FACULTY OF ENGINEERING & TECHNOLOGY

Third Year Bachelor of Engineering

Branch: Mechanical/Mechatronics/Automobile Engineering

Course Code: 102090522

Course Title: PROJECT MANAGEMENT

Type of Course: Open Elective Course

Course Objectives: The course is intended to impart basic skills of Project management & its various aspects to undergraduate students.

Teaching & Examination Scheme:

Contact hours per week			Course Credits	Examination Marks (Maximum / Passing)				
				Internal		External		Total
Lecture	Tutorial	Practical		Theory	J/V/P*	Theory	J/V/P*	
3	0	0	3	40/14	--	60/21	--	100/35

* **J**: Jury; **V**: Viva; **P**: Practical

Detailed Syllabus:

Sr.	Contents	Hours
1	**Initiating and Planning Projects:** Definition of project, Identification of the key characteristics of a project and primary project constraints, Role and responsibilities of the project manager, Project Organizational Structures, Definition of a project stakeholder, Definition of responsibility for managing stakeholders and controlling their engagement, Purpose of using a project charter, Key elements of a project plan, Scope statement ,Work Breakdown Structure (WBS),Difference between authority and influence ,Identification of common sources of conflict within a project environment.	8
2	**Budgeting the Project** Methods of budgeting, Cost estimating, Improving Cost Estimates, Budget Uncertainty and risk management	6
3	**Scheduling the Project** PERT and CPM Networks, Project uncertainty and risk management, Simulation, The Gantt chart, Extensions to PERT/CPM	15
4	**Resources allocation to the project** Expediting a Project, Resource Loading, Resource Leveling, Allocating Scarce resources to projects, Allocating several resources to the several projects, Goldratt's critical chain	6
5	**Monitoring and Controlling the Project** The plan-monitor-control cycle, Data collection and reporting, Earned value, Project control, Designing the control system, Scope creep and change	6

	control	
6	**Evaluating and Terminating the Project** Evaluation, Project Auditing, Project Termination	**4**

Suggested Specification table with Marks (Theory) (Revised Bloom's Taxonomy):

Distribution of Theory Marks						**R**: Remembering; **U**: Understanding; **A**: Application,
R	**U**	**A**	**N**	**E**	**C**	**N**: Analyze; **E**: Evaluate; **C**: Create
20%	15%	10%	40%	15%	0 %	

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Reference Books:

1	Project Management in Practice by Jack R. Meredith, Scott M. Shafer, Samuel J. Mantel, Jr. , (WILEY)
2	Project Management and Appraisal by Sitangshu Khatua (Oxford)
3	A Guide to the Project Management Body of Knowledge , Project Management Institute, Inc. Pennsylvania

Course Outcomes (CO):
After learning the course the students should be able to:

Sr.	Course Outcome Statements	%weightage
CO-1	Learning how to initiate and plan projects	**19**
CO-2	Understanding of budgeting and scheduling of project	**44**
CO-3	Learning how to allocate resources to techniques	**14**
CO-4	Monitoring and Controlling the Project	**14**
CO-5	Evaluating and Terminating the Project.	**09**

Curriculum Revision:	
Version:	**1**
Drafted on (Month-Year):	Apr-22
Last Reviewed on (Month-Year):	May-22
Next Review on (Month-Year):	Apr-24