Course Name: Software Project Management

Course Type: B.Tech. (Sem. VII) Technical Elective.

Course Structure: 3-0-2-4

Course No. : IT414

Instructor : Asim Banerjee

Course Outline

Introduction
The course provides an overview of the roles, responsibilities, and management methods of the software technology project manager. The course assumes no prior knowledge in management techniques and is intended to teach students how to develop approaches and styles of management for software projects.

Objectives:
The proposed course has the following objectives:

- To provide students with a clear understanding of the unique risks, issues, and critical success factors associated with software projects
- To introduce students to the role and function of project management
- To explain the stages and process of the project life cycle
- To understand the various techniques for planning and managing a software project
- To examine basic methodologies for software design, development, testing and implementation
- To examine various techniques for managing a software development team
- To understand the need and techniques for managing users and user expectations
- To learn project planning techniques through the use of software tools like Microsoft Project.

Contents:

- Introduction to project management principles
- Projects Stages and their importance in a project
- Project roles and responsibilities
- Project definition and Project Estimation
- Project Planning
- Risk analysis and management
- Change and Issue management
- Project Tracking, Controlling, Reporting
- Project Support
- Quality management
- Project completion
- Improvement planning
- Introduction to new paradigms of software development

Evaluation Method (Tentative)

- In-semester Examination(s) 20%
- Assignments/Role Plays/Games 20%
- Role as PM or PM tool 25%
- End Semester Examination 30%
- Overall Impression 05%
  (Regularity, participation in class, etc.)
Books & Reference Material

- “Project Management Body of Knowledge (PMBoK)”

Journals

- IEEE Transactions on Software Engineering