

COURSE CODE: ENS-451
COURSE NAME: Project Planning and Management
CREDIT HOURS: Theory = 3 Practical = 0 Total = 3
CONTACT HOURS: Theory = 48 Practical = 0 Total = 48
PREREQUISITE: None
MODE OF TEACHING: Three hours of lecture per week

Course Description:

The aim of this course is to prepare and develop future young engineers in the field of Project Management; enabling them to smoothly tackle all PM related issues which they would encounter in their professional career. How the project management is done in the real world and skills and core competencies required by a successful engineering manager entrusted with the task of project management.

TOPICS COVERED:

Week#	Topics
1	What is Project? Difference between routine work and project?
2	Project Life Cycle, The Project Manager, Importance of Project Management
3	Strategic Management Process, Need for Effective Project Portfolio, A Portfolio Management System
4	Applying a Selection Model, Managing the Portfolio System, Project Management Structures, what is the right Project Management Structure
5	Organization Culture. Defining the Project Scope, Establish Project Priorities, Creating the work breakdown structure (WBS)
6	Integrating the WBS with Organization, Coding the WBS for Information System, Process breakdown Structure, Responsibility Matrix and Project Communication Plan
7	Factor Influencing the Quality of Estimate, estimating guide lines, time cost and resources, Top down Vs Bottom up Estimation

8	Developing the Project Network, Activity on Node Fundamentals, Using the Forward and Backward pass Information, and Extended to the Network Techniques to come closure to reality
9	Midterm Exam – MSE
10	Risk Management Process, Contingency Planning, Risk Response Control
11	Overview of the Resource Scheduling Problem, Types of Resource Constraint, Resource Allocation Method, Computer Demonstration of Resource Constraint Scheduling
12	Rational for Reducing Project Duration, Option for Accelerating Project Completion, Project Cost/Duration Graph
13	Managing Vs Leading a Project, Managing Project Stake Holders, Social Network Building, and Ethics in Project Management
14	The 5 Stage Team Development Model, Building High Performance Project Team Managing Virtual Project Team, Project Team Pitfalls
15	Outsourcing Project Work, The Art of Negotiation. Project Control Process, Monitoring Time Performance, developing a Status Report
16	Forecasting Final Project Cost. Project Audit Process, Project Closure
17	Project Manager Evaluations. Environmental Factors, Project Site Selection
18	End Semester Exam

Text and Material:

1. Project Management: The Managerial Process 8th Ed. by Clifford F. Gray & Erik W. Larson, (2020).
2. Project Management: A Managerial Approach, 11th Ed. By Jack R. Meredith & Samuel J. Mental (2021).
3. Essential of Project Management by Kamaraju Ramakrishna (2010).
4. Management, 15th Ed., Stephen P. Robins & Mary Coutler (2021).

ASSESSMENT SYSTEM:

Theoretical/Instruction	100%
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Assignments	10%
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Quizzes	15%
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Mid Semester Exam	25%
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End Semester Exam	50%
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Practical Work	0%
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Lab Attendance	0%
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Lab Report	0%
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Lab Quiz	0%
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Lab Rubrics	0%
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