



ADITYA ENGINEERING COLLEGE (A)

Aditya Nagar, ADB Road, Surampalem

Department of Civil Engineering

Name of the Faculty: Ms. Devi Chukkala

Course Name: Construction technology and management

Conventional method: Chalk and Talk

Innovative teaching method: Assistance of Application software to real-life problems

About the topic:

PERT and CPM are basically time-oriented methods in the sense that they both lead to determination of a time schedule for the project. The significant difference between two approaches is that the time estimates for the different activities in CPM were assumed to be deterministic while in PERT these are described probabilistically. These techniques are referred as project scheduling techniques.

In CPM activities are shown as a network of precedence relationships using activity-onnode network construction – Single estimate of activity time – Deterministic activity times

USED IN: Production management - for the jobs of repetitive in nature where the activity time estimates can be predicted with considerable certainty due to the existence of past experience.

In PERT activities are shown as a network of precedence relationships using activity-onarrow network construction – Multiple time estimates – Probabilistic activity times

USED IN: Project management - for non-repetitive jobs (research and development work), where the time and cost estimates tend to be quite uncertain. This technique uses probabilistic time estimates.

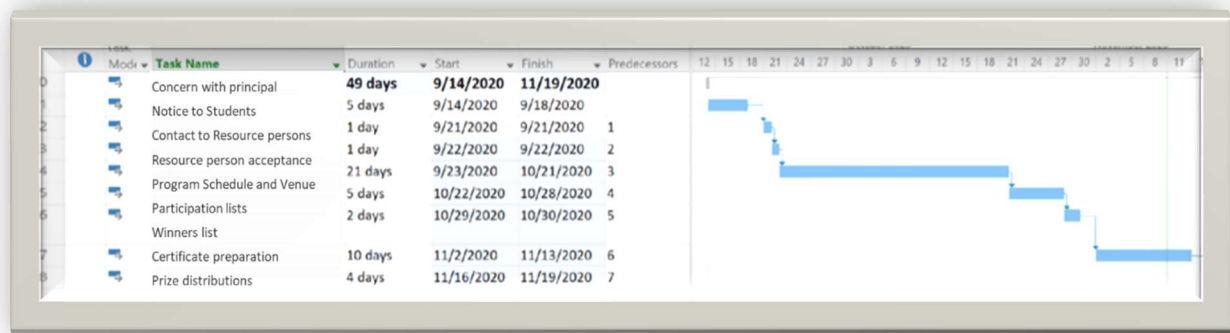
Benefits of PERT/CPM

1. Useful at many stages of project management
2. Mathematically simple
3. Give critical path and slack time
4. Provide project documentation

5. Useful in monitoring costs

Report:

Ms. Devi Chukkala has used the assistance of MS project software to explain the concepts of project planning with CPM and PERT concepts. Students were advised to prepare a detailed schedule of events in organising a cultural program through 'MS Project' i.e., for organizing a cultural event, several activities like preparation of registration links, preparation of participation, schedule of events were considered and the students created project planning using MS project software. Students became familiar to organize an event which made them ease with the software.



Planning events with MS Project