

# Project Financing and Management

MEM 212

**Semester: Third**

**Credit Hr: 3**

## **General objectives:**

- State and explain the concepts of project management in a simple and effective manner.
- To provide the concept of modern trends and techniques of project management.
- To provide the concept of project risk, project contract and project finance.

## **Specific objectives:**

Specific objectives of this unit are:

- For preparation and evaluation of the feasibility study and those involved with selection, implementation and evaluation of projects.
- To provide the sound knowledge of project planning, controlling and implementation.

## **Course contents**

### **Unit 1: Project Management Concept**

**5 hrs**

Project definition and examples, project characteristics, classification of project, project phases life cycle, project environment concept and definition of project management, elements of project management, techniques for project management, and roles of project manager.

### **Unit 2: Project Appraisal and techniques of project formulation**

**5 hrs**

Concept of project appraisal, tools of project appraisal (cost-benefit analysis, capital budgeting techniques, financial analysis), project proposal (technical and financial), procedure for developing project proposal, techniques of project formulation (feasibility analysis, network analysis, cost benefit analysis, input analysis, environmental analysis)

### **Unit 3: Project Planning and Scheduling**

**12 hrs**

Concept of project planning and its importance, project planning process, work breakdown structure, project scheduling and tools used in scheduling (Bar chart, Network analysis: CPM, PERT), project scheduling with limited resources: resource leveling and resource smoothing,

### **Unit 4: Project Contract Management**

**8 hrs**

Introduction to contract, tender and tendering procedure, contract document and factors to be considered in preparing a contract, role of responsibility and risk in contracts, types of contract (turn-key, piece-work, lump-sum, the cost plus percentage, EPC contract), sub-contract, letter of intent (LOI), BOOT, BOT, BTO, BOO project.

### **Unit 5: Project Risk Management**

**5 hrs**

Introduction to project risk, types of project risk, analysis of major source of risk, effective management of project risks.

**Unit 6: Project implementation and Controlling****6 hrs**

Introduction to monitoring, evaluation and controlling, the objective of project control, project control system, project control cycle, elements of project control (time, cost and quality), earned value analysis, introduction to project management information system (PMIS).

**Unit 5: Introduction to project finance****4hrs**

Concept of project finance, features of project finance, why use project finance, project development and management, project finance and privatization, project finance and structured finance

**References:**

- 1 Frederick E. Gould, PE, CPC, 2002. Managing the construction Process. Prentice Hall Upper Saddle River, New Jersey 2002. Second Edition.
- 2 A Guide to the Project Management Body of Knowledge, Second Edition.
- 3 E.R. Yescombe, Principles of Project Finance 2002, Yescombe-Consulting Limited.
- 4 IshwarAdhikari and Santosh Kr. Shrestha, A text of Project Engineering 2011, Chandeshwori Publication, First Edition
- 5 DhurbaP.Rizal, Project Management 2001, Ratnapustakbhandar, First Edition.