### Department of Resource Management & Design Application

#### 2-Year MSc Curriculum under NEP

#### **Only Coursework**

DS	SC			DSE	1			2 Cre	dit Cou	rse		Dissertation/Ac	
Paper Title	Credi	t Distril	bution	Paper Title	Credit	t Distrib	oution	Paper Title	Credi	t Distri	bution	ademic	
(4 Credits each)	Th	Tu	Pr	(4 Credits each)	Th	Tu	Pr	(2 Credits each)	Th	Tu	Pr	Project/Entrepr eneurship	
	-1	I	1	SEN	MESTE	RI	L	1		1	L	•	
Pick	All 3			Pick an	y 2	•	r	Pic	k any 1				
DSC RMDA 101: Building Design and Space Planning	2	0	2	2 DSE RMDA 101: 1 0 Capacity Development for Sustainability				Pick <b>any 1</b> from the list of odd semester NIL courses listed in the table below				NIL	
DSC RMDA 102: Resource Management and Sustainability	2	0	2	DSE RMDA 102: Human Centred Design and Ergonomics	2	0	2						
DSC RMDA 103: Marketing Management	3	0	1	DSE RMDA 103: Organizational Behaviour and Development	1	0	3						
				DSE RMDA 104: Designing Interiors and Styling	2	0	2	-					
		Ľ		SEN	<b>IESTEF</b>	RII							
Pick	All 3			Pick an	y 2	•	r	Pic	k any 1				
DSC RMDA 201: Sustainable Built Environment	3	0	1	DSE HSC 201: Advanced Research Methods in Home Science	3	0	1	Pick <b>any 1</b> fro semester course t				NIL	
DSC RMDA 202: Project Management in Dynamic Environment	3	0	1	DSE RMDA 202: Consumer Behaviour & Sustainability	3	0	1						

DSC RMDA 203: Product Design and Development Strategies	2	0	2	DSE RMDA 203: Facilities Operation and Services	3	0	1			
				SEM	ESTER	III		· · · · · ·		
Pick	x All 2			Pick an	y 3		P	Pick any 1		
DSC RMDA 301: Inclusive Design	3	0	1	DSE RMDA 301: Statistics & Data Management	3	0	1	Pick <b>any 1</b> from the list of odd semester courses listed in the table below	NIL	
DSC RMDA 302: Corporate Social Responsibility	3	0	1	DSE RMDA 302: Policies & Practices for Sustainable Development	3	0	1			
				DSE RMDA 303: Advanced Space Design & Strategies	2	0	2			
				DSE RMDA 304: Climate Change & Ecosystem: Issues & Concerns	3	0	1			
				DSE RMDA 305: Design Management & Audit	2	0	2			
				DSE RMDA 306: Health & Safety in Built Environment	3	0	1			
				DSE RMDA 307: Social Design & Research Practices	3	0	1			
					IESTER	IV				
Pick All 2			Pick an	y 3			Pick any 1			

Entrepreneurship and	2	0	2	DSE RMDA 401: Energy	2	0	2	Pick <b>any 1</b> from the list of even	NIL
Enterprise				Systems and				semester courses listed in the table	
Management				Sustainability				below	
				DSE RMDA 402:	3	0	1		
				Occupational ergonomics					
				and safety in living					
				spaces					
Financial Management	3	0	1	DSE RMDA 403: Waste	2	0	2		
& Accountancy				Management: Policies					
				and Technologies					
				DSE RMDA 404:	3	0	1		
				Professional Design					
				Practices & Startups					
				DSE RMDA 405:	2	0	2		
				Advancing Sustainable					
				Development in Practice					
				DSE RMDA 406: Design	2	0	2		
				Approaches in Built					
				Environment					

#### List of Skill Based Courses:

ODD SEMESTER	EVEN SEMESTER
<b>SBC RMDA 01:</b> CAD for Space Planning (2P)	SBC RMDA 02: ICTs for Sustainable Development (2P)
<b>SBC RMDA 03:</b> Event Design and Strategies (2P)	SBC RMDA 04: Program Monitoring and Evaluation (2P)
<b>SBC RMDA 05:</b> Internship (2P)	SBC RMDA 06: Internship (2P)

# **SEMESTER I**

#### DISCIPLINE SPECIFIC CORE COURSE DSC RMDA 101: BUILDING DESIGN AND SPACE PLANNING

Course Title	Credits	Credi	t Distributi Course	on of the	Eligibility Criteria	Pre-requisite of the Course	
Code		Lecture	Tutorial	Practical		(if any)	
Building Design and Space Planning DSC RMDA 101	4	2	0	2	Studied Semester 6 of Bachelors	Nil	

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### Learning Objectives

- Comprehend concepts, processes and techniques pertaining to planning and design of buildings and interior spaces.
- Understand conventional and contemporary methods of design and the best design practices employed for designing comfortable spaces.
- Identify the basic concepts pertaining to planning & design of buildings.
- Learn application of building bye-laws in designing buildings.

#### **Learning Outcomes**

The students would be able to:

- Comprehend the prudent use of conventional and contemporary building materials.
- Follow the use of resource efficient methods and techniques for building design and enhancing occupants' comfort.
- Understand human habitation as part of the ecosystem.
- Develop a holistic understanding of human settlements and their socio-cultural aspects.
- Adapt traditional knowledge systems & vernacular architecture for optimizing building efficiency.

**15 Hours** 

#### THEORY (Credits 2; Hours 30)

#### UNIT I: Human Settlements, Space planning and Design concepts

The unit highlights concepts of human settlements, vernacular architecture, building design and construction components.

- Concept and characteristics of human settlements, Factors impacting human settlements and its ecology
- Vernacular architecture: traditional building structures, local materials and resources
- Structural components of a building, Services in sustainable buildings
- Latest building bye-laws & codes of practice: NBC and MPD, Physical Planning and Zoning- concept of land use, zoning and neighborhood
- Resource efficiency of building materials, Indices of indoor comfort, Passive building design, Energy efficient building design and rethinking techniques (HVAC, energy efficient lighting systems, water efficient systems)

#### UNIT II: Interior Project construction and Estimation 15 Hours

The unit covers elements of interior finishes and building services, focusing on their construction, types, materials, and applications, as well as cost estimation, budgeting, proposals, tenders, and effective plan implementation to meet deadlines.

- Partition, paneling and false ceiling Construction of paneling; Types of Panelling full partition, part partition, construction of partitions; Materials used for paneling-ply, glass, gypsum, P.O.P, partition types
- Flooring
- Sanitary ware Various types of sanitary ware and their use; Types of layouts concepts in modern day toilet interiors; Materials & finishes colour, texture & pattern.
- Lighting Different types of lighting for interiors and exteriors; Lighting fixtures
- Estimating & budgeting: Types of cost estimations and preparing estimates and budgets
- Proposals & tenders
- Implementation of plan of work and meeting deadlines

#### PRACTICAL (Credits 2; Hours 60)

- 1. Survey on concepts in modern day interiors materials & finishes.
- 2. Create concept plans for interior designing of a selected area.
- 3. Dimensioning through use of metric and architectural scale.
- 4. Resource Mapping of a selected area.
- 5. Constructing layout plan & elevation of residential interior spaces.
- 6. Floor plan of Studio apartment/ Bedroom/ Living room with elevation plan/ section plan of the same; Create 3D views of the plans (Manual/CAD).
- 7. Preparation of a ceiling plan
- 8. Preparation of wall panelling/ partition.

- 9. Preparation of electrical layout plan.
- 10. Preparation of plumbing layout plan indicating various fittings and fixtures of water supply and sanitary installations.
- 11. Survey on concepts in modern day interiors materials & finishes.
- 12. Preparing budgetary estimates and costing of interior materials, lights, fixtures etc. of a selected project.

#### **Essential Readings**

- National Building Code of India. (2016). Bureau of Indian Standards.
- Varghese, P. C. (2015). *Building materials* (2nd ed.). New Delhi: PHI Learning Private
- Tipnis, A. (2012). *Vernacular Traditions: Contemporary Architecture*. The Energy and Resources Institute.
- Kumar, S. (2010). *Building construction* (20th ed.). New Delhi, India: Standard and Distributors.
- Neufert, Ernst. Architect's Data. 3rd ed., Blackwell Publishing, 2008.

#### **Suggested Readings**

- Chudley, R., Greeno, R., & Kovac, K. (2023). *Building Construction Handbook* (12th edition); Routledge.
- Randhawa, T. S. (2022). *Vernacular Architecture of India: Traditional Residential Styles and Spaces.* INTACH (Indian National Trust for Art and Cultural Heritage).
- Varghese, P. C. (2022). *Building Materials and Construction*. Prentice Hall India Learning Private.
- Master plan for Delhi: With the perspective for the year 2041. (2021). DDA, New Delhi.
- Ching, D. K. (2020). *Building Construction Illustrated*. Wiley.

#### DISCIPLINE SPECIFIC CORE COURSE DSC RMDA 102: RESOURCE MANAGEMENT AND SUSTAINABILITY

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Coue		Lecture	Tutorial	Practical		(II ully)
Resource Management and Sustainability	4	2	0	2	Studied Semester 6 of Bachelors	Nil
DSC RMDA 102						

#### **Learning Objectives**

- To build an inter-disciplinary perspective on understanding environmental concerns, sustainable development and its challenges.
- To familiarize students with current debates and perspectives with respect to sustainable development.
- To familiarize students with the concepts of sustainable resource management.
- To develop skills and competencies amongst students with regard to energy, water and waste management.

#### **Learning Outcomes**

The students would be able to:

- Build an understanding of environmental concerns, sustainable development and its challenges.
- Apply the concept of resources and developmental issues with respect to sustainable development.
- Develop skills in sustainable resource management.

#### THEORY (Credits 2; Hours 30)

#### UNIT I: Introduction to Sustainable Development and Developmental Issues 15 Hours

This unit lays thrust on the concept, need, principles, and goals of sustainable development, along with key global milestones and initiatives, environmental challenges and resource consumption.

- Concept of sustainable development
- Need, objectives and principles of sustainable development
- National and international milestones, initiatives, summits and protocols
- Sustainable Development Goals (SDGs)
- Environmental concerns, population explosion, urbanization, globalization, economic development, ecological footprint, carbon footprint
- Perspectives in resource consumption

#### **UNIT II: Sustainable Resource Management**

This unit deals with sustainable management of energy, water, waste, and air through strategies like star labelling, rainwater harvesting, and air quality monitoring, green practices, and green building rating systems.

