



SIX SIGMA BLACK BELT CERTIFICATION PROGRAMME

July to Dec 2024

Venue: ACMA Office, Pune

Course Content & Programme

Module	Topics discussed	Days	Total Days
	Welcome Remark & Introduction	1	3
Module – 1	- How to Identify Problems for Solving using Shainin Methodology		
	- Splitting Generic Problems into Specific Problems		
July 18 19 20	- Classification of problems into 4 categories		
July 10, 17, 20	17, 20 Phase -1 – Defining the problem		
	- Understanding the problem	_	
	- Phenomenon analysis		
	- Past data analysis to identify the Possible cause(s) for the problem		
	- Data stratification		
	- Brainstorming		
	- Machine hardware checking		
	e e e e e e e e e e e e e e e e e e e		
	Phase -2 – Measure and Analyze (Pinpointing the actual cause(s)		
	leading to the problem using Shainin techniques) Techniques that will be		
	discussed are:		
	Tool # 1 – ISO Plot		
	Tool # 2 – Attribute Agreement Analysis (AAA)		
	Tool # 3 – Paired Comparison		
Module – 2	Project facilitation and review	1	2
Aug 23, 24	Tool # 4– Product/Process search		
	Tool # 5 – Component Search		
Module – 3	Tool # 6 – Modified Component Search		2
	Tool # 7 – Multi-vari analysis		
Sept 23, 24	Tool # 8 – Variable Search	1	
Module – 4	Project review and Facilitation	1	3
	Tool # 9 – Variable search (Contd)	2	
Oct 7, 8, 9	- Factorial analysis to find out the optimal setting		
	- Using Minitab and Excel to find out the Optimal setting		
	- Using Minitab for doing Multi-vari analysis		
	Tool # $10 - B$ vs C		
	- How to validate the pin-pointed cause(s)		
	- Quantification of Improvement		





Module	Topics discussed	Days	Total Days
Module – 5	Tool # 11 – B vs C	3	3
	- How to validate the pin-pointed cause(s)		
Nov 18, 19, 20	- Quantification of Improvement		
	 Tool # 12 – Variation analysis Identification of monitoring and control method to sustain the improvement Implementation of the control method Tool # 13 - Weibull Analysis to establish the life of the product 		
Dec 18,19	Factory visits to check the improvement projects	2	2
Module – 6	Presentation of the projects 1		2
Dec 20,21	Final assessment and certification	1	
Total days			17 days

Summary of Process Improvement tools that will be taught and applied in the projects

S.no	Module	Tools			
1	Module – 1	Phenomenon analysis			
		Trend analysis			
		Data stratification			
		Concentration chart			
		ISO Plot			
		Attribute Agreement Analysis			
		Paired Comparison			
2	Module – 2	Product/Process search			
		Component Search			
3	Module – 3	Modified Component search			
		Multi-vari analysis			
		Variable search			
4	Module – 4	Factorial analysis			
		Using Minitab to do Factorial analysis and finding out optimal setting			
		Using Minitab to do Multivari analysis			
5	Module – 5	B Vs C			
		Variation analysis			
		Weibull Analysis			

Training schedule (July 2024 To Dec 2024)

Programme	July	Aug	Sep	Oct	Nov	Dec	
Training session	18, 19, 20 (M1)	23, 24 (M2)	23, 24 (M3)	7, 8, 9 (M4)	18, 19, 20 (M5)	20, 21 (M5)	
Factory visits						18, 19	
Total days	3	2	2	3	3	4	17 d





Who should attend

Function	Positions
Production	Production in-charge Factory head
Quality	Quality Engineer Quality Manager
Manufacturing Engineering	Manufacturing Process Engineers Manufacturing Process Managers
Corporate/Support Functions	Continuous Improvement engineers/managers Quality system implementers