

GUJARAT TECHNOLOGICAL UNIVERSITY

CIVIL (TOWN & COUNTRY PLANNING) (48)

PROJECT PLANNING AND APPRAISAL

SUBJECT CODE: 2714809

SEMESTER: I

Type of course: Program Elective - I

Prerequisite: Basic understanding on project management and techniques of project planning & monitoring

Rationale: The subject helps understanding and applying the fundamental of project planning along with strategies of execution. It also helps in understanding the methods to appraise a proposal by techniques of checking feasibility

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P/studio		Theory Marks		Practical Marks		
			C	ESE(E)	PA (M)	PA (V)	PA (I)	
3	0	2	4	70	30	30	20	150

Content:

Sr. No.	Content	Total Hrs	% Weightage
1	Project Planning Introduction to Projects; Nature of planning projects; Project Life Cycle; Identification of projects, Project manager roles and responsibilities, basics of quantitative techniques useful in project planning, preparation and contents of DPR documents	4	7
2	Project Formulation and Appraisal Relationship between projects and planning issues including sectoral policy at: Local, State and National levels Project appraisal: Market analysis – Macro environment survey, survey methods, market characterization, demand forecasting; Technical Analysis – Magnitude, processes, materials, equipment, factors of production availability, implementation schedule; suitability of the plans, layout and design, location of the project; location analysis; supporting infrastructure requirements- Capital Budgeting – Estimation of costing of components; developing over project cost; Social cost benefit analysis – UNIDO, Merles, ZOPP/GOPP, etc.	20	37
3	Project Management and Implementation, and Project Evaluation and Monitoring Project characteristics - pitfalls in management of a project; Techniques of management; Planning milestones - responsibility charts and principle responsibility, principles of activity planning; Project Implementation – methods, hurdles, facilitative factors; Project culture: line management, steering committee, role of project manager; Project Control: cost and time, quality - ISI standards and its application to Indian context; Introduction to Project Management Software (Ms Projects) and its usage. Types of evaluation - concurrent, ex-ante and ex-post. Methods of evaluation, techniques of evaluation, end results, Presentation of	20	37

	evaluation findings, Techniques of Monitoring of Development Works.		
4	Regulatory Frameworks Governing Projects National Rehabilitation and Resettlement Policy (2007) - Social Impact mitigation; National Environmental Policy (2006) – Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP), PPP based projects, guidelines for formulation of project using PPP mode, standard procedure of formulating tender contract documents for the government and multilateral organizations.	10	19

Reference Books:

1. R. Burke, “Project Management: Planning and Control Techniques”, Fourth Edition, Halsted/Wiley, 2004/2009
2. N. D. Vohra, “Quantitative Techniques in Management” ,Tata Mc Graw Hill
3. Prof. Abdul Matheen, “Comprehensive Project Management”, Laxmi Publications (P) Ltd, New Delhi
4. J. C. Pant, “Project Management CPM, PERT GERT and Linear Programming”, Jain publications, New Delhi
5. S. K. Bhattacharjee, “Fundamentals of PERT/ CPM and Project Management”, Khanna Publishers, New Delhi
6. R. P. Rustagi, “Financial Analysis and Financial Management”; Third Edition, Sultan Chand and Sons, New Delhi (ISBN: 81-8054-444-3)

Course Outcome:

After learning the course the students should be able to:

Understanding on basic and fundamental concepts with application on different type of projects in relevance to planning, execution, controlling, monitoring and evaluation

List of Experiments:

1. Different scale of projects and WBS preparation
2. Structuring and estimating time on developed WBS
3. Planning for project (allocation of time using software)
4. Project resources allocation
5. Techniques for updating the project in real time
6. Project Feasibility – costs & financial
7. Project feasibility – social
8. Project feasibility – environmental
9. Report formulation
10. Preparation of DPR content for a selected project

Assignment work:

Students to solve problems answer the questions (self-learning) encompassing the entire of the syllabus, submit the assignment sets in hand written hard copy. Students to be assigned a topic of recent development and prepare a “Graduate Report” followed by submitting the same in hard copy and presentation

Major Equipment:

Computers with higher configuration and internet, server

List of Open Source Software/learning website:

- M. S. Project (Trial software run from Microsoft)
- Primavera (Trial)
- Open Source: ProjectLibre (<http://www.projectlibre.org/>)
- Open source web application for project planning, monitoring and control – Libreplan (<http://www.libreplan.com/>)
-]Open Project[(<http://www.project-open.com/>)
- Redmine – (<http://www.redmine.org/>)
- Open Project (<https://www.openproject.org/>)
- Ministry of Finance, GoI, PPP in India (<http://pppinindia.com/>) for guidelines and documentation on PPP based Project in India
- Ministry of Finance, GoI, PPP India Database (<http://www.pppindiadatabase.com/>)
- Project Management Institute – PMI (<http://www.pmi.org/Knowledge-Center.aspx>)