

Training Courses Offered

ISO 9001 Courses

Course Title: Introduction to ISO 9001:2000 – Two Hours

Course Description and Objectives: This course is intended to introduce employees to the basics of an ISO 9001:2000 based Quality Management System.

Attendees Will Learn:

- The benefits of a Quality Management System
- Why customer focus is important
- Quality Policy – What it is and why have one
- Quality Objectives – What they are and why have them
- Corrective action system basics
- What to expect of internal and external audits

Condensed Course Outline:

- Who is ISO?
 - Why implement an ISO 9001 Quality Management System?
 - Customer focus
 - Quality Policy
 - Quality Objectives
 - Corrective Action
 - Internal and External Audits
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Course Title: ISO 9001:2000 Management Overview – Eight Hours

Course Description and Objectives: A course designed for senior to mid-level managers to be delivered after the commitment to implement their quality management system, but before implementation has begun.

Participants Will Learn:

- High level requirements of ISO 9001:2000
- Management Responsibility – according to ISO 9001:2000
- Management commitment – what it should look like
- Strategies for setting quality objectives
- Implementation strategies
- What an effective corrective action system should look like
- How to have a positive ROI from your QMS

Course Title: ISO 9000:2000 Internal Auditor Class – Two Day

Course Description and Objectives: This course is designed for all employees tasked with conducting internal audits.

Participants Will Learn:

- The four phases of an audit
- How to make audits value added
- How to interpret the standard from the point of view of an auditor
- How to perform process audits
- How to gather objective evidence
- How to conduct successful audit interviews

Course Outline:

1 Introduction to ISO 9001:2000

Introduction and Overview
ISO 9000 Roots
Conformance to Performance
Why Change a Good Thing?
The Eight Quality Management Principles
The ISO 9000 Documents

2 An Introduction To Auditing

Objectives of the Course
What is an Audit?
Types of Audits
Common Elements of Audits
Internal Audits
How Internal Audit Reports Are Used

3 ISO 19011: A Guideline For Auditing Quality And/Or Environmental Management Systems

4 The ISO 9001 Standard

Process Model
System Model
Interpreting the Standard
Required Documentation
Required Quality Records
Documenting the Quality Management System

5 Auditing ISO 9001:2000

- Phase 1: Audit Preparation
- Phase 2: Conducting the Audit
 - Opening Meeting
 - Collecting Evidence
 - Audit Interviews
 - Documenting System Nonconformities
 - Closing Meeting
- Phase 3: Audit Reporting
 - The Formal Audit Report
- Phase 4: Closure
 - Corrective Action Follow Up
 - Documenting the Corrective Action
 - Investigating the Root Cause of the Nonconformity
 - Implementing the Corrective and Preventive Actions
 - Verifying the Corrective and Preventive Actions

6. Group Exercises

- 2-3 case studies to practice identifying nonconformances and working as part of an audit team

Course Title: ISO 9000:2000 Internal Auditor Class – Three Day

Condensed Course Outline: Includes all subjects covered in the sixteen hour course plus eight hours of practice audits on your plant floor with the class participants.

ISO 14001 Courses

Course Title: Introduction to ISO 14001 – Two Hour

Course Description and Objectives: This course is intended to introduce employees to the basics of an ISO 14001-based Environmental Management System.

Participants Will Learn:

- The benefits of a Environmental Management System
- Why an environmental focus is important
- Why have a environmental policy
- Environmental Objectives and Targets – What they are and why have them
- Corrective action system basics
- What to expect of internal and internal audits

Condensed Course Outline:

- Who is ISO?
 - Why implement an ISO 14001 Environmental Management System?
 - Environmental focus – Why it's important
 - Environmental Policy
 - Environmental Aspects and Impacts
 - Environmental Objectives and Targets
 - Corrective Action
 - Internal and External Audits
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Course Title: ISO 14001 Management Overview – Eight Hour

Course Description and Objectives: This course is designed for senior to mid-level managers to be delivered after the commitment to implement their environmental management system, but before implementation has begun.

