

**AIM:**

This course aims at the role of software developers in getting exposure on planning and controlling aspect of software development

**OBJECTIVES:**

- To understand the roles of the project manager
- To understand the threats and opportunities in project management
- To gain Expertise in size, effort and cost estimation techniques
- To understand the techniques available with which a project's aims and objectives, timetable, activities, resources and risks can be kept under control
- To understand the social and political problems a project will encounter--against which the technical problems pale into insignificance--and to begin to understand how to approach non-technical problems
- To Appreciate management issues like team structure, group dynamics

**UNIT I INTRODUCTION TO SOFTWARE PROJECT MANAGEMENT 9**  
Project Definition – Contract Management – Activities Covered by Software Project Management – Overview Of Project Planning – Stepwise Project Planning.

**UNIT II PROJECT EVALUATION 9**  
Strategic Assessment – Technical Assessment – Cost Benefit Analysis – Cash Flow Forecasting – Cost Benefit Evaluation Techniques – Risk Evaluation – software effort estimation

**UNIT III ACTIVITY PLANNING 9**  
Objectives – Project Schedule – Sequencing and Scheduling Activities – Network Planning Models – Forward Pass – Backward Pass – Activity Float – Shortening Project Duration – Activity on Arrow Networks – Risk Management – Nature Of Risk – Types Of Risk – Managing Risk – Hazard Identification – Hazard Analysis – Risk Planning and Control.

**UNIT IV MONITORING AND CONTROL 9**  
Resource allocation - identifying and scheduling resources – publishing resource and cost schedule – scheduling sequence - Creating Framework – Collecting The Data – Visualizing Progress – Cost Monitoring – Earned Value – Priortizing Monitoring – Getting Project Back To Target – Change Control – Managing Contracts – Introduction – Types Of Contract – Stages In Contract Placement – Typical Terms Of A Contract – Contract Management – Acceptance.

**UNIT V MANAGING PEOPLE AND ORGANIZING TEAMS 9**  
Introduction – Understanding Behavior – Organizational Behaviour - Selecting The Right Person For The Job – Instruction In The Best Methods – Motivation – The Oldman – Hackman Job Characteristics Model – Working In Groups – Becoming A Team – Decision Making – Leadership – Organizational Structures – Stress – Health And Safety – Case Studies.

**TOTAL= 45 PERIODS**

**TEXT BOOK:**

1. Bob Hughes, Mikecoterrell, "Software Project Management", Third Edition, Tata McGraw Hill, 2004.

**REFERENCES:**

1. Ramesh, Gopaldaswamy, "Managing Global Projects", Tata McGraw Hill, 2001.
2. Royce, "Software Project Management", Pearson Education, 1999.
3. Jalote, "Software Project Management in Practice", Pearson Education, 2002.
4. Robert T. Futrell, Donald F. Shefer and Linda I. Shefer, "Quality Software Project Management", Pearson Education, 2003.