

## Teaching Layout for Construction Management (8<sup>th</sup> Semester B. Tech in Civil Engineering)

**Total No of Class Required = 40**

Sl. No.	Module No.	No of class Required	Topics to be Covered
1	I	1	Introduction to project management
2	I	1	Different phase of project management
3	I	1	Bar charts and mile stones
4	I	1	Introduction to networking method, Elements of networks
5	I	1	Networks rules and guideline also numbering of network
6	I	1	Introduction to CPM , activity time estimate
7	I	1	FLOATS and critical path calculation
8	I	1	Solving of examples of CPM problems
9	I	1	Introduction to PERT, PERT Time estimates
10	I	1	PERT time estimation, time computations
11	I	1	Slack and finding critical path
12	I	1	Probability of meeting schedule date in PERT and solving an example.
13	I	1	Cost model introduction
14	I	1	Direct and indirect cost , cost slope, total project cost, optimum duration
15	I	1	Optimization cost model problem solving
16	I	1	Updating
17	I	1	Resource allocation
18	I	1	Problems on resources levelling and smoothing
19	I	1	Mid semester Q & A discussion and show the copy
20	III	1	Introduction to optimization
21	III	1	Formulating LPP , graphical method
22	III	2	Solving example of graphical problems
23	III	1	Introduction to simplex problem
24	III	1	Solving of simplex problem example
25	III	1	Introduction to two other Big M method and two phase method
26	III	1	Solving of both Big M method and two phase method
27	III	2	Sensitivity problems in LPP
28	III	2	Dynamic programming
29	IV	3	Inventory management
30	IV	1	Equipment management
31	II	4	Discussion about construction equipment
32	II	1	Safety and Quality control