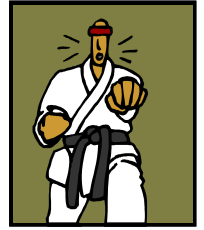




Institute of
Quality & Reliability

6σ



Six Sigma Black Belt (SSBB) Workshop

Starting from 18 April 2009

At Pune

Learn Six Sigma from Hemant Urdhwareshe

*The First
ASQ Certified Six Sigma Black Belt in India*

Institute of Quality and Reliability has conducted Six Sigma Black Belt/Green Belt training for companies like Fleetguard, Menon Pistons, Alfa Laval, TACO, Mahindra Hinoday, Satyam Computers, Eaton Technologies, College of Engineering, Pune etc.

Visit our website: <http://world-class-quality.com/>

Contact us: email ioqr@world-class-quality.com

or call Rahul on 9823792050

or call Hemant on 9822014488

Institute of Quality and Reliability (IQR)

Announces

Six Sigma Black Belt (SSBB) Workshop

(Focused on preparation for ASQ Certification)

(Duration: 17 Saturdays spread over four months)

Course Schedule: From 18 April 09 onwards on 17 Saturdays till 22 Aug 09

Timing : 10:00 am – 6.00 pm on Every Saturday

Venue : Hotel Gandharv Residency Pune.

Who is a Six Sigma Black Belt?

Black Belts play a critical role within a Six Sigma infrastructure and culture. Their primary roles are important in many ways. Black Belts provide value within the organization's Six Sigma initiative in a variety of ways.

- **Leading *Six Sigma Black Belt Projects*** and making process improvements
- **Deploying** their organization's Six Sigma program
- **Working with process owners** to ensure project gains are sustained
- **Spreading Six Sigma culture** within the company
- **Sharing of best practices** throughout the organization

Who should attend the training?

This training workshop is designed for professionals, engineers and managers and others ***who aspire to get certified by American Society for Quality (ASQ) as Six Sigma Black Belts (CSSBB)***. The course is ***designed based on the latest ASQ CSSBB Body of Knowledge***. Others who wish to learn fundamentals of Six Sigma Approach, Tools and Applications will also be immensely benefited.

Benefits and Structure of the workshop:

After attending the workshop, the participants will be able to:

- Understand Six Sigma approach and tools
- Apply Six Sigma tools using many exercises to make process improvements using SigmaXL and/or Minitab software
- Prepare for taking Certified Six Sigma Black Belt (CSSBB) examination offered by ASQ
- Test the comprehension and knowledge level with reference to ASQ body of knowledge
- Get certified by IQR as Six Sigma Black Belt (subject to passing the final examination and project completion).

This is a 17-day workshop focusing on learning the concepts and applying these to the projects selected by the participants. Each participant is expected to identify a Six Sigma Black belt project before or during the course. Guidelines and counseling for project selection will be provided to registered participants. This workshop includes sufficient hands on exercises using special SigmaXL and Minitab software and significant time in the workshop would be dedicated to the application exercises. After each session of training, participants are expected to apply the tools to their projects. Participants will also be given set of practice questions in line with ASQ examination. Their performance will be continuously monitored and shared.



Each participant is expected and encouraged to apply the concepts using Six Sigma tools and SigmaXL/Minitab software. These softwares facilitate effective use/application of Six Sigma statistical tools enabling the belts spend more time focusing on implementing process improvements. For some sessions, participants need to bring laptop computers with Microsoft Windows XP and MS Office. Laptops can also be made available at reasonable additional rental charges on request.

A simulated test will be conducted at the end of training to assess effectiveness of training. The structure of these tests will be similar to ASQ exams. Subsequent guidance for the ASQ exam will be available on request.

Certification: IQR will certify participants who pass the final test and complete their projects as “**Certified Six Sigma Black Belts**” (**CSSBB**). Participants need to apply separately for Certification from ASQ. See more details below.

