

AGB-849	Project Planning and Management	3(3-0)
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## Outcomes

Upon successful completion of the course, the student will be able to:

- About the fundamental techniques for proposal writing, winning project scheduling, and implementing keeping in view the efficient utilization of resources.
- The problem and selecting optimum solution keeping in view the financial and environmental sustainability of the project.
- The optimum solution of the problem and developing application framework.
- The project to perform project planning activities, project supervision. construction, maintenance and repair cost control.

## Contents

### 1. Project Planning, Scheduling and Controlling by Deterministic Models

- a. project planning activities,
- b. Rectangular bar chart, CPM, developing a critical path schedule, determining the minimum total cost of a project, Manual versus computer analysis of critical path methods,
- c. preparing execution schedule, scheduling resources, delivering Materials, scheduling laborers,
- d. Financing the project,
- e. Job layout,
- f. Project control during construction, keeping equipment records,
- g. Project supervision, construction cost control, cost control records.

### 2. Scheduling and Controlling by Probabilistic Models

- a. PERT project Evaluation and Review Technique,
- b. Statistical tools as mean variance.
- c. Standard Deviation.
- d. Probability distribution,
- e. beta courses,

- f. center limit,
  - g. Use of computer software in project management and planning.
- 3. Claims and arbitration**
- a . Claims, escalation,
  - b . Indexation, arbitration and litigation.
- 4. Factors Affecting the Selection of Equipment and Tools**
- a . Standard types of equipment, special equipment,
  - b . Tthe cost of owning and operating equipment, depreciation cost, straight line depreciation,
  - c . Decline balance method, sum of the year, digit method, Investment costs, operating costs, economical life of construction equipment, cost of depreciation and replacement, Maintenance and repair costs, down time costs, economical cost of equipment, sources of construction equipment,
  - d . Labor problems, labor organization, prevention and settlement of disputes,
  - e . Project planning process Preparing PC-I project proposal for small projects,
  - f . Procedure to procure goods and services in a project, Procedure to check the feasibility of any proposal, Understanding Gantt chart, time management, how to proposal get approved according to funding agency.

**Suggested Reading:**

1. Anonymous, 2008, Guidelines of the Planning Commission on Project Planning Execution and monitoring. Project wing, Planning Commission, Government of Pakistan, Islamabad.  
Kerzner, H. 2009, Project Management: A system Approach to Planning, Scheduling and Controlling, Wiley, USA.