

COURSE MODULES OF THE SUBJECT TAUGHT FOR THE SESSION AUG - DEC 2025-26 (ODD SEM)
Course Syllabi with CO's

Faculty Name: PUNEETH K	Academic Year: 2025-2026				
Department: CIVIL ENGINEERING					
Course Code	Course Title	Core/Elective	Prerequisite	Contact Hours	Total Hrs./Sessions
BCV501	Construction Management and Entrepreneurship	Core	Building Materials and Construction	L 3 T - P -	40

Objectives

1. To understand the concept of Scheduling and cost management in construction project
2. To go through the Statutory and regulatory requirements in construction
3. To explain the concept of procurement and contract management
4. To understand Quality and Safety during construction.
5. To identify the risks and its management.

Topics Covered as per Syllabus
Module-1

Planning and Scheduling Construction project formulation – construction management, define scope – scope management, types of project planning and its management, Statutory and regulatory requirements- layout and building plan approval, contract, Fire and Safety, Quality, Environmental, commencement certificate, legal and public policies. Schedule management – WBS, Bar Charts, Sequencing and Dependency, Network Diagram, Activity Duration, Critical Path Method, PERT, Case study. Cost Management - Creating schedules, Assigning Resources, Cost, Evaluation, Optimization and Tracking

Module-2

Resource Management: Basic concepts of resource management, class of labour, Wages & statutory requirement, Labour Production rate or Productivity, Factors affecting labour output or productivity.

Construction Equipment: Classification of Construction Equipment, estimation of productivity for: excavator, dozer, compactors, graders and dumpers. Estimation of ownership cost, operational and maintenance cost of construction equipment. Selection of construction equipment and basic concept on equipment maintenance.

Materials: Material Management functions, inventory Management.

Module-3

Contract and Procurement management Procurement – procurement types, planning, stages – procurement execution – sustainable procurement management Construction contract –formation, types, essential elements, contract law – tendering processcontract award – Documentation – contractor and sub-contractor management –claims – disputes compensation – breach of contract – project completion and project closure.

Module-4

Quality, Safety and Risk Management Quality Management - Occupational Health, Safety and Environment, Barriers, Quality Management System – Chart and tools. Safety management - safety requirements, Safety and Health codes. Risk management - Process, Terminology, Identification, Analysis and Response Strategy Completion certificate, occupancy certificate, Facilities management.

Module-5

Introduction to Entrepreneurship – Characteristics of a Successful Entrepreneur, Understand the entrepreneurial journey, different entrepreneurial styles, personality traits, strengths, and weaknesses. 5M Model, Communication skills: communication breakdown- miscommunication and poor listening, rectification.

Business Planning Process: Business planning process, marketing plan, financial plan, project report and feasibility study, guidelines for preparation of model project report for starting a new venture. Introduction to international entrepreneurship opportunities, entry into international business, exporting, direct foreign investment, venture capital.

List of Text Books

1. P C Tripathi and P N Reddy, "Principles of Management", Tata McGraw-Hill Education
2. Chitkara, K.K, "Construction Project Management: Planning Scheduling and Control", Tata McGraw Hill Publishing Company, New Delhi.
3. Poornima M. Charantimath, "Entrepreneurship Development and Small Business Enterprise", Dorling Kindersley (India) Pvt. Ltd., Licensees of Pearson Education
4. Dr. U.K. Shrivastava "Construction Planning and Management", Galgotia publications Pvt. Ltd. New Delhi.
5. Bureau of Indian standards – IS 7272 (Part-1)- 1974: Recommendations for labour output constant for building works:
6. Engineering Economy, Riggs J.L., 5th Edition, Tata McGraw Hill, ISBN 0-07-058670-5
7. Engineering Economics, R Panneerselvam, Eastern Economy Edition 2001, PHI, ISBN – 81- 203-1743-2. 7. Cost Accounting, Khan M Y, 2nd Edition, 2000, Tata McGraw-Hill, ISBN 0070402248
8. Mechanical Estimating & Costing, T.R.Banga, S.C.Sharma, 16th Edition, 2011, Khanna Publishers, ISBN 8174091009.

Course Outcomes	At the end of the course the student will be able to :
	<ol style="list-style-type: none"> 1. Develop WBS and estimate the resource requirements 2. Analyse the cost control monitoring and accounting methods for a project 3. Understand the Statutory and legal requirements for a construction 4. Prepare the plan for procurement management and Risk mitigation. 5. Understand the concept of entrepreneurship and business planning.

Internal Assessment Marks: 30 + 10 (3 Session Tests are conducted during the semester and marks allotted based on average of 3 test and assignment performances).

The Correlation of Course Outcomes (CO's) and Program Outcomes (PO's)

Subject Code:	BCV501	TITLE: Construction Management &Entrepreneurship										Faculty Name: Puneeth K			
List of Course Outcomes	Program Outcomes														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
CO-1	2	2	2	-	1	1	-	1	-	2	-	1	1	-	
CO-2	1	2	1	-	-	-	-	-	-	2	1	1	1	-	
CO-3	1	1	-	-	-	1	1	-	-	1	-	1	1	-	
CO-4	1	1	1	-	-	1	1	1	1	1	1	1	1	-	
CO-5	2	-	-	-	-	1	-	1	1	1	1	1	1	-	

Note: 3 = Strong Contribution 2= Average Contribution 1 = Weak Contribution - = No Contribution