





CERTIFIED LEAN SIX SIGMA -BLACK BELT

International Certification USA

Who can do?

- 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.

100,000+ Students have been Trained

since 1997

Invest in
People the
only Asset
that Appreciates

Program is offered by



⊕ www.3dedudcators.com⋈ info@3deducators.com



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Program Details

Inauguration

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

Program Structure

Duration of each class
No of classes per week
Total Hours

02 – Hour
2 Classes
48

Other Learning Activities

Classroom Assignment 4
Project by Trainees 1

About the Program Instructor

The "Six Sigma – Yellow Belt" Program has the international designed certification and will be conducted by the huge and vast experienced trainers and consultants.

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.

In Affiliation with





COURSE CONTENT OF STATISTICS USED IN BLACK BELT COURSE

Learning Outcomes:

On completion of the course participants would be able to

- LO1. Statistical applications in Six Sigma
- LO2. Apply Six Sigma black belt methodologies at multiple aspects of professional life.
- LO3. ANOVA and other advance statistical applications for problem solving
- LO4. Identify the qualitative and quantitative aspects of problem solving tools distinctly.



Session	Session Topic
1	Basis statistical applications wrt Six Sigma
2	Measure of central tendencies with applications
3	Measure of Dispersions with applications
4	Correlation and regression with applications
5	Introduction to probability , permutation and combination
6	Population distributions with applications -1
7	Population distributions with applications -2
8	Progress Check Test
9	Sampling Distributions with applications - 1
10	Sampling Distributions with applications - 2
11	Testing of Hypotheses; Parametric and nonparametric hypotheses. Type I and Type II errors. Critical Region.
12	Parametric Hypotheses Tests: for one mean, equality of means. Testing the variance, equality of variances, significance of correlation coefficient, population proportion, equality of proportions.



13	ANOVA
14	ANOVA exercises
15	Jarque Bera , Chow test , Taghuchi Statistics
16	Certification exam (MCQs + Numerical)



COURSE CONTENT OF BLACK BELT

Week 1 Six Sigma Black Belt Training and Green Belt Training

- 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

- Measurement Systems
- Capability Analysis
- Sample Size Selection
- Statistical Process Control
- Process Control Plan
- Project Plan & Deliverable
- Project Reviews
- Homework

Week 2 Six Sigma Black Belt Training and Green Belt Training Topics

- Week 1 Review in Class Project
- Advanced Graphical Analysis
- Mult-Vari Planning
- Variation Trees and Funneling
- Hypothesis Testing
- Central Limit Theorem
- Statistical Analysis Roadmap
- Test for Mean with t-test

- One Way ANOVA
- Non-manufacturing Applications
- Correlation and Regression
- Multi-Vari Analysis
- Process Control Plan
- Project Plan & Deliverable
- Project Reviews
- Final Exam



Week 3 Six Sigma Black Belt after Green Belt

- Week 1 and 2 Review Project
- Multiple Regression
- Advanced Mult-Vari
- Attribute Measurements
- Attribute Measurement Systems
- Sample Size Calculations
- Six Sigma for Service
- Managing Change

- Introduction to DOE
- Full Factorial Experiments
- Full Factorial Simulations
- Fractional Factorials Designs
- DOE Sample Size Selection
- In class DOE Project
- Project Planning & Deliverables
- Project Reviews Measurement

Week 3 Six Sigma Black Belt after Green Belt

- 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

- 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



Terms & Conditions

WITHDRAWAL FROM THE DIPLOMA/CERTIFICATION

Students are not allowed to withdraw from the Diploma. If a student cannot continue the Diploma his/her fee will be forfeited.

CONDUCT AND DISCIPLINE

A disciplinary action, leading to rustication, will be taken against students whose conduct is found objectionable at any time during the course of study. Reference will be made to 3D Educators code of conduct.

EVALUATION AND GRADING

The performance of students is evaluated through continuous observation of a student's performance in the Diploma – class participation, submission of assignments, quizzes and exercises.



The student will be examined through three hourly exams conducted at the midterm and a final exam at the end of the program. Total marks for passing the Diploma will be 60 out of a total of 100.

Students who do not meet the attendance or any other eligibility criteria will not be allowed to appear in the final examination.

The following grading plan will be applicable for the Diploma:

Α	87 - 100
B+	81 -86
В	72 - 80
C+	66 - 71
С	60 - 65
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Students who are unable to appear for the final exam are required to submit a written application stating the reason for not appearing for the exam. 3D Educators reserves the right to approve or deny such applications. If approved, the student will be allowed to sit for the exam within one month. Failure to do so, the student will be resubmit the examination fee and sit the future schedule exam. Without passing of the exams no certification will be awarded.



ONLINE LIVE CLASSES FACILITY AVAILABLE

- Instructor Led Training
- Real Time Presentations
- Interactive Classes
- Complete Notes and Other Stuff shall be provided through our Secure Student Login Member's Area
- For Online Live Classes, you may please download the Admission Form through our website http://www.3deducators.com. Fill it properly and attached the required document along with Picture and send back to info@3deducators.com with scanned fee submitted voucher in the bank.
- For Pakistan you may submit the fee at any MCB Branch with the title of "3D EDUCATORS-TRAINERS & CONSULTANTS".
- If you are outside Pakistan then you may transfer via Bank to Bank or any western union, Fast Track, Money Gram or else International Transfer Body.
- After Admission, if you don't have GMAIL Account then you are requested to kindly make one GMAIL Account and shared it info@3deducators.com. Then further correspondence shall be made by our institute official.
- Extra Bandwidth Charges shall be incurred.

DISTANCE NOT MATTER

You can join in the live classes Sessions of 3D EDUCATORS – TRAINERS & CONSULTANTS from anywhere of the world.



PRECAUTIONARY MEASURES

- During Classes, you are requested to make sure that you are in isolated room, where no noise should be there except your voice.
- Kindly Switch Off your Cell Phone during the class, because it will disturb the quorum of class.
- If you have taken the admission in the course online lonely, then ethically it is recommended and suggested that you alone in the class.
- Recording of Lectures are not allowed at your end.

This world is emerging and growing in the 21st Century very rapidly because of latest and remarkable technologies and its advancement. Due to advancement of technology, we 3D EDUCATORS offer Live Interactive class sessions

3D EDUCATORS believe on Information Technology and its systems. Now you can also avail this facility at your home.

CONTACT US

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Get the Admission Form



MANAGEMENT
3D EDUCATORS
TRAINERS & CONSULTANTS



Global Recognized Certification from IMRTC USA



IMRTC USA Recognized
CERTIFICATION





This is to Certify That

Mr. Danny Jones Wales

has successfully met the certification requirements as outlined in IMRTC content and the policies adopted thereunder, hereby grants the certification of

Six Sigma Black Belf

Student ID: IM864532201

Date of Commencement: May 4, 2014
Date of Ending: July 4, 2014



Cheryyel Rhodes

Director Affiliations and Official Affairs

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