

| | |
|------------------------|--|
| PROGRAM | Master of Business Administration |
| SEMESTER | 3 |
| COURSE TITLE | Software Project Management |
| COURSE CODE | 04MB0337 |
| COURSE CREDITS | 03 |
| COURSE DURATION | 42 Hrs (42 sessions of 60 minutes each) |

COURSE OUTCOMES:

- * Understand the major SPM concepts
- * Interpreting the effective ways SPM tools and Techniques
- * Examining the Software Project Maintenance and Software Quality Managements.
- * Explaining SPM testing plans and methods
- * Assessing the Software Risk Management strategies

COURSE CONTENTS:

| Unit No | Unit / Sub Unit | Sessions |
|----------------|--|-----------------|
| I | Introduction to Software Project Management: Concepts, Umbrella Activities under Software Project Management. Software Project Planning tools and techniques: Work breakdown Structure, Milestones, Software Sizing, Rayleigh curve etc. Cost Estimation techniques like COCOMO, Function Point Analysis and other Cost Estimation methods. Time Estimation Tools like CPM/PERT, Gantt charts and other methods, COCOMO for time estimation etc. (Use of MS-PROJECT is recommended). | 06 |
| II | Software Project Maintenance: Types, steps, Resource planning and estimation, Re-engineering the software products, Documentation standards, Version Control and Software Configuration Management. | 08 |
| III | Software Testing: Techniques, test plans, Introduction to manual testing and Automated testing tools. User Acceptance Testing: Implementation Planning, Steps, methods, Documentation etc., | 08 |
| IV | Software Risk Management: Strategies of Risk Management, Software Risks, risks Identification, Risk Projection, Risk Refinement, Risk Mitigation, Monitoring & Management. | 10 |
| V | Software Quality Management: Quality Concepts, SQA, V & V Planning, tools and techniques (reviews, FTR inspections, walkthroughs etc.), Software Quality parameters with their definitions, Introduction to ISO 9000 Quality Standards and CMM. | 10 |

EVALUATION:

The students will be evaluated on a continuous basis and broadly follow the scheme given below:

| | Component | Weightage |
|---|--|---------------------------|
| A | Continuous Evaluation Component (Assignments / Presentations/ Quizzes / Class Participation/ etc.) | 20% (C.E.C.) |
| B | Internal Assessment | 30% (IA) |
| C | End-Semester Examination | 50% (External Assessment) |

SUGGESTED READINGS:**Text Books:**

| Sr. No | Author/s | Name of the Book | Publisher | Edition & Year |
|---------------|--------------------------------|-----------------------------|-----------------------|---------------------------|
| T1 | K.K. Aggarwal and Yogesh Singh | <i>Software Engineering</i> | New Age International | 2002 |
| T2 | Martin L Shooman | <i>Software Engineering</i> | Tata McGraw Hill | 1983 |

Reference Books:

| Sr. No | Author/s | Name of the Book | Publisher | Edition and Year |
|---------------|------------------------------|--|--|------------------------------|
| R-01 | Carlo Ghezzi, Mehdi Jazayeri | <i>Software Engineering</i> | PHI | 1996 |
| R-02 | Roger S. Pressman | <i>Software Engineering: A Practitioner's Approach</i> | Tata McGraw Hill 4 th edition 1999. | 4 th edition 1999 |
| R-03 | Sommerville Ian | <i>Software Engineering,</i> | Pearson Ed | 2004 |