

Devi Ahilya Vishwavidhyalaya, Indore, India Institute of Engineering & Technology				III Year B.Tech. (Civil Engineering)		
Course Code & Name	Instructions Hours per Semester and Credits					
6RVOE1 Construction Panning & Management	Classroom Instruction (CI)		Lab Instruction (LI)	Term Work (TW) and Self Learning (SL)	Total no. of Hours Per semester	Total Credits (Total Hours/30)
	L	T	P	TW+SL	90	3
	20	10	00	60		

Course Learning Objectives:

1. Study the concepts of construction resource planning and scheduling.
2. Understand CPM and PERT models in the construction industry.
3. Learn about materials and equipment used in construction projects.
4. Gain awareness of labour management and regulations for construction activities.
5. Understand resource leveling and resource allocation.

Prerequisites: Blueprint reading & drawing, Construction methods, Building codes & regulations

COURSE CONTENTS

Unit I

Construction Planning & Scheduling Preliminary and detailed investigation methods, methods of construction, formwork and centering, schedule of construction, job layout, principles of construction management, modern management techniques (CPM/PERT, network analysis).

Unit II

Construction Equipment Factors affecting selection, investment and operating cost, output of equipment, study of equipment for earthwork, dredging, conveyance, concreting, hoisting, pile driving, compaction, grouting.

Unit III

Contract Types of contracts, tender notices, contract documents, departmental methods, rate lists, security deposit, earnest money, conditions of contract, arbitration, administrative approval, technical sanction.

Unit IV

Specifications & Public Works Accounts Necessity and types of specifications, essential requirements, specifications for works, standard specification steps. Forms used in construction works, measurement book, cash book, materials at site account, imprest account, tools and plants, running bills, secured advance, final bill.