- Energy management star labelling, renewable energy
- Water management Components of rain water harvesting system, rainwater harvesting potential, water auditing, waste water recycling, water testing
- Waste management Waste to energy plants, waste to wealth
- Air management Air quality, AQI
- Sustainable management of key resources: Land, green cover, water, air, waste
- Sustainable practices by industry, CSR initiatives
- Green buildings and green building rating systems

### PRACTICAL

#### (Credit 2; Hours: 60)

#### 1. Sustainable Development Initiatives

- Case studies on sustainable initiatives/CSR initiatives by industry
- Creation of awareness generation material for issues related to sustainable development/ Organizing events/competitions to commemorate important environment related days/ Current issues related to environment and sustainable development
- Calculation of ecological and carbon footprint using various applications and websites
- Case studies on green buildings
- Green building materials

#### 2. Energy Management

- Understanding electricity bills: components and calculations
- Understanding BEE star labels as an initiative towards sustainable energy consumption
- Energy auditing
- Portfolio/Survey on renewable energy products available in the market/ Energy efficient lighting fixtures
- 3. Air, Water and Waste Management

- Air/noise/water testing, AQI applications and websites
- Water auditing/ Rainwater harvesting/ Water efficient fixtures
- Green modes of transportation, E-vehicles: components and calculations
- Composting for sustainable waste management
- Case studies on waste management/ Biogas plants/ Waste to energy plants/ Waste water management/ Waste composting

#### **Essential Readings**

- Thakur, B., Thakur, R. R., Chattopadhyay, S., & Abhay, R. K. (Eds.). (2023). *Resource Management, Sustainable Development and Governance: India and International Perspectives.* Springer.
- Prasad, R., Jhariya, M. K., & Banerjee, A. (2021). Advances in Sustainable Development and Management of Environmental and Natural Resources: Economic Outlook and Opinions. CRC Press, Taylor & Francis Group.
- Goel, S. (Ed.). (2016). *Management of Resources for Sustainable Development*. New Delhi: Blackswan Publications.
- Somayaji, G., & Somayaji, S. (2009). *Environmental concerns and sustainable development: some perspectives from India*. New Delhi: TERI Publication.
- Sundar, I. (2006). *Environment and Sustainable Development*. New Delhi: APH Publishing Corporation.

#### **Suggested Readings**

- Patel, B. N., & Nagar, R. (2018). *Sustainable Development and India*. Oxford University Press India.
- Filho, W. L., Rogers, J., & Raniga, U. I. (Eds.). (2018). Sustainable Development Research in the Asia-Pacific Region: Education, Cities, Infrastructure and Buildings (World Sustainability Series). Springer.
- UN Millennium Project. (2005). *Innovation: Applying Knowledge in Development*. Science, Technology and Innovation Task Force Report.
- World Bank. (2006). *Enhancing Agricultural Innovation: How to go beyond the strengthening of research systems*. World Bank: Agriculture and Rural Development.

#### DISCIPLINE SPECIFIC CORE COURSE DSC RMDA 103: MARKETING MANAGEMENT

### CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Couc		Lecture	Tutorial	Practical		(ii aiiy)
Marketing Management DSC RMDA 103	4	3	0	1	Studied Semester 6 of Bachelors	Nil

#### Learning Objectives

- To impart an understanding of the conceptual framework, scope and importance of marketing management.
- To build an understanding of the macro and micro environment of organisations and their role in coping with changing market scenario.
- To impart knowledge regarding importance and techniques of market research.
- To create an understanding about dealing with competition in the market and managing marketing communication.

#### **Learning Outcomes**

The students would be able to:

- Develop an understanding of the importance and scope of marketing.
- Understand the changing macro and micro environment of organizations and importance of market research.
- Develop an understanding of the competitive strategies in marketing.
- Understanding the role of marketing communication and its effectiveness.

#### THEORY (Credits 3; Hours 45)

#### **UNIT I: Understanding Marketing Management**

#### **12 Hours**

This unit lays thrust on marketing scope, company orientations, macro environment analysis, marketing mix and new product development.

• Importance and scope of marketing

- Traditional vs. digital marketing
- Company orientations towards markets and marketing
- Functions of marketing, marketing management tasks
- Adapting marketing to new economy

#### **UNIT II: Capturing Marketing Insights**

### This unit highlights capturing marketing insights in terms of gathering information, scanning the environment, new product development and segmenting the markets.

- Gathering information and scanning the environment
- Analyzing the macro environment
- Forecasting and demand measurement
- New product development-challenges and process
- Creating customer value, satisfaction and loyalty
- Segmenting consumer markets, market targeting

#### **UNIT III: Dealing with Competition**

This unit deals with competitor analysis, competitive strategies and service marketing.

- Identify and analyse competitors, competitive strategies for marketing
- Building strong brands- creating brand equity, brand positioning, differentiation strategies
- Product life-cycle marketing strategies
- Shaping market offerings, developing brand strategies, meeting customer satisfaction
- Product classifications, product and brand relationship
- Characteristics of services, marketing strategies for service firms, Managing service quality, differentiating services

#### **UNIT IV: Marketing Communication**

#### This unit throws light on effective marketing communication.

- Role of marketing communication
- Designing effective marketing communication
- Managing mass communication: Advertising, sales promotions and public relations
- Managing Personal Communication: direct marketing and personal selling

#### PRACTICAL (Credits 1; Hours 30)

1. **Brand comparison** - Brand comparisons of products and services in terms of their marketing strategies, tools used by them for brand building and generating brand, find

#### 12 Hours

#### **13 Hours**

out their strengths and weaknesses and suggest suitable marketing strategies to increase their market share.

- 2. E-commerce Assessment and critical analysis of online retailing websites/applications with focus on visibility, user interface, experience, ease of transaction etc. Developing an e-tailing prototype.
- 3. **Case Studies** Using Case study approach (using both secondary and primary data) to develop an understanding of marketing strategies used by large, medium and small companies with emphasis on marketing strategies, marketing mix used, marketing budgets, media use, creating customer value and cultivating customer relationships.
- 4. **Visual Merchandising** To study visual merchandising of different stores during different seasons/times of the year.
- 5. **Marketing Strategies and Promotional Aids** To critically evaluate marketing strategies (digital and others) adopted by various product and service brands. To develop marketing strategy (digital and others) and design promotional aids for an existing/hypothetical brand.

#### **Essential Readings**

- Kotler, P., & Stigliano, G. (2024). *Redefining Retail: 10 Guiding Principles for a Post-Digital World*. Wiley.
- Daum, C., & Bartonico, M. (2023). *Marketing Management Essentials You Always Wanted To Know*. Vibrant Publishers.
- Kotler, P., Keller, K. (2016). *Marketing Management*, Pearson, New Delhi, 15th edition ISBN:978-81-317-3101-7
- Kotler, P., Keller, K. L., Koshy, A., & Jha, M. (2013). *Marketing Management*, 14th Edition. Pearson Education
- Baines, Fill, Sinha & Page. (2013). *Marketing*. Oxford University Press, New Delhi, Asian Edition, ISBN: 0-19-807944-3

#### **Suggested Readings**

- Kotler, P., Armstrong, G., Agnihothri, P. Y., & Haque, E. U. (2011). *Principles of Marketing*. Pearson, New Delhi, 13th edition, ISBN:978-81-317-3101-7
- Kotler P, Keller K.L., Koshy A, Jha M. (2006). *Marketing Management A South Asian, Perspective,* Pearson Education.
- Kotler, P. (2004). *Marketing Management 11th ed.* Pearson Education.
- Michael, J. E., Bruce, J. W. and Williom, J. S. (13th Edition, 2004). *Marketing Management*. Tata McGrawHill, New Delhi.

#### DISCIPLINE SPECIFIC ELECTIVE COURSE DSE RMDA 101: CAPACITY DEVELOPMENT FOR SUSTAINABILITY

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Capacity Development for Sustainability DSE RMDA 101	4	1	0	3	Studied Semester VI of Bachelors	Nil

#### **Learning Objectives**

- To provide an understanding of the conceptual framework, scope, and significance of capacity building and organizational capacity development.
- To build proficiency in designing and implementing capacity-building initiatives for sustainable development.

#### **Learning Outcomes**

The students would be able to:

- Develop an understanding of the concepts related to capacity building and its role in sustainable development.
- Acquire skills to design, develop, and implement capacity-building initiatives for sustainable development.
- Critically analyze interventional strategies of organizational capacity development

#### THEORY (Credits 1; Hours 15)

#### **UNIT I: Capacity Building for Sustainable Development**

This unit provides a comprehensive overview of capacity building for sustainable development, practical intervention strategies, essential management process and professional contemporary practices. Key topics include:

• Introduction to Capacity Development: Evolution, levels and approaches to capacity development.

- Capacity Development process: Linking policy development to capacity building initiatives; the role of stakeholders.
- Training Need Assessment (TNA)
- Training methodologies
- ICT for sustainable development
- Planning, and Implementation of capacity development programmes
- Monitoring and Evaluation
- Conflict resolution and negotiation
- Funding mechanism

#### PRACTICAL (Credits 3; Hours 90)

- 1. Critical evaluation of capacity development programs Analyze the effectiveness of development initiatives using real case studies and live projects.
- 2. Exploration of 'Lab-to-Land' and 'Land-to-Lab' approaches Examining practical application.
- 3. Training Need Assessment Identify and apply tools to determine skill gaps and training requirements of different stakeholders.
- 4. Training methodologies Develop and apply creative and engaging training methodologies for effective learning.
- 5. Development of ICT-based learning materials for sustainable development Assessment, development and implementation of ICT materials to support capacity development.
- 6. Training evaluation techniques Assess the outcomes and effectiveness of training programs.
- 7. Design, development & implementation of capacity development programmes Formulate and execute programs for enhancing knowledge, skills and perception.
- 8. Strategies for resource mobilization & fundraising Survey of the sources of financial support for the programs. Development of proposal for raising funds and other resources for developmental initiatives.
- 9. Field visits Organize visits to live projects to gain real-world insights.
- 10. Monitoring & Evaluation (M&E) framework Establish systems for tracking training progress and assessing impacts.
- 11. Skill training Plan and conduct trainings for soft skill development.
- 12. Documentation of good practices Case studies of good practices of capacity development programs.
- 13. Advocacy & networking for institutionalizing capacity building programmes Promote and build alliances to integrate capacity development efforts into institutional structures.

