# Project Quality Management Masterclass

## Training program

## Introduction:

In today's fiercely competitive and fast changing business environment, delivery of high quality project outcomes is the key to organizations' survival and prosperity. Managers are constantly seeking to produce good quality results while reducing costs and minimizing delays. Structured to offer a comprehensive overview of quality management in projects with careful balance of quantitative and qualitative considerations, this Project Quality Management course will equip participants with the essential management skills, tools and methodologies required for effective delivery of high quality project outcomes.

## This course will feature:

- An introduction to statistical process control tools
- An overview of typical project problems and strategies for their mitigation
- An overview of key project quality management concepts
- The concepts, tools and techniques involved in quality planning and control in conjunction with the Critical Path Method and other proven project management methodologies
- An overall focus on benefit realization from project conception to completion

## Who Should Attend?

Construction Engineers, Senior Construction Engineers, Construction Supervisors, Construction General Supervisors, Construction Project Managers, Engineering Technologists, Supervision Engineer, Inspection Engineers, Civil Inspectors, Foremen, Design Structural Engineers, Planners, Structural Engineers, Material Specialists, Quality Control and Quality Assurance Experts, Architects, Supervision Engineers, Team Leaders, Site Officers and Managers, Mechanical Engineers, Technical Professionals, Field Production Supervisor, Operation Engineers, Clients Representatives, professionals who are involved in or manage internal and external projects both in the private and public sector. Some prior knowledge of quantitative analysis techniques is beneficial, however not required as all tools and methodologies will be covered starting from the basics

## Course Objectives:

### By the end of this course, delegates will be able to:

- Apply basic statistical quality control concepts
- Implement effective quality assurance and control
- Be ready and conduct quality audits
- Define what quality means
- Understand the importance of deliberate quality management processes in projects and integrate quality in project initiation, planning, execution, control and completion
- Identify and document quality requirements and standards for the project and product
- Apply cost benefit analysis, cause and effect diagrams, control charts and other tools in project planning and control
- Effectively manage stakeholders to ensure their satisfaction with the project results
- Improve the quality climate and culture across the project life cycle

## Course Outline:

- Understanding Project Quality Management and Imbedding Quality in Project Initiation
- Introduction to quality management in projects and operations
- Definition of quality: quality vs grade, accuracy vs precision
- Quality Management concepts: principles, policy, objectives, planning, assurance, control, and audit
- Cost of quality
- Quality management and project life cycle
- PMBOK quality management knowledge area
- Quality at the project initiation stage: defining projects, collecting requirements, and planning scope management
- Project charter, project scope and product scope
- Business case essentials: focus of benefits
- Stakeholder management as a key to high quality outcomes
- Management of project constraints, priorities and trade-offs
- Planning for Quality
- Work Breakdown Structure (WBS), Requirement Traceability Matrix (RTM)
- Scheduling: Critical Path Method (CPM) and Gantt Chart
- Allocation of resources to achieve outcomes on time
- Basic statistics for project planning and control
- Estimating and budgeting
- Project quality planning
- Quality metrics and checklists
- Project Plan
- Quality Assurance and Control
- Quality in the project execution phase
- Key quality principles; responsibility for quality
- Quality standards and metrics

- Project monitoring control and quality assurance tools; verification and validation processes
- Introduction to Statistical Process Control (SPC) tools: Pareto analysis, cause-and-effect diagrams, histograms, trend analysis, scatter diagrams, process control charts, process capability, etc.
- Managing scope creep, hope creep, effort creep, feature creep and other “creeps”
- Correcting project delays
- Quality audits