

DEPARTMENT OF CIVIL ENGINEERING

Course Outline for the Session September – December 2026-27 (Odd Semester)

Faculty Name: RUDRESH A N

Subject with code: Construction Management and Entrepreneurship – BCV501

Semester with section: 5 - A

Modules	Class No	Topics proposed to be covered	Portion to be covered in %	Remarks
Module 1	1	Planning and Scheduling Construction project formulation – construction management & Scope	20.00	
	2	Types of project planning and its management, Statutory and regulatory requirements- layout and building plan approval & contract		
	3	Statutory and Regulatory requirements: Fire and Safety, Quality, Environmental, commencement certificate, legal and public policies		
	4	Schedule management: WBS, Bar Charts, Sequencing and Dependency		
	5	Network Diagram, Activity Duration, Critical Path Method, PERT, CPM		
	6	Problems on CPM & PERT		
	7	Problems on CPM & PERT - 2		
	8	Cost Management - Creating schedules, Assigning Resources, Cost, Evaluation, Optimization and Tracking		
Module 2	9	Basic concepts of resource management	40.00	
	10	Class of labor, Wages & statutory requirement		
	11	Labour Production rate or Productivity, Factors affecting labour output or productivity		
	12	Classification of Construction Equipment, estimation of productivity for: excavator, dozer		
	13	Estimation of productivity for: Compactors, graders and dumpers		
	14	Estimation of ownership cost, operational and maintenance cost of construction equipment.		
	15	Selection of construction equipment and basic concept on equipment maintenance.		
	16	Material Management functions, inventory Management.		
Module 3	17	Procurement types, planning, stages	60.00	
	18	Procurement execution – Sustainable procurement management		
	19	Construction contract – Formation, types, essential elements		
	20	Contract law – tendering process		
	21	Contract award Documentation		
	22	Contractor and sub-contractor management		
	23	Claims – disputes compensation – breach of contract		
	24	Project completion and project closure		

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Module 4	25	Quality Management - Occupational Health, Safety and Environment, Barriers	80.00	
	26	Quality Management - Occupational Health, Safety and Environment, Barriers - 2		
	27	Quality Management System – Chart and tools		
	28	Safety management - safety requirements, Safety and Health codes		
	29	Risk management - Process, Terminology, Identification		
	30	Risk management - Process, Terminology, Identification - 2		
	31	Analysis and Response Strategy Completion certificate		
	32	Occupancy certificate, Facilities management.		
Module 5	33	Characteristics of a Successful Entrepreneur	100.00	
	34	Understand the entrepreneurial journey, different entrepreneurial styles, personality traits, strengths, and weaknesses		
	35	5M Model, Communication skills: communication breakdown-miscommunication and poor listening, rectification.		
	36	Business planning process, marketing plan, financial plan		
	37	Project report and feasibility study		
	38	Guidelines for preparation of model project report for starting a new venture		
	39	Introduction to international entrepreneurship opportunities, entry into international business		
	40	Exporting, direct foreign investment, venture capital		

List of Text Books

Books:

1. Chitkara, K.K, “Construction Project Management: Planning Scheduling and Control”, Tata McGraw Hill Publishing Company, New Delhi.
2. Dr. U.K. Shrivastava “Construction Planning and Management”, Galgotia Publications Pvt. Ltd. New Delhi.
3. Engineering Economics, R Panneerselvam, Eastern Economy Edition 2001, PHI, ISBN – 81- 203-1743-2.
4. Cost Accounting, Khan M Y, 2nd Edition, 2000, Tata McGraw-Hill, ISBN 0070402248
5. Mechanical Estimating & Costing, T.R.Banga, S.C.Sharma, 16th Edition, 2011, Khanna Publishers, ISBN8174091009
6. Poornima M. Charantimath, “Entrepreneurship Development and Small Business Enterprise”, Dorling Kindersley (India) Pvt. Ltd., Licensees of Pearson education.