Effective Planning and Scheduling

Duration: 2 Days | 16 Hours

Day 1 – Project Scheduling Fundamentals, WBS, Estimation, and Resource Planning

Module 1: Introduction to Project Scheduling

- Course overview and learning objectives
- Understanding projects and project management
- Project life cycle and scheduling fundamentals
- Importance of project schedules
- Key elements of effective project scheduling

Module 2: Work Breakdown Structure (WBS)

- Introduction to Work Breakdown Structure
- Purpose and role of WBS in project planning
- WBS formats and numbering systems
- Steps to create an effective WBS
- Identifying project deliverables and activities
- Practical Exercise: Creating a WBS for a camping trip project

Module 3: Activity Duration Estimation and Task Dependencies

- Understanding activity duration estimation
- Techniques and considerations for estimating task durations
- Estimating overall project duration
- Identifying task relationships and dependencies
- Understanding the four types of task dependencies
- Practical Exercise: Estimating activities and identifying dependencies using the camping case study

Module 4: Resource Planning and Allocation

- Understanding project resources
- Introduction to Resource Breakdown Structure (RBS)
- Aligning resources with project activities
- Resource scheduling techniques
- Resource allocation and resource leveling
- Case Study: Resource allocation for project activities

Day 2 – Advanced Scheduling Techniques, Risk Management, and Schedule Monitoring

Module 5: Project Planning and Scheduling Techniques

- Introduction to project network diagrams
- Constructing activity network diagrams
- Understanding the Critical Path Method (CPM)
- Calculating earliest start and earliest finish times
- Calculating latest start and latest finish times
- Identifying slack and critical activities

- Introduction to Program Evaluation and Review Technique (PERT)
- Using PERT for activity duration estimation
- Creating and interpreting Gantt charts
- Practical Exercise: Developing a network diagram and calculating the critical path

Module 6: Scheduling Software and Risk Management

- Overview of project scheduling software
- Benefits and limitations of scheduling tools
- Understanding uncertainty in project schedules
- Identifying project scheduling risks
- Risk assessment and mitigation planning
- Incorporating risk considerations into project schedules

Module 7: Communication Planning and Schedule Development

- Importance of communication in project scheduling
- Four key elements of effective communication
- Communication strategies for project stakeholders
- Developing a project communication plan
- Integrating WBS, dependencies, estimates, and resources
- Creating a realistic and viable project schedule
- Identifying common scheduling challenges and solutions
- Practical Exercise: Preparing a project communication plan and workable schedule

Module 8: Schedule Monitoring, Updating, and Workshop Wrap-Up

- Monitoring project schedule progress
- Updating schedules based on project changes
- Managing schedule deviations
- Maintaining schedule accuracy
- Best practices for ongoing schedule management
- Workshop review and participant questions
- Developing an individual action plan