4/4 B.Tech - EIGHTH SEMESTER

EC8T4A Project Management Credits: 4

Lecture : 4 periods/week

Tutorial: 1 period /week

Semester end examination: 70 marks

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Course Objectives:

- Will be able to understand the phases in a Project Life Cycle
- Will be able to understand how to allocate resources to different activities while planning a project.
- To understand how to identify, quantify and mitigate risks.
- Will be able to Develop working competence in the use of MS Project.

Learning Outcomes:

Based on readings, class discussions, case analyses, practice problems, and term project, students will be able to:

- Evaluate and select the most desirable projects.
- Identify desirable characteristics of effective project managers.
- Apply appropriate approaches to plan a new project.
- Apply appropriate methodologies to develop a project schedule.
- Develop a suitable budget for a new project.
- Identify important risks facing a new project.
- Apply appropriate techniques to assess ongoing project performance.

UNIT I

Concepts of Project Management & Organizational Capability: Concepts of project management, categories, project life cycles, Roles and phases, tools and techniques. Types of organizational structures, cultures and its impacts on projects, project management roles

UNIT II

Quality Management: Quality concepts, project management plan, project quality tools, failure modes and effect analysis, Introduction to CMMI

UNIT III

Six Sigma: DMAIC methodology, project quality tools, 7-S of project management, problem solving and decision making, improving project performance and six sigma tools.

UNIT IV

Scheduling projects: Project time process management, purpose of project schedule, defining activities, sequence activities, develop project schedules, working with gantt chart

UNIT V

Project resourcing: Estimate resource needs, assigning resource to activity, using MS project for resource allocation

UNIT VI

Risk Management: Risk identification, risk analysis, risk management planning. using MS project for risk planning and case study on "satellite development"

UNIT VII

Project Budgeting: Cost planning and estimation, establishing cost control, using MS project for project budgets

UNIT VIII

Work Break Down Structure (WBS):Definition of scope, Scope planning, work breakdown structure, using MS project for work breakdown structures, case study on "inventory system"

Learning Resources

Text Books:

- 1. Project management S. Choudhary, Tata Mc.Grawhill 2000.
- 2. Contemporary project management, Timothy J. Kloppenborg, Cengage learning, India Edition, 2009

References:

- 1. Project management Harvey Maylor, Pearson, 3rd edition, 2004
- 2. Project management Gido 1 Clements, Cengage learning, 2007
- 3. The six sigma project planner Thomas Pyzdek, Tata Mc. Grawhill, 2003