#### **Essential Readings**

• Leininger, J. (2023). The Power of Capacity Building: Creating Sustainable Change. Routledge.

- Bours, D., McGee, R., & Vargas, C. (Eds.). (2022). Capacity Development in Practice: Working with Complexity. Practical Action Publishing.
- United Nations Department of Economic and Social Affairs (UNDESA). (2021). Thematic Report on Capacity Building for the 2030 Agenda for Sustainable Development.
- Thistlethwaite, J., & Dichter, T. (2021). Monitoring and Evaluation for Capacity Development: A Practical Guide. Earthscan.
- Joshi, A. (2020). Knowledge Management for Sustainable Development: Tools and Techniques. Sage Publications.

#### **Suggested Readings**

- Preskill, S., & Brookfield, S. D. (2020). Learning as a Way of Leading: Lessons from the Field. Jossey-Bass.
- Blumenthal, B. (2003). *Investing in Capacity Building: A Guide to High-Impact Approaches*. Routledge.
- James, V. U. (2018). *Capacity Building for Sustainable Development*. CAB International.
- Kenny, S., Clarke, M. (Eds.) (2010). *Challenging Capacity Building: Comparative Perspectives*. Palgrave Macmillan UK.
- Bemmerlein-Lux, F., & Bank, P. (2011). Lessons Learnt & Tools Applied: A Working Book on Capacity Building Approaches in India. GIZ.
- Bamberger, M., & Chevalier, J. (2010). *The Capacity Building Handbook: A Guide for Practitioners in Sustainable Development*. GIZ.
- Horton, D., & Mackay, R. (2003). *Developing Effective Capacity Building Programs*. Oxford University Press.
- Williams, T., & Goodwin, T. (2015). *Capacity Development for Organizational Learning*. Routledge.
- Swanson, R. A., & Holton, E. F. (2001). *Foundations of Human Resource Development*. Berrett-Koehler Publishers.
- Hamel, G., & Prahalad, C. K. (1994). *Competing for the Future*. Harvard Business Review Press.

#### DISCIPLINE SPECIFIC ELECTIVE COURSE DSE RMDA 102: HUMAN CENTERED DESIGN AND ERGONOMICS

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Cour		Lecture	Tutorial	Practical		(II ung)
Human Centered Design & Ergonomics DSE RMDA 102	4	2	0	2	Studied Semester 6 of Bachelors	Nil

#### **Learning Objectives**

- To sensitize students about the importance of ergonomics and its daily life applications.
- To understand the components influencing worker inputs.
- To develop knowledge of functional design and workplace equipment arrangement.
- To identify human and workplace factors contributing to ergonomic hazards.
- To cultivate skills in identifying product and space design problems in the workplace.

#### **Learning Outcomes**

The students would be able to:

- Comprehend the concept, history, and significance of ergonomics in design.
- Recognize the scope of ergonomics in professional environments.
- Develop skills in taking anthropometric measurements for various workstations.
- Understand techniques for conducting time & motion and energy studies.
- Evaluate and design workstations and equipment based on their functional effectiveness.

#### THEORY (Credits 2; Hours 30)

#### UNIT I: Introduction to Human Factors and Ergonomics

**12 Hours** 

This unit covers ergonomics concepts, anthropometry in design, kinesiology, biomechanics, human-centered design, and occupational safety in various work environments.

• Ergonomics- concept, significance, history, application of Ergonomics in daily life

- Anthropometry History and its application in interior designing for different work areas and workers, Types of anthropometry, anthropometric application in design development and evaluation
- Kinesiology and biomechanics, human leverage system and its mechanical benefits, biomechanics and posture for various tasks
- Human-Centered Design- Design Thinking concept and methodology
- Occupational safety and health at workplace Applications of ergonomics in different work environments

#### UNIT II: The User Component, Workplace and Equipment Design 18 Hours

This unit highlights bio-mechanics, human components including- physical, temporal, cognitive and affective factors; workplace design, work study methods, indoor comfort indices, and human-machine interface.

- Physical: Bio-mechanics of human movement and musculo-skeletal system, Anatomical position, reference planes and movements
- Temporal
- Cognitive
- Affective
- Functional design and arrangement of workplaces
- Work study- Time and motion study, energy study
- Indices of indoor comfort: ventilation, lighting, temperature, noise
- Human Machine Interface- controls and displays

#### PRACTICAL

#### (Credits 2; Hours 60)

- 1. Basic Anthropometric measurements of a selected demography
- 2. Time and motion study
- 3. Energy study Physiological cost of workload
- 4. Prepare a floor plan for a selected type of kitchen- Floor Plan 1
- 5. Prepare elevation plan for a selected type of kitchen- Elevation Plan 1
- 6. Prepare a floor plan for a selected type of kitchen- Floor Plan 2
- 7. Prepare elevation plans for a selected type of kitchen-Elevation Plan 2
- 8. Indices of internal comfort-Testing suitability of selected environmental factors at a workplace
- Ergonomic Assessment and Occupational safety analysis of Workplaces-Case study of a selected workplace - Identifying and assessing workplace for a selected occupation, analysis of posture and equipment used, suggestions for improvement in process of the activity
- 10. Designing workstation/equipment suitable to the selected occupation

#### **Essential Readings:**

- Korhan, O., Odebiyi, D., Arinze, U., Okafor, C., Erick, P., Tumoyagae, T., Masupe, T., Walsh, E., Carnahan, H., Kaya, Ö., Fallaha, M., Murat, Z., & Zeeshan, Q. (2022). *Ergonomics - new insights*. In IntechOpen eBooks.
- Tosi, F. (2019). *Design for Ergonomics*. Springer Nature.
- Karwowski, W. (2019). Handbook of Standards and Guidelines in Ergonomics and Human Factors. CRC Press.
- Bridger, R. (2017). Introduction to Human Factors and Ergonomics. CRC Press.
- Steidl, R.E. & Bratton, E.C. (1968). Work in the Home. John Wiley & Sons Inc.

#### **Suggested Readings:**

- Majchrzycka, K. (2020). *Head, eye, and face personal protective equipment: New Trends, Practice and Applications.* CRC Press.
- Podgórski, D. (2020). *New opportunities and challenges in occupational safety and health management*. CRC Press.
- Singh, L. P. (2018). Work study and ergonomics. Cambridge University Press.
- Hedge, A. (2016). Ergonomic Workplace Design for Health, Wellness, and Productivity. CRC Press.
- Shorrock, S., & Williams, C. (2016). *Human Factors and Ergonomics in Practice: Improving System Performance and Human Well-Being in the Real World.* CRC Press.
- Salvendy, G. (2012). *Handbook of Human Factors and Ergonomics*. John Wiley & Sons.
- Stanton, N. A., Hedge, A., Brookhuis, K., Salas, E., & Hendrick, H. W. (2004). *Handbook of Human Factors and Ergonomics Methods*. CRC Press.
- Helander, M. (2005). A Guide to Human Factors and Ergonomics (2<sup>nd</sup> ed.). CRC Press.
- Chakrabarti, D. (1997). *Indian Anthropometric Dimensions for Ergonomic Design Practice*. National Institute of Design.

#### DISCIPLINE SPECIFIC ELECTIVE COURSE DSE RMDA 103: ORGANIZATIONAL BEHAVIOUR AND DEVELOPMENT

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Coue		Lecture	Tutorial	Practical		(II wild)
Organizational Behaviour and Development DSE RMDA 103	4	1	0	3	Studied Semester VI of Bachelors	Nil

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### **Learning Objectives**

- To get acquainted with the determinants of intra-individual, inter-personal and intergroup behavior in organizational setting.
- To get equipped with the behavioral skills in managing people at work.

#### **Learning Outcomes**

The students would be able to:

- Understand Workplace Behavior & Culture.
- Develop Leadership & Teamwork Skills.
- Enhance Change Management & Organizational Growth.
- Improve Communication & Decision-Making.

#### THEORY (Credits 1; Hours 15)

#### UNIT I: Approaches to Organizational behavior and Development

This Unit introduces the students to the various approaches to organizational behavior, and development.

- Organizational behavior: concepts, determinants and models, Organization and the environmental factors.
- Organizational Theory, Organizational behavior modification. misbehavior –Types
- Personality Types factors influencing personality theories.
- Learning Types of learners the learning process learning theories. .
- Attitudes characteristics components formation measurement- values.
- Perceptions Importance factors influencing perception interpersonal perception-

- Impression Management- emotions and moods in workplace
- Organization structure formation groups in organizations influence group dynamics
- Interpersonal communication
- Team building Interpersonal relations group decision making techniques.
- Meaning of conflict and its types, conflict redressal process

#### PRACTICAL (Credits 3; Hours 90)

Case study analysis/Live projects/Simulations/Exercises/Presentations/Surveys on the following aspects:

- 1. Self Assessment: Case studies analysis of five broad dimensions of personality (openness, conscientiousness, extraversion, agreeableness, and neuroticism) and their implications for workplace behavior,
- 2. Self Assessment Tools: Assessing personality through tools like MBTI/DISC and discuss their uses and limitations in organizational settings.
- 3. Attitudes and Perception: To understand how attitudes and perceptions influence behavior and decision-making at the workplace through organizational case studies, ABC model of attitudes (affective, behavioral, cognitive)
- 4. Organizational Structure- Analyzing an organization for its structure, chain of command, departmentalization, centralization & decentralization.
- 5. Workplace Communication: Communication flow mapping for formal and informal communication channels within a group of an organization.
- 6. Conflict Resolution Analyzing and resolving workplace conflicts through conflict scenario role-play and demonstrate one of the **conflict resolution styles.**
- 7. Team Building Techniques and Group Dynamics: Simulations and exercises for building teams.
- 8. Leadership styles: Identify and evaluate leadership styles by observing a manager or through leadership videos.
- 9. Motivation at work: Analyze real-life or simulated cases to apply motivation theories such as Maslow's, Herzberg's, or McClelland's.
- 10. Dynamics of Organizational Behaviour: Organizational Culture Survey Design and administer a survey to assess the culture of a real or hypothetical organization.
- 11. Organizational Change, Stress- Stressors and management of work life balance
- 12. Organizational Development- Understanding organizational development interventions and change management through real-life or hypothetical case studies.
- 13. Organizational Effectiveness assessing organizational frameworks like Mskinsey 7S framework or Baldridge criteria for performance, benchmarking, TQM, Six-sigma.

