Interior Design Principles and Practices*, Standard Publishers Distribution.
- **Ministry of Housing and Urban Affairs.** (2021). Master plan for Delhi-2021 (MPD-

2021). Government of India.

- **Neufert, E., & Neufert, P.** (2012). *Architects' data* (4th ed.). Wiley-Blackwell.
- **Preisner, W. F., & Ostroff, E.** (2001). *Universal design handbook*. McGraw-Hill Education. (Relevant for Senior Living and Accessible Design).
- **Bureau of Indian Standards.** (2016). National building code of India 2016 (NBC 2016).

UNIT II

This unit will acquaint students with various elements of building construction important for developing a strong structure.

- **Clarke, W.** (1977). *An introduction to textile printing*. Butterworth and Co. Ltd.
- **Chudley, R., & Greeno, R.** (2020). *Building construction handbook* (12th ed.). Routledge.
- **Duggal, S. K.** (2017). *Building materials* (4th ed.). New Age International.
- **Harris, C. W., & Dines, N. T.** (1998). *Time-saver standards for landscape architecture*. McGraw-Hill Education.
- **Spence, W. P., & Kultermann, E.** (2016). *Construction materials, methods and techniques*. Cengage Learning.

UNIT III

This unit will introduce students to the area of space design such as elements and principles of design, furniture and furnishings and wall treatment.

- **Ching, F. D. K.** (2014). *Architecture: Form, space, and order* (4th ed.). John Wiley & Sons.
- **Goldstein, H. & Goldstein, V.** (1988). *Art in Everyday Life* (4th ed.), Oxford & IBH Publishing Co.
- **Ching, F. D. K., & Binggeli, C.** (2018). *Interior design illustrated* (4th ed.). John Wiley & Sons.
- **Livingston, H.** (2014). *Designing with light: The art, science and practice of architectural lighting design*. John Wiley & Sons.
- **Pile, J. F., & Gura, J.** (2013). *A history of interior design* (4th ed.). Laurence King Publishing.
- **Wiggin, J.** (2011). *Interior design: The essential guide to planning your home*. John Wiley & Sons.

UNIT IV

This unit will introduce students to the concept and application of sustainability in built environment.

- **Indian Green Building Council.** (2022). *Introduction to Green Buildings and Built Environment*, BSP Books.
- **GRIHA Council.** (2021). *GRIHA version 2019: The national rating system for green buildings*. TERI Press.
- **Kubba, S.** (2012). *Handbook of green building design and construction: LEED, BREEAM, and Green Globes*. Butterworth-Heinemann.
- **Maclean, A.** (2015). *Sustainable residential interiors*. John Wiley & Sons.
- **United States Green Building Council (USGBC).** (2020). *LEED v4.1 building design and construction guide*.

Suggested Readings

- Duggal S.K. (2017). *Building Materials*. CRC Press.
- Green Rating for Integrated Habitat Assessment (GRIHA). (2021). *GRIHA Manuals*, GRIHA Council.
- Grimley, C. and Love, M. (2018). *The Interior Design Reference & Specification Book*, Rockport Publishers.
- Indian Green Building Council. (2021). *IGBC Manuals*, IGBC.
- Iyer, G. H. (2022). *Green Building Fundamentals*, Notion Press.
- Mitton, M. and Nystuen, C. (2021). *Residential Interior Design: A Guide to Planning Spaces (4th ed.)*, Wiley.
- Singh, G. (2019). *Building Construction and Materials*, Standard Publishers.

Note: Examination scheme and mode shall be as prescribed by the Examination branch, University of Delhi, from time to time

Bachelors in Arts with With Community Science Category-V

DISCIPLINE SPECIFIC ELECTIVE COURSE – DSE-RMDA 11-HSC: ENTREPRENEURSHIP AND ENTERPRISE MANAGEMENT

CREDIT DISTRIBUTION, ELIGIBILITY, PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the course
		Lecture	Tutorial	Practical		
Entrepreneur ship and Enterprise Management	4	3	1	0	Class XII	Appeared in Introduction to Resource Management

Learning Objectives

- To familiarize the students with meaning and concept of entrepreneurship and its ecosystem.
- To sensitize and orient students towards identifying entrepreneurial opportunities and market potential.
- To impart knowledge for setting up an enterprise and its management

Learning Outcomes

The students would be able to:

- Understand the concepts of an entrepreneur, entrepreneurship and entrepreneurial ecosystem in context of India.
- Appreciate the role of entrepreneurial motivation and creativity in innovation.
- Develop skills in project identification, formulation and appraisal.
- Gain insight into setting up of an enterprise and its management.

THEORY (Credits 3; Hours 45)