

Construction Project Management

Course Code CE-371	Credit Hours 2-1
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Course Description

The management of construction projects requires knowledge of modern management theories and practices as well as an understanding of the design and construction process. This course is focused on the project management of capital projects. It shall allow the students to build their understanding of the widest aspects of the construction development process, from clients developing their requirements for new capital projects through the design, procurement and construction stages, to the final occupation and maintenance of new facilities

Text Book:

1. A Guide to the Project Management Body of Knowledge by Project Management Institute, USA.

Reference Book:

1. Project Management for Engineering and Construction by Oberlender, D. Garold. (1993). McGraw-Hill.
2. Professional Construction Management: Including C.M, Design-Construct, and General Contracting by Barrie and Paulson. (1992). McGraw-Hill.
3. Project Management: A System Approach to Planning, Scheduling, and Controlling by Kerzner, Harold (2000). John Wiley & Sons, Inc.
4. Construction Management in Practice, 2nd Edition by R. Fellows, D. Langford, R. Newcombe and S. Urray (2002). Blackwell

Prerequisites :

Nil.

ASSESSMENT SYSTEM FOR THEORY

	Without Project (%)	With Project/Complex Engineering Problems (%)
Quizzes	15	10-15
Assignments	10	5-10
Mid Terms	25	25

Project	-	5-10
End Semester Exam	50	45-50

ASSESSMENT SYSTEM FOR LAB

Lab Work/ Psychomotor Assessment/ Lab Reports	70%
Lab Project/ Open Ended Lab Report/ Assignment/ Quiz	10%
Final Assesment/ Viva	20%

Teaching Plan

Week No	Topics/Learning Outcomes
1	Introduction to Construction Project Management, Describe phases of project life cycle, Importance of Project Management in Civil Engineering. Industry Standards and Best Practices. (Topics Added)
2	Project manager's roles and responsibilities towards the project and the stakeholders / organization. (Topics Added) Briefly describe the project management knowledge areas and process groups.
3-4	Introduction to Project Integration and Scope Management, Define a project pre-feasibility & feasibility report. Brief explanation of Project Charter and preliminary scope statement. creation of WBS, OBS and their linkage. Develop a project pre-feasibility, feasibility reports, Project Charter, and preliminary scope statement, WBS and OBS of the real projects. (Topics Added)
5	Introduction to project stakeholders' management, identifying and analysing different types of stakeholders, their identification techniques and SH mapping, Engagement strategies.
6-8	Introduction to Project Time Management, project Planning and Scheduling. (Topics Added) (OHT 1)
9	Introduction to Resource Management, identifying, acquiring, and managing the resources needed for successful project completion. (Topics Added)
10	Project Communication management; generation, collection, distribution, storage, retrieval, and ultimate disposition of project information.
11	Project Procurement Management; goods and services from outside the performing organization to accomplish the project objectives.
12-13	Project Quality Management, (OHT 2)

14	Project Risk Management (Topics Added)
15	Safety Management. (Topics Added)
16	Use of AI in managing the construction projects (Topics Added)
17-18	End Semester Exam

Practical:

Experiment No	Description
No.	Practicals
1	Introduction to Primavera software
2	Project time management
3	Project cost management
4	Project resource management