#### **Essential Readings**

- Gregory, Moorhead and Ricky W. Griffin. (2022) *Organizational Behaviour*. 1<sup>st</sup> ed. AITBS Publishers and Distributers,
- Luthans, Fred. (2000) Organizational Behaviour. 8<sup>th</sup> ed. New York: McGraw Hill
- Newstorm, John W. and Keith Davis, (2021) Organizational Behaviour: Human Behaviour at Work, 10<sup>th</sup> ed. Tata McGraw-Hill
- Robbins, Stephen P; (2000). *Organizational Behaviour*, 9<sup>th</sup> ed. New Delhi: Prentice Hall
- Aswathappa, K. (2024). Organizational Behaviour.14<sup>th</sup> Ed. Himalaya Publishing House

#### **Suggested Readings**

- Kast, F.E. and Rosenweig, J.E. (1985) *Organization and Management: A System and Contingency Approach*. New York: McGraw-Hill
- Herbert, T.(2008) Dimension of Organizational Behavior, New York : Macmillan
- Agarwal, R D, (2007) Organization and Management, Tata McGraw Hill
- Srivastava, SK, (2009), Organization Behaviour and Management, Sarup and sons
- Chandan, J S,(2010), Organization Behaviour 3<sup>rd</sup> Ed.

#### DISCIPLINE SPECIFIC ELECTIVE COURSE DSE RMDA 104: DESIGNING INTERIORS AND STYLING

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title &	Credits	Credi	t Distributi Course	on of the	Eligibility Criteria	Pre-requisite of the Course
Code		Lecture	Tutorial	Practical		(if any)
Designing Interiors and Styling DSE RMDA 104	4	2	0	2	Studied Semester 6 of Bachelors	Nil

#### Learning Objectives

- To identify the historical evolution of architecture and interior design.
- To analyze and differentiate between various design styles and themes.
- To practice and specify the components of an interior space, including ceilings, walls, floors, furniture, and furnishings.
- Develop design solutions for different room types based on specific themes.

#### **Learning Outcomes**

The students would be able to:

- Apply historical and theoretical knowledge of interior design principles to create functional and aesthetically pleasing spaces.
- Develop creative design solutions, incorporating various styles, themes, and components like furniture and finishes, to meet specific client needs or project briefs.
- Evaluate and select appropriate materials, furniture, and furnishings based on their properties, cost, and suitability for the intended design style and function.
- Communicate design concepts effectively through visual presentations, including mood boards, floor plans, elevations, and perspective drawings.

#### THEORY (Credits 2; Hours 30)

#### **UNIT I: Historical Perspective and Design Styles**

#### **10 Hours**

This unit highlights architecture's impact on interior design, highlighting historical styles and contemporary trends shaping modern interiors.

- Introduction to the history of architecture and its influence on interior design.
- Exploration of major historical periods and their characteristic design styles (e.g., Classical, Gothic, Renaissance, Baroque, Art Deco, Modernism).
- Overview of contemporary design trends and movements.

#### **UNIT II: Themes and Styles in Interior Design**

#### 20 Hours

The unit covers various interior design styles, theme development, color theory, and principles of space planning and layout.

- Detailed study of various interior design styles (e.g., Minimalist, Scandinavian, Industrial, Bohemian, Traditional, Contemporary, Eclectic).
- Understanding the principles of theme development and application in interior design.
- Color schemes used in various interior design styles and themes.
- Components of Interior Spaces in relation to different themes and styles-Ceilings, Walls, Floors, Furniture and Furnishings

#### PRACTICAL (Credits 2; Hours 60)

- 1. Hands-on exercises in creating mood boards for selected design themes and styles using specific materials (e.g., fabric swatches, paint chips, images)- Mood board 1
- 2. Hands-on exercises in creating mood boards for selected design themes and styles using specific materials (e.g., fabric swatches, paint chips, images)- Mood board 2
- 3. Prepare a project on various historical styles and contemporary trends.
- 4. Designing a living room based on selected themes and styles.
- 5. Designing a bedroom based on selected themes and styles.
- 6. Designing a kitchen based on selected themes and styles.
- 7. Designing and sketching furniture pieces for specific spaces and styles.
- 8. Conduct a survey on different furniture items, analyzing their design, materials, and functionality.
- 9. Conduct a survey on different furnishings items and analyze the materials and suitability for various purposes.
- 10. Prepare a furnishing plan for a selected room based on a particular theme.

#### **Essential Readings**

- Ching, F. D. K. (2015). *Architecture: Form, Space and Order* (4<sup>th</sup> ed.). New Jersey: John Wiley & Sons Inc.
- Kennedy, J. (2021). *Launch Into Interior Design: A Beginner's Guide to the Industry*. Kennedy Literary Agency.
- Leslie, F. (2000). *Designs for the 20th Century Interiors*. Victoria & Albert Museum.
- Poore, J. (1995). Interior Color by Design: A Design Tool for Architects, Interior

Designers, and Homeowners. Betterway Books.

• Ramstedt, F. (2020). *The Interior Design Handbook*. Particular Books.

#### **Suggested Readings**

- Diamonstein-Spielvogel, B., & Diamonstein, B. (1982). *Interior Design, the New Freedom*. Rizzoli International Publications.
- Grimley, C., & Love, M. (2018). *The Interior Design Reference & Specification Book Updated & Revised: Everything Interior Designers Need to Know Every Day.* Rockport Publishers Incorporated.
- Neufert, E. (2008). Architect's data (3rd ed.). Blackwell Publishing.
- Pile, J. (2012). Interior Design: A Comprehensive Guide. Harry N. Abrams, Inc.

# **SEMESTER II**

#### DISCIPLINE SPECIFIC CORE COURSE DSC RMDA 201: SUSTAINABLE BUILT ENVIRONMENT

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title &	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course
Code		Lecture	Tutorial	Practical		(if any)
Sustainable Built Environment DSC RMDA 201	4	3	0	1	Studied Semester 6 of Bachelors	Nil

#### **Learning Objectives**

- To develop an understanding of the concept of sustainable habitat, its components and growth.
- To build an understanding of the policies and programs for sustainable habitat.
- To familiarize the students with energy and resource use by buildings and net zero buildings.
- To develop an understanding of green building guidelines and norms.

#### **Learning Outcomes**

The students would be able to:

- Appraise the concept and importance of sustainable habitat, policies and programs for sustainable habitat.
- Comprehend the resource use by buildings, impact of buildings on the environment.
- Understand concept, criteria and implementation of green building guidelines and norms.

#### THEORY (Credits 3; Hours 45)

#### **UNIT I: Sustainable Habitat**

This unit lays thrust on sustainable habitats, their importance, components, growth, and related policies and rating systems.

- Concept of sustainable habitat- meaning, importance and need
- Impact of built environment on natural resources and environment

- Components and growth of sustainable habitat
- Policies and programs for sustainable habitat national urban housing and habitat policy, national rating system for green buildings, national mission for sustainable habitat

#### **UNIT II: Building and Resources**

This unit highlights energy and resource use in buildings, including conservation, sustainable materials and resource audits.

- Energy and resource use by buildings sustainable and otherwise, energy intensive components of buildings, buildings as resource guzzlers
- Energy efficiency and energy conservation in sustainable habitat
- Material use, water sensitive design, waste water treatment
- Resource audit of buildings focus on energy and water auditing

#### **UNIT III: Green Building Rating Guidelines (GRIHA)** 8 Hours

This unit introduces the global and Indian green building rating guidelines, focusing on ECBC and GRIHA.

- Meaning and concept; Green rating guidelines present globally
- Basic guidelines and norms in India, ECBC code
- GRIHA: Basics of GRIHA, background, footprint and registration process, GRIHA rating systems - background, documentation and implementation, criteria details, **GRIHA** case studies and success stories

#### **UNIT IV: Green Building Rating Guidelines (LEED)** 7 Hours

This unit introduces the global green building rating guidelines focusing on LEED and other emerging green building rating guidelines.

- LEED: Basics of LEED USGBC and LEED IGBC, Background, footprint and registration process, LEED rating systems - background and implementation, credit details, LEED case studies and success stories
- Other emerging green building rating guidelines in India

#### PRACTICAL (Credits 1; Hours 30)

#### 1. Resources in Buildings

- Basic calculations of resource consumption in buildings (like energy consumption, water consumption, landscape water demand etc.).
- Energy and water auditing of buildings.

- Calculation of Energy Performance Index (EPI).
- Calculation of rainwater harvesting potential.

#### 2. Green Building Rating Guidelines

- Understanding and compilation of the basic terms under ECBC/GRIHA/LEED.
- Critical evaluation and analysis of green buildings through case study approach to assess the green initiatives undertaken.
- Compilation of strategies and technologies to implement credits/criteria for an indepth understanding of the various green building rating systems.
- Preparation of IEC material on current topics related to sustainable habitat.
- Field visits to various green buildings.

#### **Essential Readings**

- Indian Green Building Council. (2023). Introduction to Green Buildings & Built Environment. BS Publications.
- LEED. (2023). LEED Green Associate Candidate Handbook. USGBC.
- GRIHA. (2021). *GRIHA Version 2019*. GRIHA Council and The Energy and Resources Institute.
- Karuppu, K. (2019). Green Building Guidance: The Ultimate Guide for IGBC Accredited Professional Examination. Notion Press.
- Roychowdhury, A., & Somvanshi, A. (2014). Building Sense: Beyond the Green Façade of Sustainable Habitat. Centre for Science & Environment.
- Yudelson, J. (2007). Green Building A to Z: Understanding the Language of Green Building.

#### **Suggested Readings**

- Redclift, M. (2005). Sustainable Development (1987-2005): An Oxymoron Comes of Age. Wiley Interscience.
- Kubba, S. (2009). *LEED Practices, Certification, and Accreditation Handbook*. Butterworth-Heinemann.
- Trivedy R. K. (2004). Handbook of Environmental Laws, Acts, Guidelines, Compliances and Standards, 2nd Ed. Hyderabad: Book Seller.

