

Course Type	Course Code	Name of Course	L	T	P	Credit
DE	EMSD505	Strategic Project Management	3	0	0	3

### Course Objective

The uniqueness of each project needs an expertise to bring the most productive outcome for the organization and society.

This course is framed to offer you a knowledge sharing through the application of tools, techniques and discussions of case studies

### Learning Outcomes

After attending this course, the students will be expected to get a developed understanding on:

How to evaluate and select a project

How to manage and control the stakeholders, cost, schedule and quality while managing all the project risks and other threats.

This course will bring the learnings on different qualitative skills and quantitative tools to understand and lead a successful project.

Unit	Topics to be Covered	Lecture Hours (L)	Learning Outcome
1	Introduction to Project Management and Project lifecycle	1	Understanding of what is project and project management, the drivers of project management, and project governance, etc.
2	Organization Structure and Culture	2	Understanding of existing project management structures in organizations. Relationship of Program, portfolio, and project.
3	Project Selection techniques -Financial Analysis -Non- Financial Analysis Market and Demand Analysis Technical Analysis	3	Understanding of organization's strategy and Project Selection Criteria: Financial (NPV and Payback methods) and non-financial (MCDM techniques etc.)
4	Defining the Project: Project scope planning and Work Breakdown Structure	3	Understanding on how to establish Project Priorities by creating the Work Breakdown Structure and responsibility matrix and its communication Plan
5	Project scheduling: Estimations of Project time and cost reducing Project duration. Scheduling resources	9	-Developing, constructing and computing the Project Network, AOA and AON fundamentals using Forward and Backward pass information, CPM, slack and float, Probability Models in networks, PERT etc. -Understanding on how to crash the Project durations by construction of Project cost-duration graph and its evaluation. -Understanding on types of Resource Constraints, Resource Allocation Methods, splitting activities, critical chain approach. -Understanding the factors influencing the Quality of Estimates, and guidelines for estimating times, costs and resources, Top-down and bottom-up estimating, learning curves, etc.

6	Measuring Project Performance: Implementation and Control	4	Understanding on how to monitor and control the projects using Earned value analysis technique, cost-schedule graph, Gantt Chart, etc.
7	Agile Project Management methods	2	Understanding the adaptive project management techniques in the volatile scenarios and changing customer requirements. Change management in projects.
8	Managing Projects Risks	6	Understanding on Risk Management Processes, Risk identification, assessment, mitigation and risk control etc. Monte Carlo Analysis and Decision Tree Analysis
9	Project Quality Management	2	Understanding the Six sigma tools and other quality control tools in project management
10	Procurement Management	2	Understanding the steps of the procurement activities, contract management for projects, etc.
11	Project Leadership and Managing teams and stakeholders	2	Learning the five-stage team development model, Managing stakeholders, ethics of Project management, conflict management etc.
12	Project Audits and Project Closure Detailed Project Report	2	-Understanding the types of Project Closure, post completion evaluation and documentations etc. -Discussion on the documentations in a detailed project report
13	Project Management Information systems	4	Understanding the supporting information system to perform, manage, and control the projects.
	Total	42	

#### Text Books:

1. Gary, C.F., Larson, E.W. and Desai, G.V., Project Management: The Managerial Process, Edition VI, McGraw Hill Education (India) Private Limited, 2004.
2. Maley, Claude H. Project management concepts, methods, and techniques. Auerbach Publications, 2012.

#### Reference Books:

1. PMBOK® Guide – Seventh Edition (2021).
2. Meredith, Mantel and Gopalan, Project Management: Core Text Book, Wiley India, 2006.