# Construction Management & Documentation

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# Project Management Triangle

### Each side represents a constraint of the project

Time constraint: Amount of time available to complete a project

Cost constraint: Amount budgeted for the project

Scope constraint: What must be done to produce the project's end result

### Competing constraints

Tight budget

Increased scope → Increased time and increased cost,

Tight time constraint → Increased costs and reduced scope,

Increased time and reduced scope..

### One side of the triangle cannot be changed without affecting the others

\*A further refinement of the constraints separates product "quality" or

"performance" from scope, and turns quality into a fourth constraint



Triple Constraint or the Iron Triangle

# **Project Management Phases**

- 1. Definition
- 2. Planning
- 3. Execution
- 4. Control
- 5. Closure



# Objectives of Project Management

# Detailed planning of the project

Listing all the activities and their logical sequence.

Determining overall requirement of resources and their quantities .

# Development of schedule

Working out time estimates for various activities based on available resources.

Preparing time schedule and calculate total project cost.

# Periodic review of progress of work

Comparing the work progress with planned target whether work is as per schedule or not.

Identify corrective action to meet the lapses to achieve the target.

Ensure optimum use of resources such as men material money and machinery.

# Tools of Planning and Scheduling

