

Branch Name:	Mechanical / Civil /Information and Communication Technology / Artificial Intelligence and Data Science /Electrical Engineering
Program Code:	ET101/ET106/ ET107/ ET108/ ET109
Course Name:	Project Management
Course Code:	2ET1000502T
Pre-requisite Course:	Zeal to learn the subject

Course Objectives:

1. To discuss the project life cycle and build a successful project from pre-implementation to completion.
2. To introduce different project management tools and techniques

Teaching and Examination Scheme:

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								Total (Marks)
					Theory (Marks)				Practical (Marks)				
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
3	3	-	-	3	24	60	16	40	-	-	-	-	100

Course Contents:

Sr. No	Topic	Total Hours	Weightage (%)
1	Overview of Project Management: Verities of project, Project Features, Project Life Cycle – S-Curve, J-C	6	15
2	Project Selection: Project Identification and Screening – New ideas, Vision, Long-term objectives, SWOT Analysis (Strength, Weakness, Opportunities, Threats). Project Appraisal – Market Appraisal, Technical Appraisal, Economic Appraisal, Ecological Appraisal, and Financial Appraisal – Payback, Net Present Value (NPV), Internal Rate of Returns (IRR). Project Selection – Decision Matrix, Technique for Order Preference using Similarity to Ideal Solution (TOPSIS), Simple Additive Weighting (SAW).	14	25
3	Project Presentation: WBS, Project Network – Activity on Arrow (A-O-A), Activity on Node (A-O-N). Project Scheduling: Gant Chart, Critical Path Method (CPM), Project Evaluation & Review Technique (PERT).	6	15
4	Linear time cost trade-offs in project: Direct cost, indirect cost, Project crashing Resource Consideration – Profiling, Allocation, Leveling. Introduction to project management software: Primavera/ Microsoft project	6	20

5	Project Execution: Monitoring control cycle, Earned Value Analysis (EVA), Project Control – Physical control, Human control, financial control. Organizational and Behavioral Issues: Organizational Structure, Selection-Project Manager, Leadership Motivation, Communication, Risk Management. Project Termination: Extinction, Addition, Integration, Starvation.	10	25
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Assignment:

The students will have to solve at least five examples and related theory from each topic as an assignment/tutorial.

Reference Books:

1. Jack R. Meredith and Samuel J. Mantel, Jr. – ‘Project Management- A Managerial Approach’ Eighth Edition – John Wiley & Sons Inc – 2012.
2. Arun Kanda – ‘Project Management - A Life Cycle Approach’ PHI Learning Private Limited – 2011
3. “A Guide to Project Management Body of Knowledge” PMBOK GUIDE, Sixth edition, Project Management Institute – 2017
4. Ted Klastorin – ‘Project Management, Tools, and Trade-Offs’ – John Wiley – 2011

E-Resources:

- Project Management Institute (PMI)
- PMI Website
- ProjectManager.com
- ProjectManager Blog

Tools:

- Trello Website
- Asana Website
- Microsoft Project Website
- Jira Website

Course Learning Outcomes (CLO):

CLO	Description	Bloom's Taxonomy Level
CLO1	To Appraise the selection and initiation of individual projects and its portfolios in an enterprise.	5 Evaluate
CLO2	To Analyze the project planning activities that will predict project costs, time schedule, and quality.	4 analysis
CLO3	To Develop processes for successful resource allocation, communication, and risk management.	6 Create
CLO4	To Evaluate effective project execution and control techniques that results in successful project completion	5 Evaluate

Mapping of CLOs with POs & PSOs:

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CLO1	M	L	M	M	H				M		L	H	M	L
CLO2	M	L	L	M	M				L		L	M	M	L
CLO3	H	M	L	M	M				M		L	M	H	M
CLO4	H	H	M		H				M		L	H	H	H

H: High, M: Medium, L: Low