# Software Project Management

## Lecture 18

Scheduling Resources

## **Topics Covered**

- Scheduling Resources
- Creating Critical paths

#### Introduction to Scheduling resources

- It is next step to resource requirement
- This is best done by representing the activity plan as a bar chart

- Changing the level of resource on a project over a time, particularly personnel generally adds to the cost of a project
- Recurring staff has costs and even where staff are transferred internally time will be needed for familiaization

- Problem with an uneven resource histogram is that it is more likely to call for level of resource beyond those available
- In practice resource have to be allocated to a project on an activity by activity basis & finding the best allocation can be time consuming and difficult

- By delaying start of some activity it has been possible to smooth the histogram and reduce maximum level of demand for the resource
- It is difficult to split task without increasing the time they take

Two ways to prioritizing activities are

- Total float priority
- Ordered list priority

#### Demerits

 Resource smoothing or even containment of resource demand to avail levels is not always possible within planned timescale.

### Creating critical path

- Scheduling resource create new critical path
- Delaying start of activity may cause that activity to become a critical
- A delay in one activity in competing one activity can delay the avaibility of a resource required for a later activity.

#### Creating critical path

 In a large project, resource linked capability can be quite complex