



Motorola Design for Six Sigma® Green Belt Training and Certification Program

Program Participants

Participants will learn a structured methodology and comprehensive set of tools specifically for new product development. Product engineers are ideal candidates for this program. Candidates do not necessarily have to be certified Green Belts or Black Belts with experience applying the DMAIC methodology to improve existing processes or products.

Program Overview

Design for Six Sigma (DFSS) is a methodology for driving breakthrough performance in new product development.

This program is structured around the DMADV* model—a five phase model similar to the more traditional DMAIC model. DMADV is about “designing in” quality, cost savings and faster time-to-market. To achieve this, the DMADV model places special emphasis on the following:

- . Understanding and quantifying market needs and customer needs
- . Translating customer needs into product specifications
- . Quantifying allowable variability
- . Delivering innovative design solutions
- . Applying robust design techniques

Program Length

6 days

Software

Participants need to bring a laptop computer preloaded with Excel and the trial version of Crystal Ball

Location

This program is available either as open enrollment training at a Motorola site or as onsite training at a location of your choice.

Our Design for Six Sigma program provides a practical approach to product development projects. The program focuses on implementing a defined Product Development Process and applying relevant DMADV tools in each stage to launch new products in support of the established business case on time, within budget, and at unprecedented quality levels.



*The **DMADV** model is a systematic approach to product development, it consists of five phases:

- . **D**efine Requirements
- . **M**easure Performance
- . **A**nalyze Relationships
- . **D**esign Solution
- . **V**erify Functionality

Motorola Design for Six Sigma® Green Belt Training and Certification Program Content

Define Requirements - What do our customers need?

Defining Business Opportunity
Introduction to Monte Carlo Simulation
Defining Customer Requirements
Basic Statistics
Define Summary

Measure Performance - What are our metrics?

Identify Functional Requirements
Evaluate Measurement Systems
Perform Process Capability
Measure Summary

Analyze Relationship - How can we meet customer requirements?

Quantify Impact of Design Factors on Critical Customer Requirements (CCR)
Quantify Issues & Determine Significant Factors
Quantify Design Relationships
Identify & Prevent Potential Design Process Failure Modes
Identify Design Alternatives
Analyze Summary

Design Solution - What are our design alternatives?

Validate / Refine Transfer Function Models
Making our Design Robust
Tolerance Analysis
Design Summary

Verify Functionality - How will we demonstrate success?

Predict Product Life Characteristic
System Reliability
Demonstrate Attainment of Design Goals and Critical to Quality (CTQ)
Demonstrate CCR Fulfillment
Verify Summary

Certification Process

The certification process for Green Belt consists of three steps:

1. Complete the Green Belt training
2. Pass the Green Belt test
3. Lead and successfully complete one Green Belt project. Project will be assessed for business impact (financial and/or "soft-dollar" impact) as well as Six Sigma skill demonstration



亞卓國際顧問股份有限公司
http://www.agitek.com.tw
AgiTek International Consulting, Inc.

http://www.agitek.com.tw/
6F, Tsing-Hua Info. Building, No.352, Kuang-Fu Rd., Sec. 2, Hsinchu,
Taiwan 30071, R.O.C.
TEL : 886-3-572-3200 FAX : 886-3-572-3210

A Global Network of Innovation and Intelligence