

ME493	ELEMENTS of PROJECT MANAGEMENT	L-T-P-CH-CR: 3-0-0-3-3	Prerequisites: None
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Course Instructor: Dr Barnali Chowdhury

Course Objectives:

This course is offered as ME elective. The objectives of the course are:

- i. To introduce basic concepts and practices of project management.
- ii. To understand the fundamentals of communications theory and practice
- iii. To understand the fundamental aspects of team structure, interpersonal dynamics, and role of the project manager, time-management techniques and strategies for individuals and team activities.
- iv. To understand project governance and control

Course Contents:

Unit 1: Importance of Project management: About the Art and Science of Project Management, Project and process, Project and Project Management, Project Management-The Process Context, The Interpersonal and Behavioral Context, Project Management: The Organizational Context.

Types of Project.

Role of Project Manager -Skill Requirements, Responsibilities and Functional Competencies of the Project Manager, Common Challenges, the value of Introspection and Self-Awareness

Unit 2: Defining a Project - selection, definition, goal. Project Life-cycle model, Project team and stakeholders, Organizational influences, Project management processes and mapping, Project Process flow diagrams, Project idea generation and acceptance.

Project analysis and feasibility report.

Project Scope: definition and planning, Project Breakdown Structure (WBS).

Unit 3: Project Plan- Planning and Scheduling techniques, Resource Scheduling: Resource allocation method, splitting and multitasking, Multi-project resources scheduling, Critical chain scheduling. Project integration management, PERT/CPM and overview of other scheduling methods.

Performance measurement and control. Project monitoring and Control.

Unit 4: Project Time management, project activity- its definition, sequencing, resource and duration estimation, schedule development and control, Project cost estimation, budget and control. Project risk management.

Unit 5: Human resource management- Human aspects of Project Management, Human resource planning, acquire, develop and manage project team and stakeholders, performance reporting.

Time Plan:

SN	Topic	Content details	L	T	P	Total number of classes
1	Unit 1	Importance of Project management: About the Art and Science of Project Management, Project and process, Project and Project Management, Project Management-The Process Context, The Interpersonal and Behavioral Context, Project Management: The Organizational Context. Types of Project. Role of Project Manager -Skill Requirements, Responsibilities and Functional Competencies of the Project Manager, Common Challenges, the value of Introspection and Self-Awareness	12	0	0	12
2	Unit 2	Defining a Project - selection, definition, goal. Project Life-cycle model, Project team and stakeholders, Organizational influences, Project management processes and mapping, Project Process flow diagrams, Project idea generation and acceptance. Project analysis and feasibility report. Project Scope: definition and planning, Project Breakdown Structure (WBS).	6	0	0	6
3	Unit 3	Project Plan- Planning and Scheduling techniques, Resource Scheduling: Resource allocation method, splitting and multitasking, Multi-project resources scheduling, Critical chain scheduling. Project integration management, PERT/CPM and overview of other scheduling methods. Performance measurement and control. Project monitoring and Control.	10	0	0	10
4	Unit 4	Project Time management, project activity- its definition, sequencing, resource and duration estimation, schedule development and control, Project cost estimation, budget and control. Project risk management.	6	0	0	6
5	Unit 5	Human resource management- Human aspects of Project Management, Human resource planning, acquire, develop and manage project team and stakeholders, performance reporting.	5	0	0	5
	Total		39	0	0	39

Text Books:

- [1] Heerkens, G. R. *Project Management*, McGraw-Hill, 2nd edition, 2013.
- [2] Gray, C. F., Larson, E. W. and Desai G. V. *Project Management -The Managerial Process*. McGraw Hill Education Private Limited, New Delhi, 4th edition, 2010.

References:

- [1] Chandra, P. *Project Preparation, Appraisal and Implementation*. Tata McGraw Hill Publishing Company, New Delhi, 7th edition, 2009.
- [2] Burke, Rory. *Project management - Planning and Control Techniques*. John Wiley & Sons, Inc., 5th edition, 2013.
- [3] Lientz, B. P. and Rea, K. P. *Project Management – for 21st Century*, Academic Press, 4th edition, 1995.
- [4] Maylor, H. *Project Management*. Pearson Education Limited. New Delhi, 3rd edition, 2003.

Evaluation Plan

Test No.	Marks	Exam Type	Duration (minutes)	To be completed within
Sessional Test I	10	Assignments/ written	-	As per the Tezpur University notified Academic Calendar
Mid-Semester examination	30	Written	90	
Sessional Test II	10	Quiz/Seminar/Case study	-	
End-Semester Examination	50	Written	120	
Total Marks	100			

All the examinations/tests will be held as per the Tezpur University notified Academic Calendar.

Pedagogy

Teaching -learning methods to be used:

- Lecture and Discussion
- Seminars and presentation
- Case studies/Problem solving sessions
- Assignments
- Class Tests/Quiz

Course Outcomes:

CO 1: Initiate projects with clearly identified scope, requirements, constraints, deliverables and stakeholders.

CO 2: Estimate and manage project risk

CO 3: Use structured methodology to address complexities in projects.

CO 4: Track projects with earned value management, milestone monitoring.