Participants Will Learn:

- High level requirements of ISO 14001
 - Management Responsibility – according to ISO 14001
 - Management commitment – what it should look like
 - Strategies for setting environmental objectives and targets
 - What an effective corrective action system should look like
 - Implementation strategies
 - How to have a positive ROI from your EMS
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Course Title: ISO 14001 Internal Auditor Class – Two Day

Course Description and Objectives: A sixteen hour course designed for all employees tasked with conducting internal audits.

Participants Will Learn:

- The four phases of an audit
- How to make audits value added
- How to interpret the standard from the point of view of an auditor
- How to gather objective evidence
- How to conduct successful audit interviews

Course Outline:

1 Background of the Standards

- ISO and the standardization process
- Development of the ISO 14000 Series
- The Emergence of EMS standards
- Status of the standards in the series

2 Relationships and Application

- The Development of EMS Standards
- EMS Standards and other Environmental Management Tools
- Commonalties between ISO 14001 and ISO 9001

3 Understanding the Requirements of the Standard

4 ISO 19011: a guideline for auditing quality and/or environmental management systems

5 Auditing the EMS

- Four Phases of Auditing
- Phase 1 Audit Preparation
- Phase 2 Conducting the Audit
- Phase 3 The Formal Audit Report
- Phase 4 Closure
- Internal Audits

6 Group Exercises

2-3 case studies to practice identifying nonconformances and working as part of an audit team.

Course Title: ISO 14001 Internal Auditor Class – Three Day

Course Description and Objectives: A twenty-four hour course designed for all employees tasked with conducting internal audits.

Condensed Course Outline: Includes all subjects covered in the sixteen hour course plus eight hours of practice audits on your plant floor with the class participants.

Lean Manufacturing Courses

Course Title: Principles of Lean Manufacturing – Three Day

Course Description and Objectives: A twenty-four hour course providing an overview of Lean Manufacturing. This course intended for the core team who will be the primary implementers.

Participants Will Learn:

- Value vs non-value added activities
- The place of organizational culture in a successful lean implementation

SYSTEMS Quality Consulting Training Courses

- Lean is about problem-solving and continuous improvement - how to support it
- What management commitment looks like in a lean organization
- What enlightened experimentation means
- That there is more to lean than the lean tools
- Barriers to implementing lean and what to do about them

Condensed Course Outline:

- History of Lean Manufacturing: Henry Ford and Toyota Production Systems
 - Seven Lean Wastes
 - Five Lean Thinking principles
 - Value Stream Mapping
 - 5S/Visual Management
 - Setup Time Reduction
 - Standard Work
 - Flow
 - Takt Time
 - Kanban
 - How to involve your suppliers successfully
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Course Title: Lean Manufacturing Management Overview – One Day

Course Description and Objectives: This course is designed to provide senior management an understanding of what it takes to implement Lean Manufacturing and become a Lean Enterprise.

Participants Will Learn:

- What management commitment looking like in a lean enterprise
- What continuous improvement really looks like
- Why enlightened experimentation is critical to success in a lean organization
- Barriers to implementing lean and what to do about them
- What to do about “concrete heads”
- Lean about setting and achieving goals at all levels of the organization
- Company culture and lean manufacturing

Condensed Course Outline: A brief overview of the lean manufacturing tools, initiating and sustaining change

Course Title: Value Stream Mapping – Two Day

Course Description and Objectives: This course is for team members who will be participating in value stream mapping events

Participants Will Learn:

- Value vs non-value adding activities
 - How to create a current state map
 - How to create a future state map
 - How to create the implementation plan
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Course Title: 5S/Visual Management – Eight Hour

Course Description and Objectives: A course on 5S as a tool for identifying and eliminating waste. Visual management as a tool for eliminating waste.

Participants Will Learn:

- The benefits of 5S
 - How to conduct and participate in a 5S “Event”
 - 5S Auditing
 - Visual Management basics
 - How to sustain the 5S discipline
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Related Courses

Course Title: Process Management – Three Day

Course Description and Objectives: This is a hands-on workshop that includes exercises to demonstrate process control and process improvement.

