



SOFTWARE PROJECT MANAGEMENT

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PRE-REQUISITES : Basic Programming Course

INTENDED AUDIENCE : CSE, IT

COURSE OUTLINE :

Effective Software project management is crucial to the success of any software development or maintenance project. The roles and responsibilities of the project manager is numerous and varied. However, at the broad level, these can be classified in to the project planning and monitoring and control activities. Project planning involves making cost, effort, and duration estimation and preparing various types of plans such as schedule, configuration management, risk management, quality management, staffing plan, etc. The monitoring and control activities encompass keeping track of the progress and removing bottlenecks using techniques such as PERT, GANTT, and also effective risk management, team building, etc.

ABOUT INSTRUCTOR :

Prof. Rajib Mall is Professor, Department of Computer Science and Engineering, Indian Institute of Technology Kharagpur, West Bengal. He has more than a two decades of teaching experience in the areas of program analysis and testing. He has written five text books and over 150 refereed research papers.

Prof. Durga Prasad Mohapatra is a Professor, in Department of Computer Science and Engineering, National Institute of Technology Rourkela, Odisha. He has more than two decades of teaching experience in the areas of Real-Time Systems, Software Engineering, Software Testing, and Discrete Mathematics. He has written one text book on Discrete Mathematics and more than 100 refereed research papers.

COURSE PLAN :

Week 1: Introduction to Software Project Management

Week 2: Selection of a Project Approach

Week 3: Project Estimation Techniques

Week 4: Project Estimation Techniques Cont ...

Week 5: Project Planning and Project Scheduling

Week 6: Project Planning and Project Scheduling Cont ...

Week 7: Project Organization and Team Structures

Week 8: Risk Management

Week 9: Resource Allocation

Week 10: Project Monitoring and Control, Software Configuration Management

Week 11: Software Quality Management

Week 12: Managing Contracts and Project closeout