17MB204 PROJECT MANAGEMENT

Course Objective

The objective of this course is to enable the students to gain knowledge about the modern project management, project life-cycle, estimation of project times and costs. This course will develop skills of students in the area of project management techniques, managing project risks and teams and out sourcing project works and monitoring of project progress and project closure; to acquaint the students about various issues of project management.

Course Outcomes

At the end of the course the student will be able to

- 1. Understand concepts, develop skills and formal project management processes that are used by managers to propose, plan secure resources, budget and lead project teams for successful completion of projects.
- 2. Apply decision tools, frame works and fast experiences to critically analyze various project management issues and challenges
- 3. Initiate actions when needed, make mid course adjustments in plans and recover from unexpected problems.
- 4. Hone their abilities to build the projecting and implement the project systematically

UNIT - I: Modern Project Management: Project life cycle, characteristics of Project, drivers of project management, project governance, project management – a socio technical approach Project portfolio management system, Project selection criteria project request for proposal (RFP) defining the project scope, establishing project priorities, creating work breakdown structures (WBS), integrating WBS with the organization responsibilities, matrices, responsibility matrics, project communication plan.

UNIT - II: Estimating project times, costs and project management techniques: Factors influencing quality estimates, top – down versus bottom – up estimates, methods for estimation of project times and costs, bottom – up approaches for estimating project times and costs, types of costs, creating database for estimation.

Network Analysis – PERT and CPM – application of network techniques to engineering problems.

UNIT - III: Managing project risk and scheduling resources and costs: risk management processes, risk identification, risk assessment, risk response development, contingence planning, opportunity management, risk response control, change control management.

Scheduling resources and costs: overview of resource scheduling problem, types of resource constrains, classification of scheduling problem, resource allocation methods, benefits of scheduling the resources, assigning project work.

UNIT - IV: Managing Project Teams and outsourcing Project work: Five stage team development model, situational factors affecting team development, building high performance project team, managing virtual project teams, project team pitfalls.

Outsourcing project works, best practices in outsourcing project work, the art of negotiations.

UNIT - V: Monitoring and Project closure: Structure of a project monitoring information system, project control process, monitoring time performance, forecasting final project cost, other control issues.

Types of project closure wrap – up closure activities: post – implementation evaluation.

Skill Development:

(These activities are only indicative, the Faculty member can innovate)

- 1. Prepare a work break down structure for a given Project.
- 2. Apply Network Technique and calculate critical path for a given Project.
- 3. Project risk analysis Identify a project and conduct risk analysis.
- 4. Identify a project and list out the major activities that can be outsourced to the companies
- 5. Prepare a project control report for a given project.

TEXT BOOK:

1. Clifford F. Gray, Erik W. Larson and Gowtham.V.Desai "Project Management, the Managerial Process" 6e, Mc Graw Hill, 2014.

REFERENCE BOOKS:

- 1. Merydith, Montel and Gopal "Project Management" wiley India
- 2. Prasanna Chandra, "Projects, Planning, Analysis, Selection, Financing, Implementation and Review", TataMcGraw Hill Company Pvt. Ltd., New Delhi.
- 3. L.S Srinath "PERT and CPM" 3e EWP.
- 4. Subhash Chandra Das "Project Management And Control" PH