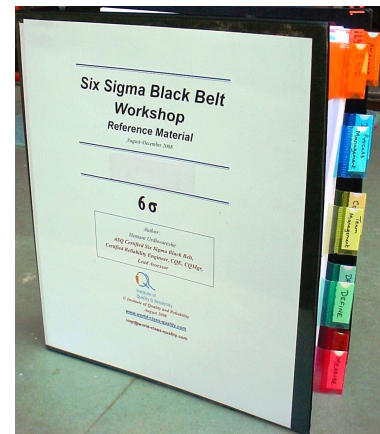
About ASQ Certification:

ASQ conducts Certified Six Sigma Black Belt (CSSBB) Examination in March and October every year. ASQ CSSBB enjoys excellent international reputation. Participants can appear for the ASQ exam scheduled on 17 October 09 with Pune as one of the venues. More details about ASQ certification are available on web site of ASQ <http://www.asq.org/certification/six-sigma/index.html>. In addition to attending the workshop, participants are expected to prepare for the examination using the course material and other recommended reference books. Depending on the prior experience, study time for preparation may vary between 50 to 100 hours. ASQ CSSBB examination is a 4-hour examination of 150 multiple-choice questions. ASQ certification fees (US \$ 260 for members + ASQ membership fees \$74) are not included in the course fees.

Participants need to take up -and complete their projects by 14th August 2009 so that they can apply for ASQ certification examination scheduled on 17 October 2009. Last Date for application is 21 August 2009. One of the requirements for application approval to take ASQ’s CSSBB exam is the demonstration of experience. Six Sigma Black Belt affidavit(s) must be completed and submitted attesting to that fact. Provide two signed affidavits attesting to the completion of two Six Sigma projects, signed by the project champion(s). If two Six Sigma projects have not been completed, one completed project will be allowed providing you have at least three years of work experience covered by the Six Sigma Black Belt Body of Knowledge (BOK). For detailed information, visit <http://www.asq.org/pdf/certification/inserts/cssbb-insert-2007.pdf> .

Course Kit:

1. Comprehensive workshop material of more than 525 pages (based on ASQ body of knowledge) + 300 practice questions and explanations.
2. CD containing many useful templates for implementing Six Sigma and data files for exercises.
3. Single user Licensed copy of SigmaXL software is included in the course fees. However, please check the price options for the course for specific details.
4. 30-day evaluation copy of Minitab Software will be provided. However, if required, licensed copies of software should be procured by the participants during training and later for project work.
5. Six Sigma Black Belt Handbook published by ASQ depending upon availability at the time of course.
6. A six sigma t-shirt!



Course Contents:

Day	Session	Topics Planned	Approximate Time (Hrs)
1	1	Registration, Introduction of the participants, faculty	0.75
1	2	Overview of the course	0.50
1	1	History and Evolution of Six Sigma	1.0
1	2	Defining customers, CTQs, CTPs, CTCs, QFD	1.5
1	3	Organizing for Six Sigma and Defining Projects	1.5
1		Mconnel's exercise	0.5
2	4	Mapping the current process	2.0
2	5	FMEA	2.0
2	6	Data Collection	1.0
3	7	Basic Quality Tools and Exploratory Data Analysis: Histograms, Box Plots, Scatter Plots etc.	4.0
3	8	Basic Probability and Statistics	6.0
4	9	Probability plotting and identifying distribution	2.0
4	10	Measurement Systems Analysis	4.0
5	11	Process Capability and Performance	4.0
5	12	Non Normal Data	2.0
6	13	Hypothesis Tests	8.0
7	14	Non Parametric Tests	2.0
7	15	Confidence Intervals and Natural Tolerance Limits	2.0
7	16	Power and Sample Size	2.0
8	17	Analysis of Variance	4.0
8	18	Regression and Correlation	3.0
8	19	Logistic Regression	1.5
9	20	Design of Experiments: Basic Concepts	3.0
9	21	Fractional Factorial Experiments and other designs	3.0
9	22	Other improvement tools	2.0
10	23	Statistical Process Control	6.0
11	24	Lean Principles and Tools	6.0
12	25	Design for Six Sigma	4.0
12	26	Teams and Team management	2.0
13	27	Six Sigma and Other Approaches: Kaizen, 5S, TPM and Theory of Constraints	2.0
13	28	Six Sigma Tools: Case Studies and Application Examples	3.0
14	29	Tools practice on SigmaXL/Minitab	4.0
15	30	Multivariate Analysis: Principal Components, Factor Analysis, Discriminant Analysis and MANOVA	4.0
16	31	Practice Test and discussion	2.0
17	32	Final Examination, results and certification	8.0

Course Fees:

