

AFOES CONSULTANTS

Management System Consultants & Educators



Course Ref: 98055

Six Sigma Black Belt Certification

Program Overview

In the course of your Six Sigma Black Belt training, you study the five-phase **DMAIC** approach in detail, using a simulation experience as the foundation along with a combination of informal lecture, small group breakout sessions, and hands-on practice.

Define - Six Sigma Black Belt participants gain working knowledge of critical tools to ensure that a project is well defined in scope, expectations, resources, and timeline.

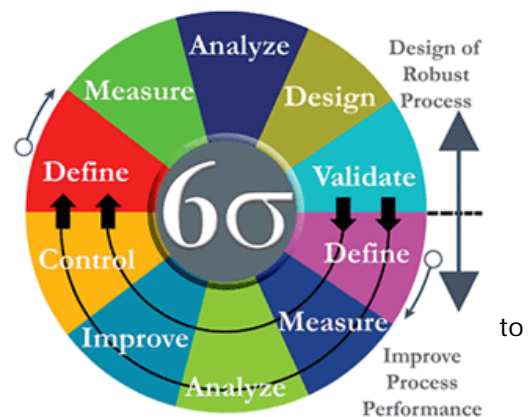
Measure - Six Sigma Black Belt participants learn and practice employing tools to quantify the "problem" using actual data.

Analyze - Six Sigma Black Belt participants learn analyze the Six Sigma process map and apply statistical tools to validate root causes of problems.

Improve - Six Sigma Black Belt participants are introduced to various methods of solution identification, prioritization, and implementation.

Control - Six Sigma Black Belt participants develop process control systems to ensure that the process does not revert to the "old way" over time. Six Black Belt participants enlist the support of process owners to insure long term process success.

Presented in a just-in-time fashion, the course is scheduled to allow participants to learn the improvement tools at the pace their projects require them.



AFOES CONSULTANTS

Management System Consultants & Educators



Certification Process Includes:

Completion of 1- week training program - 100% attendance -

Written final exam with a minimum passing score of 80%

Project completion - Project must be completed within 3months of completion of training - Must obtain results as stated in project charter - Minimum savings of 75k or an 80% reduction in defects

Project defense - Demonstrate practical application of DMAIC methodology - Demonstrate proper use of Six Sigma tools and techniques.



Prerequisites

Participants will be expected to arrive at the training with a process improvement project already identified (and approved), which can be expected to generate at least 75k in savings for the company, a 10x reduction in defects, or both.

Who Should Attend

This course is designed for individuals wishing to become certified Black Belts.

AFOES CONSULTANTS

Management System Consultants & Educators



Six Sigma Features

- Access to course leader with extensive project experience
- Project consulting support during each training week
- Included up to two hours of project start up assistance by voice and email prior first week
- Included up to two hours of project start up assistance by voice and email between weeks
- Certification review of **BLACK** Belt project
- Certificate after project acceptance
- Generic Project examples
- Generic Project Charter examples
- Certification review of Black Belt project
- Certificate after project acceptance
- On-site Consulting Support at a discounted rate
- Fun and exciting exercises
- Fun learning atmosphere



Six Sigma Black Belt Certification



Week 1 Six Sigma Black Belt Training Topics

<ul style="list-style-type: none">• Six Sigma Introduction• Six Sigma Project Definition• Project Selection Process• Six Sigma Deployment• Process Mapping• Input Prioritization Tools• Failure Mode Effect Analysis• Six Sigma Software Introduction	<ul style="list-style-type: none">• Measurement Systems• Capability Analysis• Sample Size Selection• Statistical Process Control• Process Control Plan• Project Plan & Deliverable• Project Reviews• Homework
<ul style="list-style-type: none">• Advanced Graphical Analysis• Multi-Vari Planning• Variation Trees and Funneling• Hypothesis Testing• Central Limit Theorem• Statistical Analysis Roadmap• Test for Mean with t-test	<ul style="list-style-type: none">• One Way ANOVA• Non-manufacturing Applications• Correlation and Regression• Multi-Vari Analysis• Process Control Plan• Project Plan & Deliverable• Project Reviews• Final Exam

Six Sigma Black Belt Certification



Week 2 Six Sigma Black Belt

<ul style="list-style-type: none">• Week 1 and 2 Review Project• Multiple Regression• Advanced Multi-Vari• Attribute Measurements• Attribute Measurement Systems• Sample Size Calculations• Six Sigma for Service	<ul style="list-style-type: none">• Introduction to DOE• Full Factorial Experiments• Full Factorial Simulations• Fractional Factorials Designs• DOE Sample Size Selection• In class DOE Project• Project Planning & Deliverables
---	--

<ul style="list-style-type: none">• Design of Experiments Review• Blocking in Experiments• General Factorial Experiments• Six Sigma Residual Analysis• Non-Normal Data - Transformations• Non-Normal Data in Experiments• Sequential Experimentation• Response Optimization Designs• Multiple Response Optimization• Transactional Improvements	<ul style="list-style-type: none">• Simulations for Improvement• Applied Experimentation• Statistical Process Control• Mistake Proofing• Control Methods• Project Closure and Synergy• Class Project• Integration of Lean• Project Reviews• Final Exam
--	---

AFOES Consultants LOCAL CONTACTS:

Mr. Lawrence D'Souza - **Abu Dhabi**
E-mail: training@afoes.ae
Tel: +971 2 6763191
Web: www.afoes.ae