

SIX SIGMA – BLACK BELT Training Program



This nationally recognized Six Sigma Black Belt certification training integrates Six Sigma Black Belt learning with hands-on data analysis. The Six Sigma Black Belt certificate course material provides an in-depth look at the Six Sigma Black Belt DMAIC problem-solving methodology, as well as deployment and project development approaches. All materials included.

This Program is ideally suited to following individuals who are:

- **Working Class who are involved in the Quality Management Systems**
- **Organization who would like to achieve the highest level of quality**
- **People who are looking a career job in field of quality management systems and would become a consultant in the six sigma field.**

Program is offered by: 3D Educators – Trainers & Consultants

Table of Contents

Detail

Inauguration

Structure

Topics & Time Allocation

About the Program Designer & Instructor

Syllabus

3D EDUCATORS

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Program Details

Inauguration

The Training Program will be inaugurated by a senior member of 3DEducators

Program Structure

Duration of each class	2-Hour
Classes Per Week	2 Classes
Total Duration	32 Hours

Other Learning Activities:

Classroom Assignments	4
Presentations by Trainees	1

About the Program Designer & Instructor

The "Six Sigma – Black Belt" Program has the international designed certification and will be conducted by the huge and vast experience trainer and consultant.

They trainers are foreign qualified and having the degree & certification of Ph.D, MBA, MSc.

As Consultant & Senior Trainers the team of trainers from Engineering side we **3D Educators – Trainers & Consultants** would not compromise on the faculty.

Program Syllabus

COURSE OUTLINE:

Week 1 Six Sigma Black Belt Training and Green 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• Minitab 15 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
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Week 2 Six Sigma Black Belt Training and Green Belt Training Topics

<ul style="list-style-type: none">• Week 1 Review in Class Project• 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
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Week 3 Six Sigma Black Belt after Green 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
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<ul style="list-style-type: none"> • Managing Change 	<ul style="list-style-type: none"> • Project Reviews Measurement
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Week 4 Six Sigma Black Belt after Green Belt

<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
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