- Basic price of the course is Rs. 34,900 (plus Service Tax at 10.3%) per participant . This price **includes training material, Six Sigma Black Belt Handbook, training CD containing many useful templates/data files, 30-day trial version of SigmaXL and Minitab-15 software.** The course is non residential. Fees include Lunch, Tea/snacks at the venue.
- **Early registrations (till 7st April 2009) Rs. 32,490 only.** (plus ST at 10.30%)

		With SigmaXL Software					
		On or Before 7 April 09			After 7 April 09		
No. of Participants	Payment option	Price per participant	Service Tax at 10.3%	Total per participant	Price per participant	Service Tax at 10.3%	Total per participant
1	One time payment	39590	4078	43668	42000	4326	46326
2		37960	3910	41870	39900	4110	44010
1	In 2 Equal Installments	40250	4146	44396	42850	4414	47264
2 or more	In 2 Equal Installments	38590	3975	42565	40710	4193	44903

		Without SigmaXL Software					
		On or Before 7 April 09			After 7 April 09		
No. of participants	Payment option	Price per participant	Service Tax at 10.3%	Total per participant	Price per participant	Service Tax at 10.3%	Total per participant
1	One time payment	32490	3346	35836	34900	3595	38495
2 or more		30860	3179	34039	33155	3415	36570
1	In 2 Equal Installments	33150	3414	36564	35610	3668	39278
2 or more	In 2 Equal Installments	31490	3243	34733	33830	3484	37314

- Participants can choose to pay in two equal installments: 1st installment at registration and second installment on or before 6 June 2009
Refer table below for details of pricing:
- ASQ examination fees are not included. (US \$260+ membership fees \$74)
- The course can be purchased with SigmaXL software for six sigma implementation. Participants have option to buy SigmaXL worth Rs.10,500 and get additional discount in the course fee. Refer following table for details:

Payment:

- Registration will be confirmed after payment by DD/Cheque payable at par in favour of "Institute of Quality and Reliability, Pune".
- In case of payment in 2 installments, cheque for the first installment and post dated cheque for the second installment should be given at the time of registration.

Cancellation Policy:

- Registration can be cancelled till 10 April 2009. Fees paid will be refunded after deducting Rs.1000. Cancellation after 10 April 2009 is not possible.

Registration can be transferred prior to start of the course at no extra cost.

Faculty:

Mr. Hemant Urdhwareshe, Master Black Belt and Director, Institute of Quality and Reliability (IQR) is the principal faculty for the program. He has more than 28 years of experience in Manufacturing, Quality and Engineering at Cummins India Limited (CIL). As **head of quality, reliability and subsequently engineering functions at CIL, he was actively involved in driving Six Sigma and has led/sponsored many Six Sigma projects.** He has applied various Six Sigma tools in improving processes and solving complex manufacturing and field problems. Hemant has conducted many in-house training programmes on Leadership, Quality Engineering and management at CIL and on behalf of Indian Institution of Production Engineers (IIPE). He has also published many [articles on Six Sigma](#) and quality engineering.



He has conducted Black/Green Belt Programmes for Fleetguard Filters, TACO, Alfa Laval, Menon Pistons and Mahindra Hinoday, Satyam Computers and Eaton Technologies. He has also conducted many Six Sigma Green Belt public workshops. **He has trained more than 300 Six Sigma Black/Green Belts** till date.

He is:

- **The first ASQ Certified Six Sigma Black Belt in India (2001)**
- **The first ASQ Certified Quality Manager in India (1998)**
- **ASQ Certified Quality Engineer (1996) and**
- **ASQ Certified Reliability Engineer (2005)**
- **The first person in India with four or more certifications from ASQ**
- **Recipient of Silver Standard 2003 award from Qimpro Foundation as outstanding Manager of International Quality Systems**
- Senior Member of ASQ, Fellow of IIPE and member of National Center for Quality Management. (NCQM).
- Qualified Lead Assessor

Hemant Urdhwareshe will be supported by other competent faculty.

About Institute of Quality and Reliability:

Institute of Quality and Reliability (IQR) was established in Nov. 2005, with primary objective to help Industries for improving their business performance. IQR also supports individuals aspiring to improve their knowledge and skills in Quality and Reliability. After 28 years of rich industrial experience in the Industry, at Cummins India Ltd. (CIL), Hemant Urdhwareshe decided to start IQR. So far IQR has trained more than 300 Six Sigma Black/Green Belts and about 400 individuals in the field of Quality and Reliability.



For registration or more information Contact us:

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