

INTRODUCTION

Field of quality keeps advancing in both depth and breadth with the scope of application of its various methodologies expanding beyond the traditional manufacturing arena. Resolving quality issues and improving customer satisfaction are now a major concern of every organization, including public, private and service sector. Knowledge and application of six sigma methodology and lean management can play a key role to systematically resolve quality and productivity problems. Proper understanding of DMAIC principal and Toyota Production System (TPS) for variation reduction and waste elimination can result in many fold benefit for an organization. Overall, this course will provide fundamental concepts, sample evidence on application of various techniques using cases, and hands-on training on statistical software's, to address and resolve critical quality and productivity problems in industries.

BROAD OBJECTIVES

The aim of this 3-days short-term course would be to familiarize and illustrate application of key concepts/techniques/methodology of six sigma and lean management. More emphasis will be given to case-based application of key concepts/tools of Six Sigma and lean management. Participants will also learn how to use MINITAB 17 statistical software and Microsoft Excel data analysis tool for in-depth analysis of various problem situations. Upon successful completion of this course, participants may appreciate the systematic use of methodology/key tools suggested in lean and six sigma.

COURSE CONTENTS

- Overview of Quality and Six Sigma Methodology
- Identification, Prioritization and selection of Improvement opportunities
- Over view of Six Sigma Project execution and Closing
- Identification of critical to quality characteristics
- Data Collection and Planning
- Introduction to MINITAB 17 and Microsoft Excel software packages for data visualization &
- Understanding natural variation using control chart
- Process Capability and assessing Sigma level

- Understanding Applications of few Statistical Tool, such as Regression, Two-sample Hypothesis Testing, ANOVA, and
- Factorial Design of Experiment in MINITAB 17
- Taguchi's Robust Design in MINITAB 17
- Understanding Toyota Production System and Lean Management
- Inventory rationalization

WHO MAY BENEFIT

Executives, Managers, Engineers, Scientist in R&D, Teachers, and students interested in the area of Quality Assurance /Industrial/Production/Manufacturing/ Process Engineering and optimization. Researchers, consulting engineers, and self-employed practitioners engaged in quality assurance, operation, production, service, and process improvement activities may benefit from this module. As participants are expected from all over India, this course would also provide an excellent opportunity for the participants to interact and get connected with one another to discuss varied problems of mutual interest.

VENUE FOR CLASSES

Course will be held in Seminar Room, Shailesh J Mehta School of Management, IIT Bombay.

LECTURE NOTES

To fully realize the objectives of the course, the lecture notes/slides/books will be made available for personal use to the participants at IIT Bombay.

FACULTY

The teaching faculty constitutes experts from Shailesh J. Mehta School of Management & Mechanical Engineering of IIT Bombay, and other central institutes of India.

ACCOMMODATION

Accommodation on twin sharing basis may be provided on request in the Institute Guest house for limited number of participants on payment basis and with an advance email request.

IMPORTANT DATES

Last date for receipt of registration form: **27th April 2016** (Wednesday)

Notification of acceptance: **28th April 2016** (Thursday)

Course dates: **5th May-7th May 2016**
(Thursday, Friday, and Saturday)

Note:

- Incomplete application forms will not be entertained.
- For additional copies of the registration form, please use a photocopy or type in the format given.

REGISTRATION FEE

Total fee per participant

Rs 13740 (Rs.12000/- + Rs.1740/- towards Service Tax @14.5 %)

Fee must be paid by a demand draft drawn in favour of **“The Registrar, IIT Bombay- CEP Account”** payable at Mumbai.

No income tax is to be deducted at source from the course fee, as IIT Bombay is exempt from the same. The course fee includes course material, lunch and coffee/tea.

A Certificate of participation will be awarded to all the participants of the course.

Complete registration form along with DD must be sent to the course coordinator at the following address:

Prof. Indrajit Mukherjee

Course Coordinator,

Shailesh J. Mehta School of Management,

Indian Institute of Technology Bombay,

Powai, Mumbai – 400 076.

Phone : (022) – 2576 7742

Fax : (022) – 2572 2872

Email : indrajitmukherjee@iitb.ac.in ; sixsigma@som.iitb.ac.in

For further details, please visit: <http://www.cep.iitb.ac.in/calendar/2016.cgi>



CEP Short Term Weekend Course on

Fundamentals and Application of Six Sigma Methodology and Lean Management

May 5 - 7, 2016

Coordinator

Prof. Indrajit Mukherjee

Shailesh J. Mehta School of Management
IIT Bombay

Office of
Continuing Education & Quality Improvement Programmes

Indian Institute of Technology Bombay
Powai, Mumbai – 400 076

REGISTRATION FORM

Three-day CEP Course on
**Fundamentals and Application of Six Sigma Methodology and
Lean Management**
May 5 - 7, 2016

NAME (BLOCK LETTERS) :

_____ Gender: M / F

DESIGNATION : _____

ORGANIZATION: _____

MAILING ADDRESS : _____

TELEPHONE : _____ (O) _____ (R)

FAX: _____ MOBILE: _____

EMAIL : _____

QUALIFICATIONS : _____ EXPERIENCE : _____ Yrs.

IIT Guest House accommodation required?* YES / NO

PAYMENT: D.D. No.: Dt. Rs.

**[Demand draft should be drawn in favour of "Registrar, IIT
Bombay (CEP A/c)".]**

Date: Signature of Applicant

***Guest House bill to be paid directly by participant.**

(PHOTOCOPY ADDITIONAL COPIES OF THIS FORM, IF NEEDED)