

PANIPAT INSTITUTE OF TECHNOLOGY, SAMALKHA, PANTPAT
Department of Civil Engineering
Lecture Delivery Schedule

Semester: 6th Sem.

Faculty Name: Mr. Balraj Singh

Course Title: Construction Engineering and Management

Course No. EL-332A

Unit	Topics to be covered	Schedule date	Covered On	Reference Used (Book/Web/NPTEL etc.)
1	Introduction about syllabus	01/02/21		Text book – 2 and Ref. book : 3
	Basic concepts in the development of construction plans	03/02/21		Text book – 2 and Ref. book : 3
	Choice of Technology and Construction method- Defining Work Tasks	04/02/21		Text book – 2 and Ref. book : 3
	Work breakdown structure	05/02/21		Text book – 2 and Ref. book : 3
	Definition- Precedence relationships among activities-Estimating Activity Durations	08/02/21		Text book – 2 and Ref. book : 3
	Estimating Resource Requirements for work activities-coding systems	10/02/21		Text book – 2 and Ref. book : 3
	Relevance of construction schedules-Bar charts - The critical path method	11/02/21		Text book – 2 and Ref. book : 3
	Calculations for critical path scheduling	12/02/21		Text book – 2 and Ref. book : 3
	Activity float and schedules	15/02/21		Text book – 2 and Ref. book : 3
	-Presenting project schedules-Critical path scheduling for Activity-on- node and with leads	17/02/21		Text book – 2 and Ref. book : 3
	Lags and Windows- Calculations for scheduling with leads	18/02/21		Text book – 2 and Ref. book : 3
	lags and windows- Resource oriented scheduling	19/02/21		Text book – 2 and Ref. book : 3

	Scheduling with resource constraints and precedences	22/02/21		Text book – 2 and Ref. book : 3
	Use of Advanced Scheduling Techniques-Scheduling with uncertain durations	24/02/21		Text book – 2 and Ref. book : 3
	Crashing and time/cost tradeoffs	25/02/21		Text book – 2 and Ref. book : 3
	Improving the Scheduling process – Introduction to application software	26/02/21		Text book – 2 and Ref. book : 3
2	The cost control problem	01/03/21		Text book – 1 and Ref. book : 1
	The project budget-Forecasting for Activity cost control	03/03/21		Text book – 1 and Ref. book : 1
	financial accounting systems and cost accounts-Control of project cash flows	04/03/21		Text book – 1 and Ref. book : 1
	Schedule control-Schedule and Budget updates	05/03/21		Text book – 1 and Ref. book : 1
	Relating cost and schedule information	10/03/21		Text book – 1 and Ref. book : 1
3	Quality and safety Concerns in Construction	12/03/21		Text book – 2 and Ref. book : 4
	Organizing for Quality and Safety-Work and Material Specifications	15/03/21		Text book – 2 and Ref. book : 4
	Total Quality control-Quality control by statistical methods	17/03/21		Text book – 2 and Ref. book : 4
	Statistical Quality control with Sampling by Attributes	18/03/21		Text book – 2 and Ref. book : 4
	Statistical Quality control by Sampling and Variables-Safety	19/03/21		Text book – 2 and Ref. book : 4
4	Types of project information-Accuracy and Use of Information	24/03/21		Text book – 1 and Ref. book : 3
	Computerized organization and use of Information	26/03/21		Text book – 1 and Ref. book : 3

	Organizing information in databases-relational model of Data bases	09/04/21		Text book – 1 and Ref. book : 3
	Other conceptual Models of Databases-Centralized database Management systems	12/04/21		Text book – 1 and Ref. book : 3
	Databases and application programs-Information transfer and Flow	16/04/21		Text book – 1 and Ref. book : 3
	Revision class	19/04/21		
		22/04/21		
		23/04/21		

TEXTBOOKS:

1. Chitkara, K.K. “Construction Project Management Planning”, Scheduling and Control, Tata McGraw Hill Publishing Co., New Delhi, 2009
2. Srinath,L.S., “Pert and CPM Principles and Applications“, Affiliated East West Press, 2001

REFERENCES:

1. Chris Hendrickson and Tung Au, “Project Management for Construction – Fundamentals Concepts for Owners”, Engineers, Architects and Builders, Prentice Hall, Pittsburgh, 2000.
2. Moder.J., Phillips. C. and Davis E, “Project Management with CPM”, PERT and Precedence Diagramming, Van Nostrand Reinhold Co., 3rd Edition, 1985.
3. Willis., E.M., “Scheduling Construction projects”, John Wiley and Sons, 1986.
4. Halpin,D.W., “Financial and Cost Concepts for Construction Management”, John Wiley and Sons, New York, 1985.