



Corporate Education

Industry & Manufacturing

Six Sigma Black Belt

(Certification Training Course at CVCC for Project Leaders)

This is a blended learning course with 40 hours of classroom instruction and 36 hours of interactive and dynamic online instruction featuring voice over and closed captioning. There will be a certification exam scheduled individually. In addition to preparing you to be an effective Six Sigma Project Leader, this course will prepare you to take the ASQ Six Sigma Black Belt certification examination (details will be discussed in class). The major subjects covered in this course are listed below.

Introduction to Six Sigma
Understanding Data
Introduction to Process Mapping
Pareto Analysis
Calculating Process Based Costs
Validating the Measurement System
Cause and Effect Diagrams
Failure Mode and Effects Analysis
Process Capability Assessment
Control Charts
Scatter Diagrams
Introduction Descriptive Statistics
Measures of Dispersion
Measures of Central Tendency
Organization of Data
Introduction to Probability

Introduction to Inferential Statistics
Inferential Statistics: Self Assessment
Comparing Means
Hypothesis Tests for the Mean
Making Inferences about Proportions
Simple Linear Regression
Introduction to Minitab
Making Inferences about Variances
Maximizing ROI,
Sustaining ROI, Extending ROI
Continuous Probability Distributions
Introduction to Lean Principles, Lean Tools I, Lean
Tools II, Lean Tools III
Probability Distributions: Discrete Random
Variables

CVCC East Campus Room 956 8:00 am – 12:00 noon

6/23, 6/30

7/7, 7/14, 7/21, 7/28

8/4, 8/11, 8/18, 8/25

\$2,750 per person

***Textbooks to be purchased separately by the student.**

For more information or to register, please contact:

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- **Implementing Six Sigma: Smarter Solutions Using Statistical Methods**, Breyfogle, Forrest, Second edition, New York: John Wiley & Sons, 2003. **Approximately \$95**
- **CSSBB Primer** by the Quality Council of Indiana. **Approximately \$75**
Textbooks can be purchased at www.qualitycouncil.com