

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar
Programme & Subject : B.Sc. CA & IT
Semester – V
US05CIIT25 : Software Project Management
(Syllabus Effective from June 2020)

Credits : 4

External : 70 Marks

Contact Hrs per Week : 4

University Examination Duration: 3 Hrs

All units carry equal weightage

Unit	Description
I	PROJECT EVALUATION AND PROJECT PLANNING Importance of Software Project Management –Activities Methodologies – Categorization of Software Projects – Setting objectives – Management Principles – Management Control – Project portfolio Management – Cost-benefit evaluation technology – Risk evaluation – Strategic program Management – Stepwise Project Planning.
II	PROJECT LIFE CYCLE AND EFFORT ESTIMATION Software process and Process Models – Choice of Process models - mental delivery – Rapid Application development – Agile methods – Extreme Programming – SCRUM – Managing interactive processes – Basics of Software estimation – Effort and Cost estimation techniques – COSMIC Full function points - COCOMO II A Parametric Productivity Model - Staffing Pattern.
III	ACTIVITY PLANNING AND RISK MANAGEMENT Objectives of Activity planning – Project schedules – Activities – Sequencing and scheduling – Network Planning models – Forward Pass & Backward Pass techniques – Critical path (CRM) method – Risk identification – Assessment – Monitoring – PERT technique – Monte Carlo simulation – Resource Allocation – Creation of critical patterns – Cost schedules.
IV	PROJECT MANAGEMENT AND CONTROL Framework for Management and control – Collection of data Project termination – Visualizing progress – Cost monitoring – Earned Value Analysis- Project tracking – Change control- Software Configuration Management – Managing contracts – Contract Management.

Basic Text and Reference Books:

1. Bob Hughes, Mike Cotterell and Rajib Mall: Software Project Management – Fifth Edition, Tata McGraw Hill, New Delhi, 2012.
2. Robert K. Wysocki “Effective Software Project Management” – Wiley Publication,2011.
3. Walker Royce: “Software Project Management”- Addison-Wesley, 1998.
4. Gopaldaswamy Ramesh, “Managing Global Software Projects” – McGraw Hill Education (India), Fourteenth Reprint 2013.