
PROJECT MANAGEMENT(Open Elective-2)

Course Code: IMOE02

Credit: 3:0:0

Prerequisite: Nil

Contact Hours: 42

Course Coordinator(s): Sudheer D Kulkarni / Dr. M R Shivakumar

Course Content

Unit I

Concepts of Project Management: Concepts of projects, characteristics of project, Phases of project life cycle, Tools and techniques for project management, Computer based project management.

Project planning and estimating: Feasibility report, Preparation of cost estimation, Evaluation of the project profitability.

Unit II

Organizing Human Resources and Contracting: Delegation, Skills / abilities required for project manager, Authorities and responsibilities of project manager, Project organization, Contracts, Tendering and Selection of contractors.

Unit III

Tools and techniques of project management: Bar (GANTT) chart, Networks – PERT and CPM, Applications, Basic steps in PERT/CPM, Rules for drawing network diagram, Labelling, Time estimates, Critical Path Method, Project Evaluation and Review Technique (PERT).

Unit IV

Performance measures in Project Management: Performance indicators, Performance Improvement, Project management and environment.

Risk Analysis: Sources, measures and perspectives on risk, sensitivity analysis, scenario analysis, breakeven analysis, Hiller model, simulation analysis, decision tree analysis, managing risk, project selection under risk.

Unit V

Financing of Projects: Capital structure, menu of financing, equity capital, internal accruals, term loans, debentures, working capital advance, miscellaneous sources, raising of venture capital, raising capital in international markets.

Text books

1. Project Management: Choudhry S., Tata McGraw-Hill,2010
2. Projects: Planning, Analysis, Financing, Implementation, and Review- Prasanna Chandra, 5th edition, Tata McGraw-Hill publishing company limited,2005.
3. Operations Research- N V R Naidu, G. Rajendra, T Krishna kumar, I K international Publishing house, Pvt. Ltd. 2011.
4. Operations Research and Engineering Management, S. D. Sharma, Kedar Nath Ram Nath & Co., 2010

References

1. A Guide to the Project Management Body of knowledge PMBOK Guide 6th Edition, Project Management Institute 2017.
2. Project management a system approach to planning scheduling and controlling- Harold Kerzner, CBS Publisher and distributors, 2002.
3. A management guide to PERT and CPM- WEIST and LEVY Eastern Economy of PH 2002.
4. T R Banga, N K Agarwal and S C Sharma -Industrial engineering and Management Sciences, -KhannaPublishers

Course outcomes

At the end of the course, student will be able to

1. Prepare project plan by applying the concepts of project management (PO- 6,7,10,11&PSO 2,3)
2. Organize and manage the resources of projects (PO- 6,9,11&PSO 3)
3. Apply tools and techniques used in project management (PO- 1,2,3,11 &PSO 1,2)
4. Identify, analyze, quantify and mitigate risks (PO- 11 &PSO 3)
5. Evaluate the sources of finance (PO- 11 &PSO 3)

