

**SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA
(LECTURE PLAN)**

Subject: **CONSTRUCTION MANAGEMNET, TOOLS AND TECHNIQUES (MBEM102)**

Class: MBEM, I Semester

Teacher: Dr. Nagaraju Kaja
Internal Marks: 50

Dept: Architecture
External Marks: 50

Number of Hours:03
Total Marks: 100

Objective: To introduce the importance of Construction Management/Project Manager in the field of Construction and to impart knowledge in the related disciplines.

SL.NO	DATE	TOPIC OF CLASS LECTURE & DISCUSSION	REMARKS
1	Week 1	<p style="text-align: center;"><u>Introduction</u></p> <ul style="list-style-type: none"> ✓ Intro to Project Management, Management Functions ✓ Construction Industry, role in development ✓ Construction Team 	Lecture
2	Week 2	<p style="text-align: center;"><u>Management Team</u></p> <ul style="list-style-type: none"> ✓ Construction Manager-role and responsibility ✓ Causes of project failure <p style="text-align: center;">Management styles</p>	Lecture
3	Week 3	Assignment	
4	Week 4	<p style="text-align: center;"><u>Project Planning process</u></p> <ul style="list-style-type: none"> ✓ Project Planning and development ✓ Importance of planning ✓ Feasibility Studies ✓ Project Report 	Lecture
5	Week 5	<p style="text-align: center;"><u>Management Tools & Techniques</u></p> <ul style="list-style-type: none"> ✓ Scheduling, Importance, advantages ✓ Methods of Scheduling: Bar Charts, Milestone Charts, Work Break down structure, Job Layout 	
6	Week 6	<p style="text-align: center;"><u>Networks</u></p> <ul style="list-style-type: none"> ✓ Types of Networks ✓ Rules for writing a Network ✓ Fulkerson's rule of numbering the events 	Lecture
7	Week 7	<p style="text-align: center;"><u>Networks</u></p> <ul style="list-style-type: none"> ✓ PERT ✓ CPM ✓ Critical Path <p style="text-align: center;">Diff between PERT&CPM</p>	Lecture
8	Week 8	<u>MID TERM EXAMS</u>	
9	Week 9	<p style="text-align: center;"><u>Networks</u></p> <ul style="list-style-type: none"> ✓ PERT ✓ CPM ✓ Critical Path <p style="text-align: center;">Diff between PERT&CPM</p>	Lecture

SL.NO	DATE	TOPIC OF CLASS LECTURE & DISCUSSION	REMARKS
10	Week 10	<p style="text-align: center;"><u>Networks</u></p> <ul style="list-style-type: none"> ✓ PERT ✓ CPM ✓ Critical Path ✓ Diff between PERT&CPM 	Lecture
11	Week 11	<p style="text-align: center;"><u>Project Controlling</u></p> <ul style="list-style-type: none"> ✓ Monitoring and controlling ✓ Resource levelling & updating ✓ 	Lecture
12	Week 12	<p style="text-align: center;"><u>Site Management</u></p> <ul style="list-style-type: none"> ✓ Site Mobilization ✓ Resource management ✓ Communicating and reporting ✓ Training for Managers/Engineers ✓ 	Lecture
13	Week 13	✓ INTERNAL ASSESSMENT	
14	Week 14	✓ Revision	

Tentative Break-up of Internal Assessment:

S. No.	Categories of Evaluation	Marks	Note
1	Internal test/ Individual Assessment	15	1. Marks allotted at each stage is tentative 2. New stages or categories of evaluation may be included if and when the need arises
2	Mid Term Exam	20	
3	Seminar Presentation	15	

Reference Books:

1. Construction Engineering and Management, S Seetharaman
2. Construction Project Management, Chitkara K.K
3. Construction Project Management, Rangwala
4. Construction Planning & Management, UK Srivatsava
5. PERT & CPM Principles and applications, LS Srinath

(Nagaraju Kaja)