No	Information of every subject		
1	Unit name:	System Design	
2	Code:	McE61031	
3	Classification:	Engineering subject	
4	Credit value:	3.5	
5	Semester/ Year Offered:	1/6	
6	Pre-requisite:	NA	
7	Mode of delivery:	Lecture, Assignment	
8	Assessment system and breakdown of	Assignment	
	marks:		
	Mid-term/ final Examination	70%	
	Assignment/ Home work	30%	
9	Academic staff teaching unit:	Department of Mechatronics	
10	Course outcome of unit:		
	After completion of this course, students will be able to		
	1. To understand the importance of project management for engineering.		
	2. To make the project using models to achieve organizations goals.		
	3. To apply the management for engineering project.		
11	Synopsis of unit:		
	The use of projects and project management continues to grow in our society and its		
	organizations. Businesses regularly use project management to accomplish unique		
	outcomes with limited resources under critical time constraints. As well as being a		
	text that is equally appropriate for classes on the management of service, product, or		
	engineering projects.		
12	Topic:		
	1. The World of Projects		
	1.1 The Definition of a "Project"		
	1.2 Why Project Management?		
	1.3 The Project Life Cycle		
	2. Selecting Projects Strategically		
	2.1 Project Management Matur	ity	

- 2.2 Project Selection and Criteria of Choice
- 2.3 The Nature of Project Selection Models
- 2.4 Types of Project Selection Models
- 2.5 Analysis under Uncertainty- The Management of Risk
- 2.6 Comment on the Information Base for Selection
- 2.7 Project Portfolio Process
- 2.8 Project Proposals
- 3. Planning the Work Activities
  - 3.1 Initial Project Coordination and the Project Plan
  - 3.2 System Integration
  - 3.3 The Action Plan
  - 3.4 The Work Breakdown Structure and Linear Responsibility Chart
- Project Costs and Budgets
  4.1 Estimating Project Budgets
- 5. Project Activity Scheduling
  - 5.1 Background
  - 5.2 Network Techniques
- 6. Allocating Resources to the Project
  - 6.1 Critical Path Method- Crashing a Project
  - 6.2 The Resource Allocation Problem
  - 6.3 Resource Loading
  - 6.4 Resource Leveling
  - 6.5 Constrained Resource Scheduling
  - 6.6 Multi-project Scheduling and Resource Allocation
- 7. Information Requirements for the Project
  - 7.1 The Planning-Monitoring-Controlling Cycle
  - 7.2 Information Needs and Reporting
  - 7.3 Earned Value Analysis

	8.	Controlling Project Execution
	8.1 The Fundamental Purposes of Control	
		8.2 Three Types of Control Processes
		8.3 The Design of Control Systems
		8.4 Control: A Primary Function of Management
	9.	Evaluating the Project
		9.1 Purposes of Evaluation- Goals of the System
		9.2 The Project Audit
		9.3 Construction and Use of the Audit Report
		9.4 The Project Audit Life Cycle
		9.5 Some Essentials of an Audit/Evaluation
	10	. Completing the Project
		10.1 The Varieties of Project Termination
		10.2 When to Terminate a Project
		10.3 The Termination Process
		10.4 A Final Report- A Project History
14	Main ret	ferences:
	Jack R.	Meredith. Samuel J. mantel
15	Addition	nal references:
1	1	