Participants Will Learn:

- What a “process approach” means
- How to identify process inputs, outputs, suppliers and customers
- How to identify sources of variation
- Managing and reducing variation in processes
- Process improvement tools

Condensed Course Outline:

Standards of Measures and Performance

- Theory of variation
- Cycle Time Reduction
- Trend Analysis
- Measurement Issues

Process Improvement

- Quality control tools
- Quality Management and Planning Tools
- Cost of Quality
- PDCA Cycle
- Identifying areas for improvement
- Forming process improvement teams
- Kaizen Methods

Concurrent Engineering and Process Mapping

- Principles of Product/Process Design
- Taguchi Methods
- Concurrent Engineering
- Process Mapping
- Poka-yokes, kanbans and other process tools

Supplier Management

- Supplier Selection
- Supplier Certification
- Customer-supplier Relations

Course Title: Cost of Quality – Two Day

Course Description and Objectives: This hands-on workshop starts with a thorough review of cost of quality concepts – including history of the development of Quality Costs, goals of a quality cost system, the quality/accounting interface, the management of quality costs

Participants Will Learn:

- Cost of Quality Concepts
 - Quality Cost Definitions
 - How to Implement a Cost of Quality Program
 - How to Use Quality Costs for Decision Making
 - Quality Improvement based On Quality Costs
 - Cost of Quality Reductions
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Course Title: Corrective/Preventive Action – Eight Hour

Course Description and Objectives: This course covers setting up and maintaining a effective corrective and preventive action system

Participants Will Learn:

- How to initiate corrective action
 - Setting criteria for documenting nonconformances
 - Setting criteria for taking corrective action
 - Effective root cause analysis
 - How to conduct proper follow-up activities
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Course Title: Team Problem Solving – Three Day

Course Description and Objectives: A course designed for training cross-functional teams to find root cause of problems uncovered through the nonconformance/corrective action system. This course supports Lean Manufacturing and ISO 9001.

Participants Will Learn:

- Identifying symptoms versus problems
 - How to create a problem definition statement
 - WV problem solving model
 - Problem solving team roles
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Course Title: Introductory Statistical Process Control – Two Day

Course Description and Objectives: This hands on workshop begins with the basics of Statistics as it applies to SPC - however it is NOT the typical academic approach to Statistics, rather it is more application focused. Data is created in class via business and process simulations to introduce the participants to the messy world of dealing with actual data. This enables the participants get practical experience in treatment of data, and also gain insight into important precautions before such data is used in SPC.

Participants Will Learn:

- Statistical Analysis Methods
- Pre-requisites for SPC
- Role of SPC in Quality
- Constructing and Interpreting IMR and X Bar R Charts
- Introduction to Common and Special Causes
- Conceptual Understanding of C, U, P, and NP Charts
- Concept of Process Capability

Condensed Course Outline:

- Quality - Principles and Concepts
- Theory of Variation
- Role of SPC in Quality
- Types of data
- Measures of center and dispersion
- Importance of Measurement System
- Precautions before starting SPC
- Types of Data and Types of SPC Charts
- SPC Charts (X Bar-R and IMR) for Continuous Variables Data
- Concepts in Treatment of Attribute Variables Data
- Introduction to Process Capability

Course Title: Intermediate Statistical Process Control – Two Day

Course Description and Objectives: This hands on workshop begins from the foundations laid with SPC Introduction. The Statistics behind Control Charts are covered rigorously so that the participants understand the rationale for the Control Limits and Rules for Control Charts. Myths about Control Charts are discussed, and dispelled using actual data from process operations. Organization level decision processes that go with Control Charts are explored at length, to ensure participants know the short term and long term impact of the decisions they will make.

Participants Will Learn:

- Setting up proper Data Collection Procedures
- Cleanup of Data (Validation, and Outlier Removal)
- Construction and Interpretation of (all types of) Control Charts
- Control Chart Rules and Statistical Analysis
- Common Causes vs. Special Causes and Corrective Actions
- Guidelines on when to change Control Limits
- Selection of the Right Chart
- Calculating Process Capability, and Predicting Defect Rates

Condensed Course Outline:

- Precautions in Data Collection
- Understanding Measurement System Error
- Types of SPC Charts
- Charting Continuous Variables Data with SPC (X Bar and IMR)
- Charting with Attribute Variables Data for Defects (C, U Charts)
- Charting with Attribute Variables Data for Defectives (P, NP Charts)
- Control Chart Interpretation, Rules, and their Rationale
- Common Errors in Chart Selection and Usage
- Process Capability - Computation and Application