

PEC	SOFTWARE PROJECT MANAGEMENT	3	0	0	3
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COURSE OBJECTIVES

- To understand the basic knowledge of software management principles.
- To familiarize in choosing an appropriate project development methodology and identifying project risks, monitoring and tracking project deadlines.
- To develop the capability to work in a team environment and be aware of different modes of communications.

UNIT I: INTRODUCTION TO SOFTWARE PROJECT MANAGEMENT 9

Project Definition – Contract Management – Activities Covered by Software Project Management – Plans, Methods and Methodologies – Management – Objectives – Stakeholders – Requirement Specification – Management control – 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 : Net Profit – Payback Period – Return on Investment – Net Present Value – Internal Rate of Return – Risk Evaluation : Identification and Ranking – Cost-benefit Analysis – Risk Profile Analysis – Using Decision Trees.

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

Creating Framework – Collecting The Data – Visualizing Progress – Cost Monitoring – Earned Value Analysis – Prioritizing 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 : a Background – 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 HOURS : 45

TEXT BOOKS

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

REFERENCES

1. Ramesh, Gopalaswamy, "Managing Global Projects", Tata McGraw Hill, 2001.
2. Royce, "Software Project Management", Pearson Education, 1999.

Jalote, "Software Project Manangement in Practive", Pearson Education, 2002.

COURSE OUTCOMES

CO1	Determine the Plans, Methods and Methodologies of Software project Management	K5
CO2	Assess the project evaluation techniques based on cost and risk	K5
CO3	Elaborate the Sequencing and Scheduling Activities & Hazards	K6
CO4	Examine the Stages In Contract Placement	K4
CO5	Organize people in team and develop decision making skills	K3

Course Articulation Matrix/CO-PO Mapping Matrix

Mapping of Course Outcomes to Program Outcomes

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	3	3	3	-	-	-	1	-	-	-	2	3
CO2	3	2	2	3	3	-	-	-	1	-	-	-	2	3
CO3	3	3	3	3	3	-	-	-	1	-	-	-	2	3
CO4	3	3	2	3	3	-	-	-	1	-	-	-	2	3
CO5	2	2	3	3	3	-	-	-	1	-	-	-	2	3