#### DISCIPLINE SPECIFIC CORE COURSE DSC RMDA 202: PROJECT MANAGEMENT IN DYNAMIC ENVIRONMENT

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Couc		Lecture	Tutorial	Practical		(ii any)
Project Management in Dynamic Environment	4	3	0	1	Studied Semester 6 of Bachelors	Nil
DSC RMDA 202						

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### **Learning Objectives**

- To impart an understanding of the conceptual framework, scope and importance of project management
- To build proficiency in developing and managing projects

#### Learning Outcomes

The students would be able to:

- Develop an understanding of project management, the role of project manager, and the organizational structure
- Comprehend the range, scope, and complexity of contemporary project management tools and techniques
- Acquire skills to design and manage projects

#### THEORY (Credits 3; Hours 45)

#### UNIT I: INTRODUCTION TO PROJECT MANAGEMENT

**10 Hours** 

This unit lays thrust on scope and importance of project selection, planning, budgeting, risk mitigation and management

- Project Integration Management
- Project Lifecycle
- Project Selection
- Measuring Project Success

#### **UNIT II: THE PROJECT MANAGER**

This unit examines a project manager's role, characteristics, skills and ethics.

- Role and characteristics
- Ethics
- Team Building and Leadership
- Conflict Management

#### **UNIT III: PROJECT ORGANIZATION**

The unit introduces students to the foundational principles of project management, focusing on planning, budgeting, and risk management.

- Project Planning
- Budgeting
- Cost Estimation
- Risk Management

#### UNIT IV: PROJECT MONITORING AND CONTROL

The unit focuses on contemporary professional practices in project management including project scheduling, resource allocation, leveling, auditing, and ensuing success.

- Scheduling
- Resource allocation
- Leveling
- Auditing and termination
- Project success

#### PRACTICAL (Credits 1; Hours 30)

- Project Planning and Selection: This focuses on the fundamentals of project planning and selection through hands-on experience. Students will work on real-time/live projects to explore how to identify viable project opportunities, evaluate their potential, and develop structured project plans. Emphasis is placed on applying practical tools and techniques, such as feasibility analysis and scope definition.
- 2. **Project Scheduling:** Creating, managing, and controlling project schedules using real tasks, dependencies, and timelines—applying tools like Gantt charts, network diagrams, and scheduling software.
- 3. **Cost Management:** Budget planning and cost baseline of the sample project, doing Earned value analysis, identifying causes (e.g., scope creep, underestimation), and proposing corrective actions.
- 4. **Resource Management:** Applying the principles of resource allocation and leveling in real or simulated projects, ensuring optimal use of people, tools, and time without overloading or underutilizing resources by identifying and listing resources for a sample

#### **10 Hours**

project, Categorize them into human, material, and equipment, making Work Breakdown Structure (WBS) to assign team members to each task, Build a resource sheet in Excel or MS Project, Creating Gantt chart to Assign resources and make Resource Histograms.

- 5. **Project Evaluation**: Evaluating the effectiveness, efficiency, impact, and sustainability of completed or ongoing projects by listing what should be evaluated (cost, quality, timeliness, satisfaction), Defining Key Performance Indicators for a sample project, Designing of a simple evaluation survey and interview questions for stakeholders, analysing Cost Performance Index, Schedule Performance Index and Variance reports, analyze feedback data from survey results, report findings (bar graphs, pie charts) and Preparation of actionable recommendations for future projects.
- 6. **Request for Proposal (RFP):** Critical evaluation of RFPs. Drafting RFPs for sustainable development initiatives.

The above practicals will be conducted using latest tools like PRIMA VERA, MS Project etc.

#### **Essential Readings**

- Project Management Institute. (2021). A guide to the project management body of knowledge (PMBOK® guide) (7th ed.). American National Standard, ANSI/PMI 99-001-2021. Project Management Institute.
- Meredith J. R., Shafer S. M., and Mantel S. J. Jr. (2021). Project Management: A Managerial Approach, (11<sup>th</sup> ED.). Wiley.
- Project Management Institute. (2013). A guide to the project management body of knowledge (PMBOK® guide) (5th ed.). ISBN: 9781935589679. Project Management Institute.

#### **Suggested Readings**

- Erickson T., Khatri P. V. (2015). Project Management, Global Vision Publishing House ISBN-13 : 9381695418-978
- Horine, G. (2017). Project Management Absolute Beginner's guide (4<sup>th</sup> ed.) Que Publishings
- Jain, G.L. Project Management: A Managerial Approach, DND Publications, ISBN-10. 9380929765 · ISBN-13. 978-9380929767
- Nagarajan, K. (2010). Project Management (6<sup>th</sup> ed.) New Age International Pvt. Ltd.
- Project Management- Prasanna and Chandra, Tata McGraw Hill

#### DISCIPLINE SPECIFIC CORE COURSE DSC RMDA 203: PRODUCT DESIGN AND DEVELOPMENT STRATEGIES

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
coue		Lecture	Tutorial	Practical		(11 411)
Product Design and Development Strategies DSC RMDA 203	4	2	0	2	Studied Semester 6 of Bachelors	Nil

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### **Learning Objectives**

- To enhance the understanding of students regarding materials and their thoughtful application in the creation of products and services.
- To develop an understanding of the constructional details of products, with a focus on furniture and accessories.
- To help students apply ergonomic principles in product design for improved user performance and comfort.

#### **Learning Outcomes**

The students would be able to:

- Recognize design challenges and suggest innovative, sustainable solutions for product development.
- Develop schematic drawings, construction details, and product prototypes with an emphasis on upcycling, refurbishment, and recycling.

#### THEORY (Credits 2; Hours 30)

#### **UNIT I: Introduction to Product Design**

This unit covers the concept, scope, importance, approaches, and challenges of product design, along with success factors, design philosophies, and the role of product designers.

- Concept, scope, importance and challenges
- Product design- Approaches, Design philosophies of famous designers, Role of Product Designers

- Creativity and Innovative thinking Theories, models and Techniques of creativity, Role of innovation in product design
- Need for product development, types of product and components, concerns and issues in the context of design
- Exploration of elements of design in the context of a product and its environment-form, function and aesthetic
- Insight into traditional design practices

#### **UNIT II: Product Development Process**

#### **16 Hours**

This unit explores various product development processes including innovation, materials, product development, prototyping, as well as market potential assessment and sustainable product service systems.

- Design methods
- Stages in design process
- Integrated approach to new product development
- Understanding material behaviour for furniture construction, product design and aesthetics properties and finishes including new & recycled materials.
- New and Composite materials application in product design and impact on environment, structural strength of materials and products made from them
- Prototyping
- Assessing market potentials for new products; Market research, design research and user research
- Study of product life cycle and its relevance in new product design
- Packaging, advertising and branding
- Product service system evaluation for a sustainable design

#### PRACTICAL (Credits 2; Hours 60)

- 1. Case study of selected products-success stories
- 2. Design Tools and Software: CAD, graphic design tools, 3D printing etc.
- 3. Product-Life cycle mapping of any consumer product
- 4. Idea sketching/mock-ups, clustering of ideas for concept development, refinement and detailing
- 5. Survey on new, composite and conventional materials available for product design
- 6. Analyzing selected materials for their suitability in product design
- 7. Designing the product on 3D software
- 8. Prototyping of a product on 3D printer
- 9. Product prototyping using suitable material
- 10. Design portfolio indicating the processes for product development

#### **Essential Readings**

- Stark, J. (2023). *Product Lifecycle Management*. Springer Nature.
- Mukhopadhyay, P. (2022). Ergonomics Principles in design: An Illustrated Fundamental Approach. CRC Press.
- Jang, S., Thaler, M., & Frederick, M. (2020). 101 Things I Learned® in Product Design School. Crown.
- Green, W., & Jordan, P. W. (2019). *Human factors in product design: Current Practice and Future Trends*. CRC Press. (Original work published 1999).
- Penty, J. (2019). *Product design and sustainability: Strategies, Tools and Practice.* Routledge.

#### **Suggested Readings**

- Mattson, C., & Sorensen, C. (2017). *Fundamentals of product development: Creating Desirable and Transferable Designs*. CreateSpace Independent Publishing Platform.
- Eppinger, S., & Ulrich, K.(2015). *Product design and development*. McGraw-Hill Higher Education.
- Aspelund, Karl (2006). *The Design Process*. New York: Fairchild Publications Inc.
- Jones, J. Christopher. (1996). *Design Methods: Seeds of Human Factors*. New York: John Wiley & Sons
- Macleod, Dan. (1995). *The Ergonomics Edge: Improving Safety, Quality and Productivity*. New York: Nostrand Reinhold.
- Doren, Harold V. (1954). *Industrial Design A Practical Guide to Product Design and Development*. New York: McGraw-Hill Book Company.

#### DISCIPLINE SPECIFIC ELECTIVE COURSE DSE HSC 201: ADVANCED RESEARCH METHODS IN HOME SCIENCE

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Couc		Lecture	Tutorial	Practical		(ii unj)
DSE HSC 201: Advanced Research Methods in Home Science	4	3	0	1		Nil

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### **Learning Objectives**

- To explain the types and approaches to research.
- To describe the principles and process of quantitative research approach.
- To describe the principles and process of qualitative research approach.
- To elaborate the critical ethical issues for planning, conducting and publishing research.

#### **Learning Outcomes**

The students would be able to:

- Describe the types, paradigms and approaches to research.
- Employ the principles and process of quantitative research approach.
- Appraise the principles and process of qualitative research approach.
- Apply the principles of ethics in designing, executing and reporting of research.
- Formulate a research proposal in any specialized area of Home Science.

#### THEORY (Credits 3; Hours 45)

#### UNIT I: Research: Paradigms, approaches and process

**10 Hours** 

This unit introduces the concept, types, designs, paradigms, approaches and process of research. The unit also highlights the concerns of reliability and validity in research.

