

## **MBPC4010 MANAGING SOFTWARE PROJECT (3-0-0)**

### **Course Objectives:**

1. Understand the unique aspects of software project management, including activities, methodologies, stakeholders, and success/failure factors.
2. Learn techniques for project portfolio management, individual project evaluation, risk assessment, resource allocation, and strategic programme management.
3. Gain insights into selecting appropriate project approaches, methodologies, and technologies
4. Develop skills in stepwise project planning, choosing process models, and estimating software effort, enabling effective project management and delivery.

### **Module – I:**

Introduction to Software Project Management: Introduction– Software Project –vs–other Projects, Activities covered by Software Project Management– Plans, Methods and methodologies, Some ways of categorizing software projects, stakeholders– Project success and failure – Management Control.

### **Module – II:**

Project Evaluation and Programme Management: Project Portfolio Management, Evaluation of Individual projects, CBA techniques, Risk Evaluation, Programme Management, Managing the allocation of resources within programmes, Strategic Programme Management, Aids to programme management, Stepwise Project Planning.

### **Module – III:**

Selection of an appropriate project approach and Software Effort estimation: Build or buy– Choosing methodologies and technologies, Choice of process models, structure –vs– speed of delivery, Waterfall model, Spiral model, software prototyping, Selecting the most appropriate process model, Basis for Software Estimating, Software effort estimation techniques

### **Course Outcomes:**

- CO-1: Acquire proficiency in managing software projects by understanding project activities, methodologies, stakeholders
- CO-2: Develop the ability to evaluate projects, manage project portfolios, assess risks, allocate resources strategically, and implement programme management techniques for optimal project outcomes.
- CO-3: Gain the ability to select appropriate project approaches, methodologies, and technologies based on project requirements
- CO-4: Acquire techniques for software effort estimation, enabling accurate planning and allocation of resources, leading to successful project completion within budget and schedule constraints.

### **Books :**

1. Bob Hughes, Mike Cotterell and Rajib Mall – Software Project Management – TMH– 2017
2. Joel Henry, Software Project Management, Pearson, 2011
3. Kathy Schwalbe, Project Management in IT, Cengage, 2011
4. Sanjay Mohapatra – Software Project Management – Cengage –2011