

**GUJARAT TECHNOLOGICAL UNIVERSITY****Syllabus for Integrated MCA 9th Semester****Branch: MCA Integrated****Subject Name: Project Management****Subject Code: 2698604****With effective
from academic
year 2022-23**

Teaching Scheme			Credits	Examination Marks				Total Marks	
L	T	P		C	Theory		Tutorial/ Practical		
					University exams (ESE)	Progressive Assessment (PA)	External Practical /viva Exam(ESE)		Internal evaluation Practical /viva Exam(PA)
4	2	0	6	70	30	30	20	150	

Pre-requisites:

Attitude to learn

Course Objectives:

At the end of the course students will be able to explain the concepts of IT Project Management in context of General Project Management Approaches

Course Outcome (COs):

At the end of the course (theory) students will be able to –

- CO1. Discuss the basic concepts of Project Management
- CO2. Discuss the concepts related to project charter, project planning, and scope management
- CO3. Discuss the concepts of Work Breakdown structure, SE metrics and approaches, and COCOMO
- CO4. Explain concepts related to project scheduling, and budgeting,
- CO5. Explain various planning such as risk management plan, project communication plan, and IT project quality plan
- CO6. Explain concepts related to project implementation and closure

Course Outcome (CO) for Tutorials:

At the end of the course tutorials students should be able to –

- CO7. Use an open-source PM tool and developed case study for an IT project

Course Content:

Unit No.	Content	Hrs
1	Introduction: Project Management (PM) and IT Project Management, Four approaches of PM, Introduction to Extreme PM, Introduction to Project Management Body of Knowledge (PMBOK)	4
2	The Project Life Cycle (PLC) and IT Development, Phases of IT Project Management, Business Case, Project selection and approval	4
3	Project Charter Project Integration Management, Project Management Processes, Product Oriented Processes, Components in Project Charter, Project Planning Framework	4

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4	Organization and Project Planning, The Project Team, The Project Environment	2
5	The Scope Management Plan Scope Management Processes, Scope Planning, Project Scope Definition, Project Scope Verification, Scope Change Control	4
6	The Work Breakdown Structure (WBS), Project Estimation, Software Engineering Metrics and Approaches, COCOMO	4
7	Project Schedule and Budget Introduction, Developing Project Schedule, Project Management Software Tools, Developing the Project Budget, Finalizing the Project Schedule and Budget	4
8	The Risk Management Plan Introduction, IT Project Risk Management Planning Process, Identifying IT Project Risks, Risk Analysis and Assessment, Risk Strategies, Risk Monitoring and Control, Risk Response and Evaluation	4
9	The Project Communication Plan Introduction, Monitoring and Controlling the Project, The Project Communication Plan, Project Metrics, Reporting Performance and Progress, Information Distribution	4
10	The IT Project Quality Plan Introduction, Quality Tools and Philosophies, Quality Systems, The IT Project Quality Plan	4
11	The Implementation Plan and Project Closure Introduction, Project Implementation, Administrative Closure, Project Evaluation	4
Total Hours:		42

Tutorials:

1. Explore and use any one open source project management tool
(Institute may use any open source PM tool like Open Project Community edition/JIRA Free Version/Focal Board/Restya etc.)
2. Students are required to develop a case study on IT Project. Preferably, they may identify the final semester project and develop case study for the same.
3. Prepare the planning, scheduling, budgeting, and reporting using the PM tool

Evaluation:

Student has to submit the developed case study and VIVA will be conducted based on the basic concepts of the courses and case study developed by student.

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	S Level
25	75	0	0	0	0

Distribution of Tutorial Marks					
R Level	U Level	A Level	N Level	E Level	S Level
5	10	10	10	15	50

Legends used are as below –



R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate S: Synthesis
as per Revised Bloom's Taxonomy

Text Books:

1. Information Technology: Project Management (4th Edition) by Jack T. Marchewka, Wiley India Pvt. Ltd.

Reference Books:

1. Effective Project Management: Traditional, Agile, Extreme (7th Edition) by Robert K Wysocki, Wiley India Publication
2. Project management: Achieving Competitive Advantage by Jeffrey K. Pinto, Pearson
3. Project Management by Sanjiv Marwah, Dreamtech Press
4. Project Management by S Choudhury, McGraw Hill Education
5. Project Management by M R Gopalan (2nd Edition), Wiley India Publication
6. Project Management: Planning and Control Techniques (5th Edition) by Rory Burke, Wiley India Pvt. Ltd.
7. Project Management by Harvey Maylor (3rd Edition), Pearson India
8. Project Management by Rajeev M. Gupta (2nd Edition), PHI Learning Limited
9. Absolute Beginner's Guide to Project Management by Greory M. Horine, Pearson India
10. Project Management by R. Pannerselvam and P. Senthilkumar, PHI Learning
11. Project Management: Processes, methodologies and Economics by Avraham Shtub, Jonathan F. bard, Shlomo Globerson, Pearson India

Open Source Tools

- Open Project: <https://www.openproject.org/>
- JIRA: <https://www.atlassian.com/software/jira>
- FocalBoard: <https://www.focalboard.com/>
- Restya: <https://restya.com/board/>
- ERPnext: <https://erpnext.com/> (self-hosted version)
- Taskcase: <https://github.com/JordanKnott/taskcafe>