



Six Sigma Green Belt-Information Technology

Module 1 – The Beginning of Six Sigma

Introduction to Six Sigma Green Belt*

What is Six Sigma?

The History of Six Sigma

Prominent Figures in Six Sigma

DMAIC Methodology Overview*

The Project Charter*

Module 2 – Data Collection Plans, Part I

The Project Scope of a Team*

Team Dynamics

Paradigm Shifts*

Determining Customers, Needs and Requirements*

Quality Function Deployment and the House of Quality*

Critical to Quality Tree and Kano Model

Process Mapping and SIPOC*

Module 3 – Data Collection Plans, Part II

Data Collection Plan – Part I*

Data Collection Plan – Part II

Data Collection Plan – Part III

Calculating Baseline Sigma*

Quincunx Process Demonstration

Types of Data*

Module 4 – Root Cause Analysis

Basic Data Analysis*

Basic Process Analysis*

The Big Picture*

Root Cause Analysis*

Hypothesis Testing*

Module 5 – 7M Tools

Measures of Central Tendency

Concept of Standard Deviation – Part I

Concept of Standard Deviation – Part II

Determining Project Solutions*

Prioritization Matrix

Affinity Diagrams

Metrics

7M Tools

Interrelationship Diagrams

Module 6 – Control Charts

QxA=E*

Maintaining Solutions*



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- Introduction to Control Charts*
- Control Charts Conceptually
- Control Chart Construction – Part I
- Control Chart Construction – Part II
- XmR Chart
- Pre-Control
- Attribute Charts – p Charts*
- Other Attribute Charts – np, c, and u
- Module 7 – Process Capability
 - Process Capability – Part I*
 - Process Capability – Part II*
 - Process Capability – Part III*
 - Distributions – Part I
 - Distributions – Part II
 - Distributions – Part III
 - Reliability
 - Weibull Distribution
 - Chi Square Distribution
 - Multi-Vari
 - Point and Interval Estimation
 - FMEA and DOE*
- Module 8 – Other Tools and Techniques
 - Design of Experiments – Part I
 - Design of Experiments – Part II
 - Design of Experiments – Part III
 - Building Charts
 - Ten Questions Regarding Six Sigma*
 - Course Wrap-Up

* Additional Information Technology lecture material