

## Six Sigma DMAIC Training for Process Improvement

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### **BPI 100 – STRUCTURED PROBLEM SOLVING for Transactional Process Improvement**

**Aim** -The purpose of this course is to introduce participants to the fundamentals necessary for process improvement by providing a solid foundation in continuous improvement concepts, structured problem-solving techniques, and how to use teams to improve quality and productivity.

**Course Description** - Includes: an introduction to the **Seven Steps to Improved Processes** using structured problem-solving, process measurement and control, and basic continuous improvement tools.

### **BPI 101 - VALUE STREAM MANAGEMENT for the Lean Office**

**Aim** -The purpose of this course is to introduce people to the fundamentals necessary for Value Stream Management by providing a solid foundation in the application of the **Kaizen Team Approach** utilizing **Lean Enterprise Principles**.

**Course Description** – It is an 8-step process integrating tools and techniques derived from the Toyota Production System into a planning system for Lean implementation. It includes process mapping and workflow analysis, continuous flow, level production, and the pull / kanban system.

### **BPI 102 - 5S WORKPLACE ORGANIZATION for the LEAN OFFICE**

**Aim** -The purpose of this course is to introduce people to the fundamentals necessary for a **Lean Office Environment** by providing a solid foundation in the application of the **Kaizen Team Approach** utilizing **5S Improvement Techniques**.

**Course Description** – It is a 7-phase process integrating tools and techniques derived from the 5S Workplace Organization System. It includes project identification, planning, and a **5S Lean Office Implementation Kaizen**.

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### DOE 105 - Minitab SIX SIGMA DESIGN of EXPERIMENTS

**Aim** - The purpose of this course is to introduce design, process, production, and quality control personnel to advanced statistical techniques used to carry out effective programs of industrial experimentation. The primary objective is to obtain results that are interpretable, understandable, and easily communicated to others.

**Course Description** - A layman's "design of experiments" course covering the philosophy behind DOE, and design of experiments utilizing the design and production oriented **Six Sigma Approach** within the **Six Sigma DMAIC Method**.

### EI 100 - TEAM-BUILDING - The Leadership Alliance

**Aim** -The purpose of this seminar is to introduce participants to the foundation necessary for "total improvement leadership" by providing a solid background in the application of team-building.

**Course Description** - Includes: types of teams, work team roles, team functions, fundamental communication and leadership skills, the meeting process, record-keeping, consensus decision making, and working together in a cooperative fashion.

### EI 102 - MINITAB GREEN BELT TRAINING for SIX SIGMA PROCESS IMPROVEMENT

**Aim**- The purpose of this course is to introduce the participants to the principles of how **Six Sigma Statistics** are used to manage processes in business and industry.

**Course Description:** Descriptive statistics, probability distributions, estimation, hypothesis testing, regression, and contingency tables. Interpretation and misinterpretation of statistical techniques.

### EI 104 - PROJECT MANAGEMENT

**Aim** - The purpose of this seminar is to introduce participants to the foundation necessary for project management by providing a solid background in the process for managing projects with project teams. Project types include process / quality improvement, process reengineering, and new product, service or process development and installation.

**Course Description** - Includes introduction to creating successful team projects, how to create a detailed project charter and a project plan, how to work together as a team while doing the project, and how to close out the project.

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### QFD 100 - COMPETITIVE COMPARISONS and BENCHMARKING

**Aim** - The purpose of this seminar is to provide participants with a working knowledge of the House of Quality Matrix and its applications in manufacturing and service organizations.

**Course Description** - This seminar discusses ways in which many service and manufacturing organizations are involving the customer and the producer at the beginning of the product / service design phase. Includes measuring customer satisfaction, benchmarking competitors, and constructing a House of Quality Matrix to analyze and prioritize this information.

### QFD 101 - ADVANCED PRODUCT QUALITY PLANNING and CONTROL PLAN

**Aim:** To introduce management, engineering, supervision and technical personnel to the fundamentals necessary for "managing for quality" through an APQP system.

**Course Description:** includes fundamental concepts of quality control management, an overview of quality function deployment, development of design and process FMEA's, preparation of a control plan, and the utilization of the APQP system for preparing the production part approval process. **12 hours.**

### QFD 102 - POTENTIAL FAILURE MODE and EFFECTS ANALYSIS

**Aim:** To introduce management, engineering, supervision and technical personnel to the fundamentals necessary for critiquing product designs and production processes for potential failure modes.

**Course Description:** includes fundamental concepts of failure mode analysis, associated effects of the failure modes and their root cause analysis, and a risk prioritization of each failure mode and its associated effects through the use of severity, occurrence, and detection rankings.

### SPC 101 – Minitab MEASUREMENT SYSTEMS ANALYSIS

**Aim** - The purpose of this seminar is to introduce people to the fundamentals necessary for conducting a measurement systems analysis to determine the quality of measurement data.

**Course Description** - Includes statistical properties of measurement systems, the use of standards, general guidelines, types of measurement system variation, measurement system discrimination, and the analysis of a measurement system using **Minitab** software.

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### SPC 103 – Minitab SPC CONTROL CHARTING & CAPABILITY STUDIES

**Aim** - The purpose of this course is to introduce participants to the fundamentals necessary for "statistical thinking" by providing a solid grounding in quality concepts and the application of control charting and capability studies.

**Course Description** - Includes an introduction to continual improvement philosophy; statistical process control using variables and attribute charts; and process capability studies.

### TIM 102 - STRATEGIC PLANNING for quality, productivity & competitive position

**Aim:** To introduce planning strategies to the Top Management Staff and/or the Steering Committee for a continuous improvement environment.

**Course Description:** Covers fundamental attributes of a total improvement environment, how to start a TIM program, and planning for continuous quality and productivity improvement through policy deployment.

### TIM 104 – MEASURING COST of (POOR) QUALITY

**Aim:** The purpose of this seminar is to learn the principles, implementation, and use of quality costs.

**Course Description:** Includes: basic quality cost philosophy and issues, the fundamentals of the quality cost approach, how to implement a quality cost system, how to use quality cost for justification for change, and linking quality costs to performance improvement results.

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