- Definition and objectives of research
- Importance, scope and types of research
- Research design: Concept and significance

- Paradigms of research
- Research approaches: Quantitative, qualitative and mixed methods
- Reliability and validity in research methods and concerns
- The Research Cycle

#### UNIT II: Principles and process of quantitative research approach 12 Hours

This unit focuses on various research designs, methods of sampling and data collection techniques followed in quantitative research approach. It also emphasizes on the levels of measurement of data and errors in quantitative research

- Components, types and applications of research designs in quantitative research approach: Observational and experimental designs
- Concept of sampling, sampling methods Probability and non-probability sampling in quantitative research
- Methods of data collection in quantitative research
- Measurement in research, scales and errors in measurement
- Errors in inference bias and confounding

#### UNIT III: Principles and process of qualitative research approach 14 Hours

This unit introduces students to qualitative research methodologies, exploring their philosophical foundations, data collection methods, analysis techniques and ethical considerations.

- Philosophical underpinnings: Constructivism, interpretivism and critical theory
- Approaches to qualitative research: Ethnography, phenomenology, case study research, grounded theory and action research.
- Sampling in qualitative research
- Data collection methods and techniques: Observation, interview, focus group discussion and case study.
- Data management and analysis in qualitative research: Thematic, narrative and discourse analysis

#### **UNIT IV: Research and publication ethics**

This unit addresses issues related to research integrity, responsibilities of researchers and ethical standards for publishing academic work.

- Definition and importance of research ethics: Ethical concerns for research in the field of Home Science
- Ethical principles in Research planning and execution: Informed consent, anonymity, confidentiality and privacy, voluntary participation, safety and dignity of participants, transparency
- Data integrity and ethical data collection: use of appropriate methodology, ensuring accuracy and validity, managing sensitive data, avoiding misuse of information

#### 9 Hours

- Bias and conflict of interest in research
- Forms of research misconduct: Fabrication and falsification of data and plagiarism
- Ethical issues in research publication: Selective reporting, misrepresentation of data, salami slicing and predatory publications

#### PRACTICAL (Credits 1; Hours 30)

- 1. Critical review of a published original research article in any area of Home Science.
  - Identification and documentation of strengths and weaknesses of various components of the selected research article
- 2. Sampling in Research
  - Probability and non-probability sampling techniques
- 3. Formulation of a data collection tool
- 4. Referencing and Citation in Scientific Writing
  - Importance and different styles of referencing
  - Concept of in-text and post-text referencing
  - Digital tools for referencing
- 5. Plagiarism in research
  - Concept and types of Plagiarism
  - Technical writing using quotations, paraphrasing and summarizing
  - Plagiarism detection software
- 6. Formulation of a research proposal
  - Identification of a research problem/thrust area in any specialization of Home Science
  - Literature review related to the identified research problem
  - Proposal formulation giving timeline for conducting the research study

#### **Essential Readings**

- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Cengage Learning.
- Kothari, C. R., & Garg, G. (2023). *Research Methodology: Methods and Techniques*. New Age International Pvt Ltd, New Delhi.
- Kumar, R. (2019). *Research Methodology: A Step-by-Step Guide for Beginners*. 5th Ed. Sage Publications, New Delhi.
- UGC (2021) *Academic Integrity and Research Quality*. New Delhi: UGC, Retrieved from https://www.ugc.ac.in/e-

 $book/A cademic\%20 and\%20 Research\%20 Book\_WEB.pdf$ 

#### **Suggested Readings**

• Aggarwal, J. & Sabharwal, V. (2025). *Essentials of Research Methodology- A Practical Manual*. Elite Publishing House, New Delhi.

- Bernard, H. R. (2000). Social research methods: Qualitative and quantitative approaches. Thousand Oaks, CA.: Sage.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE Publications.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications.
- Silverman, D. (2020). *Qualitative research* (5th ed.). SAGE Publications.

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

# DISCIPLINE SPECIFIC ELECTIVE COURSE DSE RMDA 202: CONSUMER BEHAVIOUR AND SUSTAINABILITY

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Coue		Lecture	Tutorial	Practical		(ii uiig)
Consumer Behaviour and Sustainability DSE RMDA 202	4	3	0	1	Studied Semester 6 of Bachelors	Nil

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### **Learning Objectives**

- To develop an understanding of underlying concepts and issues in consumer behaviour.
- To evaluate the factors affecting consumer behaviour.
- To study the various stages of consumer decision process.
- To study market research for understanding the needs and wants of target consumers.
- To study consumer behaviour in the context of sustainability.

#### **Learning Outcomes**

The students would be able to:

- Understand the concepts and issues associated with consumer behaviour.
- Outline the factors affecting consumer behaviour.
- Understand the various stages of consumer decision process.
- Carry out market research for understanding needs and wants of consumers.
- Understand consumer behaviour in the context of sustainability.

#### THEORY (Credits 3; Hours 45)

#### **UNIT I: Introduction to Consumer Behaviour**

**10 Hours** 

This unit lays thrust on the definition, scope and nature of consumer behaviour.

- Definition, Nature, Scope of consumer behaviour
- Consumer Behaviour's Applications in Marketing
- The Interdisciplinary Nature of Consumer Behaviour

#### **UNIT II: Models of Consumer Behaviour**

The unit throws light on the various models explaining consumer behaviour.

- Consumer Needs and Motivation
- Consumer Personality, Perception, Learning and Attitudes
- Models of consumer behaviour

#### UNIT III: Consumer Buying Behaviour and Market Research 14 Hours

This unit highlights the consumer buying behaviour in terms of factors affecting consumer behaviour, consumer adoption process and buying decision process. The unit also throws light on market research.

- Factors influencing consumer behaviour, Consumer buying behaviour in the digital world
- Consumer Adoption Process-stages and factors influencing
- Diffusions of innovation
- Types of buying decision behaviour, Buying decision process
- Conducting market research

#### UNIT IV: Consumer Behaviour and Sustainability

This unit deals with green and environmentally conscious consumer behaviour and green marketing practices.

- Green Consumerism and Eco-awareness
- Environmentally Conscious Consumer Behavior
- Green Marketing Concepts, Strategies and Future Trends, Innovations in Green Marketing Practices
- Sustainable Production and Consumption

#### PRACTICAL (Credits 1; Hours 30)

#### (Creatis 1; nours 50)

#### PRACTICAL (Credits 1; Hours 30)

- 1. Market research proposals Developing market research proposals on consumer buying behaviour, effect of promotional schemes on consumer purchase, consumer satisfaction and opinion regarding selected products/brands/marketing strategies, online purchasing etc.
- 2. Case studies on consumer behavior, green consumerism, green marketing etc.
- 3. Surveys for understanding consumer buying behavior
- 4. Designing digital campaigns on issues related to consumer behavior and green

#### **10 Hours**

#### **11 Hours**

marketing

- 5. Understanding models of consumer behavior
- 6. Understanding consumer buying behaviour process for any product or service: smart phone, apparels, life insurance, online shopping, socially responsible products, luxury and branded products etc.

#### **Essential Readings**

- Kumar, R., & Krishnamurthy, A. (2024). *Advertising, Brand and Consumer Behaviour: The Indian Context.* India: Pearson Education.
- Sethna, Z., & Blythe, J. (2024). *Consumer Behaviour*. Sage Publications India Pvt. Ltd.
- Kumar, D. (2023). Basics of Consumer Behaviour. Sahitya Bhawan Publications.
- Kotler, P. T., Armstrong, G., & Agnihotri, P. (2022). *Principles of Marketing*, 17<sup>th</sup> *Edition*. Pearson Education.
- Mothersbaugh, D. L., Hawkins, D. I., & Kleiser, S. B. (2022). *Consumer Behavior: Building Marketing Strategy*. McGraw Hill Education (India) Private Limited.

#### **Suggested Readings**

- Solomon, M., R., & Panda, T. K. (2020). *Consumer Behaviour, 13<sup>th</sup> Edition.* India: Pearson Education.
- Kumar, S. R. (2017). Consumer Behaviour: The Indian Context (Concepts and Cases), 2<sup>nd</sup> Edition. Pearson Education.
- Sahney, S. (2017). Consumer Behaviour. Oxford University Press.
- Schiffman, L. G., Kanuk, L. L., & Kumar, S. R. (2015). *Consumer Behaviour, 11<sup>th</sup> Edition*. Pearson Education India.
- Krishna, R. (2014). *Consumer Behaviour*. Oxford University Press.

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#### DISCIPLINE SPECIFIC ELECTIVE COURSE

#### DSE RMDA 203: FACILITIES OPERATION AND SERVICES

# **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			0 1	Pre-requisite of the Course (if any)
Couc		Lecture	Tutorial	Practical		(II ully)
Facilities Operation & Services DSE RMDA 203	4	3	0	1	Studied Semester 6 of Bachelors	Nil

#### **Learning Objectives**

- The course provides a thorough understanding of managing facilities and services.
- It emphasizes the importance of maintaining work areas to improve operational efficiency.
- Focuses on the operations and maintenance of facilities.
- Covers both soft services (e.g., cleaning, security) and engineering services (e.g., HVAC, electrical maintenance).
- It aims to enhance the core functions of an organization through effective facility management.

#### **Learning Outcomes**

The students would be able to:

- Comprehend various aspects of facilities maintenance and services, materials and accessories in indoor and outdoor environment.
- Understand the systems-operations management, quality control and project review techniques.
- Develop competence among students for professional practice in management of facilities.

#### THEORY (Credits 3; Hours 45)

#### **UNIT I: Basics of Facilities and Services Management**

This unit introduces the student to the facility management basics, including maintenance strategies, facility manager roles, cleaning techniques, and surface/space upkeep.

• Concept & Need for Facility Management- Focus on preventive and predictive

14 Hours

maintenance and understanding statutory compliances.

- Role of a Facility Manager- Key responsibilities and functions.
- Modern Cleaning Techniques- Introduction to cleaning materials, techniques, and equipment.
- Surface & Space Maintenance- Techniques for maintaining interior and exterior surfaces, including critical areas like walls, ceilings, doors, windows, furniture, and kitchen areas. Covers upkeep for furnishings, flooring, washrooms, laundry, and common/public spaces.

#### UNIT II: Operations & Maintenance of Facilities

# This unit focuses on O&M processes, including in-sourcing vs. outsourcing, soft services coordination, and efficient engineering systems management.

- Operations Process- In-sourcing vs. outsourcing in O&M.
- Soft Services- Coordination of housekeeping, visitor management, asset and inventory management, work order management, and space management. Integration with BAS/BMS, vendor procurement, tenant billing, and SLA management.
- Engineering Services- Efficient operation of electrical systems (lighting, energy conservation), HVAC (air-conditioning & heating), plumbing (water treatment, pumps), waste management (STP/ATP), and safety systems (fire prevention, CCTV).

