

A roadmap to Black Belt certification...

DireXtra[®]

Proposed course structure for delivery from Feb
to Dec 2017

Prepared by: John Fraser



John Fraser



- Over 10 years of experience as a fully certified Black Belt - General Electric (GE)
- Accredited by the IASSC – an Internationally recognised training body
- Trained more than 1000 delegates to GB and BB standard worldwide
- Focus on keeping skills updated through running projects in addition to training

Selected Clients:

Virgin Group

Airbus

IKEA

Kone

PwC

Harman

Arcelor Mittal

NHS

Yellow Belt Agenda, 2017

YB Materials covering the following topics:

Introduction to Lean Six Sigma
Project Selection

Define

Introduction to Define
Business Case
Problem Statement
Goal Statement
Scope
Voice of the Customer
SIPOC
People Capability Map
Stakeholder Analysis
Communications Plan
Define Summary

Measure

Introduction to Measure
Process Mapping
Basic Statistics
Data Collection & MSA
Risk Management
Variation Concepts
Measure Summary

Analyze

Introduction to Analyze
Process Analysis
Cause & Effect
5 Whys
Analyze Summary

Improve

Introduction to Improve
Generating and Selecting Solutions
PM Fundamentals
Piloting and Verifying Results
Improve Summary

Control

Introduction to Control
Statistical Process Control
Transition Planning

The above to take place over 2 days with day 1 on Define and day 2 on Measure in the morning and A, I and C in the afternoon. There are no exams or case studies at YB level

Green Belt Agenda, 2017

GB Materials covering the following topics:

Introduction to Lean Six Sigma
Project Selection

Define

Introduction to Define
Project Planning
Project Charter
SIPOC
People Capability Map
Stakeholder Analysis
Process Management
The Voice of the Customer
Define Summary

Measure

Introduction to Measure
Value Stream Mapping
Data Collection & MSA
Basic Statistics
FMEA
Graphical Statistics for Continuous Data
Graphical Statistics for Discrete Data
Variation Concepts
Process Capability
Measure Summary

Analyze

Introduction to Analyze
Process Analysis
Cause & Effect
Introduction to Minitab
Minitab Exercises
Analyze Summary

Improve

Introduction to Improve
Generating and Selecting Solutions
Error-Proofing
PM Fundamentals
Standardization
Piloting and Verifying Results
Improve Summary

Control

Introduction to Control
Statistical Process Control
Transition Planning

Organizational Change Management

Exam

The above to take place over 5 days with each day covering one of the phases, so day 1 on Define, day 2 on Measure etc. This expands and develops on YB or is a standalone build from the beginning, depending how its tailored. There is one exam at the end of the week and some reference to case studies

Black Belt Session, 2017

BB Materials covering the following topics:

Review Lean Six Sigma Green Belt

Minitab Continuation with Case Study

Measurement System Analysis

MSA for discrete data

MSA for continuous data

Advanced Process Capability

Sigma Value, Defect Metrics and Yield Metrics

Long- and Short-Term Capabilities

Cp, Cpk, Pp, Ppk Capability Indices

Advanced Statistical Process Control

Control Charts for Continuous Data

Control Charts for Discrete Data

Handling Non-normal Data

Data Sampling

Sampling Strategies

Central Limit Theorem

- The Mean

- Proportions

Confidence Interval for Standard Deviation and Median

Hypothesis Testing

Introduction to Hypothesis Tests

Tests for Means

- t-Test, ANOVA, Tukey's Test

- Paired data

Tests for Variance (Bartlett's, Levene's and F-Tests)

Tests for Proportions (Chi Square Test)

Non-Parametric Tests

Correlation and Regression

Simple Correlation and Regression

Multiple Correlation and Regression

Logistic Regression

Design of Experiments

2k full factorial designs

Optimisation Plots

Blocking

Organizational Change Management

Managing Successful Project Teams

Decision-Making Approaches

Conflict Management

Exam

Course Summary and Next Steps

The above to take place over 5 days with each day covering one of the phases, so day 1 on Define, day 2 on Measure etc. This expands and develops on GB. There is one exam at the end of the week and case studies are run intensively. Heavy on statistics so GB is a pre-requisite

Testimonials

John was an engaging trainer who did a great job translating Lean Six Sigma theory into practical application. I learned a great deal during our training and would definitely recommend a course he is leading.
IT Manager, Abercrombie & Fitch

John conducted the Lean Six Sigma Black Belt training that I followed and found extremely valuable. He demonstrated a high degree of expertise and is the trainer that steers away from the academic statistics course into the hands-on application and real life situations of a black belt project manager. His style is open and inviting to questions and willingly shared with us his diverse project experiences. "Kaizen" is what you get when training with John! I certainly would recommend him for any training on this subject.
Finance VP, Nestle

John is able to relate his real world projects to the training, providing an important insight into the practical application of Lean Six Sigma.
Operations Director, Aerospace