

Syllabus for Final Year of B.Tech. (Common for All Programs)
Semester VIII (Autonomous)
(Academic Year 2022-2023)

Program: Final Year (Common for All Programs)				Semester: VIII						
Course: Project Management				Course Code: DJ19ILO8021						
Teaching Scheme (Hours / week)				Evaluation Scheme						
				Semester End Examination Marks (A)	Continuous Assessment Marks (B)		Total marks (A+ B)			
				Theory	Term Test 1	Term Test 2		Avg.		
				75				25	25	25
				Laboratory Examination				Term work		
3	--	--	3	Oral	Practical	Oral & Practical	Laboratory Work	Tutorial / Mini project / presentation/ Journal	Total Term work	
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Pre-requisites: Basic concepts of Management.

Objectives:

1. To familiarize the students with the use of a structured methodology/approach for every unique project undertaken, utilizing project management concepts, tools and techniques.
2. To appraise the students with the project management life cycle and make them knowledgeable about the various phases from project initiation through closure.

Outcomes: On completion of the course, learner will be able to:

1. Explain project management life cycle and the various project phases as well as the role of project manager.
2. Apply selection criteria and select an appropriate project from different options.
3. Create a work break down structure for a project and develop a schedule based on it. Manage project risk strategically.
4. Use Earned value technique and determine & predict status of the project.
5. Capture lessons learned during project phases and document them for future reference.

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Detailed Syllabus (Unit wise)		
Unit	Description	Duration in Hours
1	Project Management Foundation: Definition of a project, Project Vs Operations, Necessity of project management, Triple constraints, Project life cycles (typical & atypical) Project phases and stage gate process. Role of project manager, Negotiations and resolving conflicts, Introduction to project leadership, ethics in projects, Multicultural and virtual projects, Project management in various organization structures, PM knowledge areas as per Project Management Institute (PMI).	07
2	Initiating Projects: How to get a project started, selecting project strategically, Project selection models (Numeric /Scoring Models and Non-numeric models), Project portfolio process, Project sponsor and creating charter, Effective project team, Stages of team development & growth (forming, storming, norming &performing), team dynamics.	08
3	Project Planning: Work Breakdown structure (WBS) and linear responsibility chart, Project cost estimation and budgeting, Top down and bottoms up budgeting, Networking and Scheduling techniques, PERT, CPM, Crashing project time, Resource loading and levelling, Goldratt's critical chain, GANTT chart, Project Stakeholders and Communication plan, Introduction to Project Management Information System (PMIS). Risk Management in projects: Risk management planning, Risk identification and risk register, Qualitative and quantitative risk assessment, Probability and impact matrix. Risk response strategies for positive and negative risks.	12
4	Monitoring and Controlling Projects Planning monitoring and controlling cycle, Information needs and reporting, engaging with all stakeholders of the projects, communication and project meetings. Earned Value Management techniques for measuring value of work completed, using milestones for measurement, change requests and scope creep, Project audit. Project Contracting Project procurement management, contracting and outsourcing.	08
5	Closing the Project: Customer acceptance, Reasons of project termination, Various types of project terminations (Extinction, Addition, Integration, Starvation), Process of project termination, completing a final report, doing a lessons learned analysis, acknowledging successes and failures.	07

Books Recommended:

Text books:

1. Project Management: A managerial approach, Jack Meredith & Samuel Mantel, 7th Edition, Wiley India.
2. Project Management: The Managerial Process, 6th edition, Erik Larson, Clifford Gray, McGraw Hill Education.

Reference Books:

1. A Guide to the Project Management Body of Knowledge (PMBOK® Guide), 5th Ed, Project Management Institute PA, USA.
2. Project Management, Gido Clements, Cengage Learning.
3. Project Management, Gopalan, Wiley India.
4. Project Management, Dennis Lock, 9th Edition, Gower Publishing England.

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Evaluation Scheme:

Semester End Examination (A):

Theory:

1. Question paper based on the entire syllabus will comprise of 5 questions (All compulsory, but with internal choice as appropriate), each carrying 15 marks, total summing up to 75 marks.
2. Total duration allotted for writing the paper is 3 hrs.

Continuous Assessment (B):

Theory:

1. Two term tests of 25 marks each will be conducted during the semester out of which, one will be a compulsory term test (on minimum 02 Modules) and the other can either be a term test or an assignment on live problems or a course project.
2. Total duration allotted for writing each of the paper is 1 hr.
3. Average of the marks scored in both the two tests will be considered for final grading.