#### **UNIT III: Advanced Management Techniques**

This unit highlights data systems, project planning, quality management, and emerging trends.

- Information Systems- Data management, monitoring, and software for maintaining interiors.
- Project Management- Creating maintenance plans, budgeting, tendering, and monitoring work plans.
- Quality Management ISO specifications and SIPOC tool for process design and review.
- Futuristic Facility Management- Emerging trends and technologies.

#### UNIT IV: Maintenance of indoor and outdoor plants

This unit highlights the methods for selection, care and maintenance of indoor and outdoor plants.

- Selection of indoor and outdoor ornamental plants
- Landscaping components, styles of gardens
- Maintaining gardens: care of plants

#### **10 Hours**

**16 Hours** 

#### 5 Hours

# PRACTICAL (Credits 1; Hours 30)

- 1. Survey of different finishes on surfaces of walls, ceilings and floors, doors and windows, furniture, furnishings and accessories. Analyze methods and mechanisms for cleaning and maintenance of facilities
- Case Studies for critical evaluation of maintenance of individual and public areas with respect to services and facilities and preparing maintenance plans of the selected facilityresidences (rural and urban); institutional / Government / NGO / Corporate; hotels and restaurants; hospitals; gymnasiums, health clubs and sports complexes; exhibitions and conferences
- 3. Lighting design, energy audit of lighting design
- 4. Maintenance of facilities and services using project review techniques such as SIPOC
- 5. Drafting professional service contracts for cleaning or maintenance
- 6. Designing customized facility inspection checklists

#### **Essential Readings**

- Roper, K. P., & Payant, R. P. (2022). *The Facility Management Handbook*. Amacom.
- Williams, J. (2022). Facilities Management Key Performance Indicators: For Commerce and Industry. Independently Published.
- Patil, A. P., & Savla, A. H. (2021). *Facility Management: Indian & global best practices*. Notion Press.
- Wiggins, J. M. (2020). Facilities Manager's Desk reference. John Wiley & Sons.
- Fediw, K. (2015). *The manual of interior plantscaping: A guide to design, installation, and maintenance.* Portland, OR: Timber Press.

#### **Suggested Readings**

- Kemp, R.; Zuijderwijk, L.; Weaver, P.; Seyfang, G.; Avelino, F.; Strasser, T.; Becerra, L.; Backhaus, J. & Ruijsink, S. (2015). *Doing things differently: Exploring transformative social innovation and its practical challenges* (TRANSIT Brief; 1)
- Garcia-Diaz, A. & Smith, J. M. (2008). *Facilities planning and design*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Kapila, U. (2009). *Indian Economy since Independence* (19<sup>th</sup> Ed.). Academic Foundation.
- Mazumdar, D. & Sarkar, S. (2009). *The employment problem in India and the phenomenon of the missing middle. Indian Journal of Labour Economics*. Ministry of Information and Broadcasting e-book on Major Initiatives.
- Rhonda, P. & Pittman, R.H. (2009). A framework for community and economic development. In Rhonda, P. & Pittman, R.H (Eds.), *An introduction to community development*. New York: Routledge.

- Schaffer, R., Deller, C.S., & Marcouiller, W. D. (2004). *Community economics: Linking theory and practice*. Blackwell Publishing.
- Temali, M. (2002). *The community economic development handbook: Strategies and tools to revitalize your neighborhood*. Amherst H. Wilder Foundation.
- Kretzmann, J.P., & McKnight, J.L. (1993). Building communities from inside out: A path toward finding and mobilising community assets. ACTA Publications.

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# SKILL BASED COURSES

# SKILL BASED COURSE SBC RMDA 01: CAD FOR SPACE PLANNING

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Coue		Lecture	Tutorial	Practical		(II any)
CAD for Space Planning SBC RMDA 01	2	0	0	2	Studied Semester 6 of Bachelors	Nil

#### **Learning Objectives**

- Explain the role of software in design.
- Introduce fundamental space design principles.
- Teach the basics of 2D and 3D drawing software.
- Develop skills in creating and presenting 2D and 3D plans.
- Familiarize students with basic rendering techniques to enhance the drawings.
- Introduce students to use of AI in creating plans

#### **Learning Outcomes**

The students would be able to:

- Confidently use CAD for interior design, qualifying them for positions with interior designers, architects, and real estate companies.
- Possess a foundational understanding that prepares them for further study in advanced space design and 3D modeling software.

#### PRACTICAL

#### (Credits 2; Hours 60)

#### 1. Introduction to Computer Aided Design 2D Software

- Introduction to two-dimensional software AutoCAD.
- Setting up AutoCAD
- Introduction to AutoCAD (basic tools and bedroom floor plan designing)
- Basics of AutoCAD (elevation design/single line drawings and standard dimensions)
- Using simple commands to create simple geometrical pattern
- Drawing two dimensional patterns with different methods

#### 2. Computer Aided Design 3D Software

- Setting up Sketch up/ 3d software and its functions
- Introduction to modelling and annotation tools

- Introduction to drawing and editing tools
- Image to Sketch up 3D modelling
- AutoCAD to Sketch up 3D modelling
- Understanding plug-ins, groups and components 3D warehouse

#### **3.** Preparation of Plans

- Designing of Staircase, False ceiling, Wall-panel
- Bedroom designing
- Camera setting
- Rendering

#### 4. Use of AI in interior design

- Introduction to AI
- Difference between AR and VR
- Use of AI for designing interiors some common software

#### **Essential Readings**

- Cline, L. (2023). *Sketchup for interior design: 3D visualizing, designing, and space planning* (2nd ed.). John Wiley & Sons.
- De Chiara, J. (2017). *Time-saver standards for interior design and space planning* (2nd ed.). McGraw-Hill Education.
- Tal, D. (2013). *Rendering in SketchUp: From modeling to presentation for architecture, landscape architecture, and interior design.* John Wiley & Sons.
- Ramadhanty, D. M., & Handayani, T. (2020). *The effect of computer-based 3D visualization I.* IOP.
- Shoukry, Y., & Pandey, J. (2020). *Practical Autodesk AutoCAD 2021 and AutoCAD LT 2021: A no-nonsense, beginner's guide to drafting and 3D modeling with Autodesk AutoCAD*. Packt Publishing.

#### Suggested Readings

- Abbott, D. (2007). AutoCAD secrets every user should know. Wiley Publishing, Inc.
- Grabowski, R. (2019). AutoCAD for dummies. John Wiley & Sons.
- Fu, F. (2018). In *Design and analysis of tall and complex structures*.Butterworth-Heinemann.
- Gindis, E. (2012). Up and running with AutoCAD 2012 (2nd ed.). Pearson.
- Adobe Creative Team. (2002). Adobe Photoshop 7.0 classroom in a book. Adobe Press.
- Benton, B. C., & Omura, G. (2020). *Mastering AutoCAD 2021 and AutoCAD LT 2021*. John Wiley & Sons.
- Kirkpatrick, B., Kirkpatrick, J., & Assadipour, H. (2021). *AutoCAD for interior design and space planning*. Pearson.

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# SKILL BASED COURSE SBC RMDA 02: ICTs FOR SUSTAINABLE DEVELOPMENT

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
0000		Lecture	Tutorial	Practical		(II ully)
ICTs for Sustainable Development SBC RMDA 02	2	0	0	2	Studied Semester 6 of Bachelors	Nil

#### Learning Objectives

- To appreciate the conceptual framework, scope, and significance of ICTs.
- To understand the potential of both information and communication technologies for sustainable development
- To critically analyse the existing business models (public, private sector, PPP, civil society) and other applications in sustainable development with respect to technology, infrastructure, capacity building, human resource etc.
- To inculcate skills in using ICTs for sustainable development

#### **Learning Outcomes**

The students would be able to:

- Develop an understanding of the concepts related to the ICTs for sustainable development.
- Critically analyse how ICTs can be best applied for sustainability challenges.

#### PRACTICAL (Credits 2; Hours 60)

- 1. Introduction to ICTs for Sustainable Development: Case studies/visits to the communities to understand different types and role of ICTs in Sustainable Development.
- 2. Information and Communication Technologies: Working on software, the physical infrastructure, satellite, wireless solutions, telecommunication technologies, mobiles, fixed line, internet and world-wide web, community radio, technology-user interface, design of relevant ICT products and services.

- 3. Building Knowledge Societies: Understanding of stakeholders and target communities; information needs, Traditional vs. contemporary knowledge systems, information processing and retrieval; means of communication in different areas through live projects.
- 4. ICT Applications: Case Studies on applications of ICTs in various aspects of sustainable development.
- 5. ICT for Development in India: Portfolio/research on policy and institutional framework in India, e-governance, ICT Models, Mobiles for Development Experience sharing by ICT for Development practitioners.
- 6. ICT in Education: Creating e- learning module using digital educational tools aimed for sustainable development.
- 7. Digital Inclusion and Smart Governance: Analyze e-governance platforms that support sustainable development (e.g., digital services for rural/ urban areas)
- 8. ICT4D Implementation: Developing an ICT4D Project, Critical Success factors for technology diffusion and use, Constraints in adoption, the role of national policies, institutional framework, multi stakeholder partnerships, role of private sector.
- 9. Environmental Monitoring with ICT: Use mapping tools or mobile apps for tracking.
- 10. Green ICT Practices: Use of Energy-Efficient ICT for Optimization.

#### **Essential Readings**

- Bours, D., McGee, R., & Vargas, C. (Eds.). (2022). Capacity Development in Practice: Working with Complexity. *Practical Action Publishing*.
- Joshi, A. (2020). Knowledge Management for Sustainable Development: Tools and Techniques. *Sage Publications*.
- Leininger, J. (2023). The Power of Capacity Building: Creating Sustainable Change. *Routledge*.
- Thistlethwaite, J., & Dichter, T. (2021). Monitoring and Evaluation for Capacity Development: A Practical Guide. *Earthscan*.
- United Nations Department of Economic and Social Affairs (UNDESA). (2021). Thematic Report on Capacity Building for the 2030 Agenda for Sustainable Development.

#### **Suggested Readings**

- Bamberger, M., & Chevalier, J. (2010). The Capacity Building Handbook: A Guide for Practitioners in Sustainable Development. *GIZ*.
- Bemmerlein-Lux, F., & Bank, P. (2011). Lessons Learnt & Tools Applied: A Working Book on Capacity Building Approaches in India. *GIZ*.
- Blumenthal, B. (2003). Investing in Capacity Building: A Guide to High-Impact Approaches. *Routledge*.
- Hamel, G., & Prahalad, C. K. (1994). Competing for the Future. *Harvard Business Review Press*.
- Horton, D., & Mackay, R. (2003). Developing Effective Capacity Building Programs. *Oxford University Press.*
- James, V. U. (2018). Capacity Building for Sustainable Development. CAB International.
- Kenny, S., Clarke, M. (Eds.) (2010). Challenging Capacity Building: Comparative Perspectives. *Palgrave Macmillan UK*.
- Preskill, S., & Brookfield, S. D. (2020). Learning as a Way of Leading: Lessons from the Field. *Jossey-Bass*.
- Swanson, R. A., & Holton, E. F. (2001). Foundations of Human Resource Development. *Berrett-Koehler Publishers*.
- Williams, T., & Goodwin, T. (2015). Capacity Development for Organizational Learning. *Routledge*.

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# SKILL BASED COURSE SBC RMDA 03: EVENT DESIGN AND STRATEGIES

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Couc		Lecture	Tutorial	Practical		(ii any)
Event Design and Strategies SBC RMDA 03	2	0	0	2	Studied Semester 6 of Bachelors	Nil

#### Learning Objectives

- To understand the event design and management:
- To design the event layout and understand logistics
- To develop competencies in event marketing and promotion
- To understand techniques and strategies for successful event planning

#### Learning Outcomes

The students would be able to:

- Understand the concept and planning of event management.
- Design the layout and logistics of the event
- Manage event financials and costing
- Create and implement event marketing strategies
- Evaluate the success of an event

#### PRACTICAL (Credits 2; Hours 60)

1. Event Analysis & Strategic Planning:

Analyze events, assess KPIs, and apply design thinking to create event concepts.

- Understanding event types & contexts: Identify corporate, cultural, social, and entertainment events through case studies
- SWOT analysis of the event: Evaluate event strengths, weaknesses, opportunities, and threats
- Key Performance Indicators (KPIs) & Success Metrics: Analyze real-world event data to measure engagement, attendance, and ROI
- Event Conceptualization & Theme Development: Apply design thinking principles to create an event blueprint.

2. Event Design, Execution, and Evaluation

Plan event logistics, budgeting, and marketing while ensuring sustainability and effective execution.

- Logistics and space planning: Venue selection and design, seating, estimated audience, catering, team delegations
- Budgeting and financial planning: Financial control plan including budgeting and cost estimations
- Marketing & Sponsorship Strategy: Design branding materials (posters, flyers, digital content) and develop an advertising strategy (social media, email, etc.), procuring sponsorship for events
- Sustainability in Events: Implement eco-friendly practices, minimizing waste and optimizing resources.
- Manage the logistics of executing the event: coordinating vendors, prepare event timelines, handling PR/media, managing celebrities or resource persons
- Evaluation: Collect feedback (surveys, interviews), analyze KPIs (attendance, engagement, satisfaction), and refine strategies based on analysis for future events.

#### **Essential Readings**

- Getz, D. (2020). *Event management & event tourism* (4th ed.). Cognizant Communication Corporation.
- Goldblatt, J. (2020). Special events: Creating and sustaining a new world for *celebration* (8th ed.). Wiley.
- Berridge, G. (2021). *Events design and experience* (2nd ed.). Routledge.
- Van der Wagen, L., & Carlos, J. (2019). *Event management: For tourism, cultural, business and sporting events* (7th ed.). Pearson Education.
- Allen, J., O'Toole, W., Harris, R., & McDonnell, I. (2018). *Festival and event management* (4th ed.). Wiley.

#### Suggested Readings

- Bladen, C., Kennell, J., Abson, E., & Wilde, N. (2019). *Events management: An introduction* (3rd ed.). Routledge.
- Pendergast, D., & Wheeler, K. (2019). *The event marketing handbook: Beyond logistics and planning*. McGraw-Hill Education.
- Swarbrooke, J., & Horner, S. (2019). Business of tourism (4th ed.). Routledge.
- Tassiopoulos, D. (2020). *Event management: A developmental and managerial approach* (2nd ed.). Juta and Company Ltd.
- Felsenstein, D., & Jayaratne, N. (2020). *The global events industry: Case studies of managing international events*. Springer.

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# SKILL BASED COURSE SBC RMDA 04: PROGRAM MONITORING AND EVALUATION

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisite of the Course (if any)
Cour		Lecture	Tutorial	Practical		(II any)
Program Monitoring and Evaluation	2	0	0	2	Studied Semester 6 of Bachelors	Nil
SBC RMDA 04						

#### **CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

#### Learning Objectives

- To understand the standards and procedures for results-based monitoring and evaluation of programs.
- To develop proficiency in monitoring and evaluating developmental programs.

#### Learning Outcomes

The students would be able to:

- Develop a comprehensive monitoring and evaluation plan
- Efficiently utilize data analysis software
- Build program results levels and construct a program using logical frameworks
- Use indicators and targets to measure success
- Monitor and track performance indicators over the life of a program
- Conduct impact evaluation and evaluate a program against key measures

#### PRACTICAL (Credits 2; Hours 60)

Case study analysis /Live projects /Simulations /Exercises /Presentations / Surveys on the following aspects:

1. Fundamentals of Monitoring and Evaluation

- Create a concept map comparing different types of evaluation (formative, summative, developmental).
- Analyze an NGO's project report and identify monitoring vs evaluation elements.
- Simulate an introductory stakeholder meeting to discuss M&E importance.

#### 2. Program Analysis

- Conduct a SWOC analysis of a Sustainable development initiative.
- Map stakeholders and their roles in a given development project.
- Present a comparative analysis of two similar programs based on performance data.

3. Design of Results in Monitoring & Evaluation

- Create a Results Framework for an institutional water management program.
- Develop a Problem Tree and turn it into an Objective Tree.
- Roleplay: Pitch your results-based design to a funding agency.

#### 4. Monitoring & Evaluation Indicators

- Design SMART indicators for a youth employment program.
- Evaluate a program's indicators for relevance and feasibility.
- Use a case to classify indicators as input, output, outcome, or impact.

#### 5. Logical Framework Approach

- Construct a Logical Framework Matrix (LogFrame) for a women's empowerment program.
- Identify assumptions and risks in a given LogFrame case.
- Peer review and revise a flawed LogFrame draft.

#### 6. Theory of Change

- Draft a Theory of Change for a sanitation campaign using backward mapping.
- Compare ToC vs LogFrame using a real-world example.
- Group project: Create a visual ToC map and justify your causal links.

#### 7. Monitoring & Evaluation Systems

- Design a basic M&E system for an education initiative (include tools, roles, data flow).
- Critically review an existing system and suggest improvements.
- Roleplay internal audit to check if the system is functioning.

#### 8. Monitoring & Evaluation Planning

- Draft an M&E plan for a disaster relief project.
- Create a Gantt chart outlining M&E activities and responsibilities.
- Group simulation: Manage M&E for a multi-stakeholder program and adjust the plan mid-way based on changes.

#### 9. Program Performance Evaluation

- Conduct a mock mid-term evaluation of a clean water project.
- Develop KPIs and benchmark them using available data.
- Present findings in a dashboard-style format with visualizations.

- 10. Monitoring & Evaluation Data Management
  - Use Excel/SPSS/Google Sheets to input, clean, and analyze M&E data.
  - Simulate a data quality assessment (DQA) for a program.
  - Create a coding system for qualitative M&E interviews.
- 11. Monitoring & Evaluation Results Use and Dissemination
  - Draft a policy brief using mock M&E findings.
  - Create a results dashboard using Canva/Tableau/Excel.
  - Simulate a dissemination meeting with stakeholders.
- 12. ICT in Monitoring and Evaluation
  - Use KoboToolbox or ODK to design and deploy an M&E survey.
  - Compare different ICT tools (e.g., DHIS2, SurveyCTO) for data collection.
  - Record a video presentation or demo of how a digital tool enhances M&E.

#### 13. Program Impact Assessment

- Design an impact assessment plan using a control and treatment group.
- Analyze a dataset to determine impact using a quasi-experimental design.
- Present a poster summarizing your findings and limitations.
- 14. GIS in Monitoring & Evaluation
  - Use Google Earth or QGIS to map service delivery points of an NGO.
  - Conduct spatial analysis using basic GIS tools to show program reach.
  - Simulate a disaster response evaluation using GIS data to recommend resource allocation.

#### **Essential Readings**

- Bamberger, M., Rugh, J., & Mabry, L. (2019). *RealWorld evaluation: Working under budget, time, data, and political constraints* (3rd ed.). SAGE Publications.
- Kusek, J. Z., & Rist, R. C. (2004). Ten steps to a results-based monitoring and evaluation system: A handbook for development practitioners. The World Bank. https://doi.org/10.1596/0-8213-5823-5
- Patton, M. Q. (2021). Utilization-focused evaluation (5th ed.). SAGE Publications.
- Rogers, P. J. (2014). Theory of change: Methodological briefs Impact evaluation No. 2. UNICEF Office of Research Innocenti.
- World Bank. (2017). Impact evaluation in practice (2nd ed.). The World Bank.

#### Suggested Readings

• Chen, H. (2015). *Practical program evaluation*. (Vols. 1-0). SAGE Publications, Inc, https://doi.org/10.4135/9781071909850

- Gertler, P. J., Martinez, S., Premand, P., Rawlings, L. B., & Vermeersch, C. M. J. (2016). *Impact evaluation in practice* (2nd ed.). The World Bank.
- Hatry, H. P. (2020). *Performance measurement: Getting results* (2nd ed.). The Urban Institute Press.
- International Labour Organisation.. *Basic Principle of Monitoring and Evaluation*. https://www.ilo.org/media/436106/download
- OECD. (2019). *Better criteria for better evaluation: Revised evaluation criteria definitions and principles for use*. Organisation for Economic Co-operation and Development (OECD). https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf
- Scriven, M. (2016). The logic of evaluation. CREA Publishing.

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