



Northern Shenandoah Valley Section

Quality Statistics Refresher for ASQ Certifications

The Northern Shenandoah Valley ASQ Section will offer 8 refresher modules on quality statistics. Online classes, using GoToMeeting will be held once a week. The classes will cover the quality statistics topics in the Body of Knowledge from several ASQ certifications, including CQIA, CQT, CQE, CMQ/OE, CSSGB, and CSSBB. The modules will serve as refresher of the topics and as such assume the students have prior knowledge/experience with the statistical tools; comprehensive training on the topics will **not** be provided. The classes will also benefit those desiring to refresh their knowledge of quality statistics for a new job or expanded responsibilities. Practice exam questions from the ASQ CQE exam will be used as homework.

The sessions will cover the following topics:

Sept 6	Module 1: Basic Statistics – terminology, frequency distributions, measures of central tendency & dispersion, probability, Z values, Students t, confidence intervals
Sept 13	Module 2: 7 Classic Quality and 7 Planning & Management Tools – cause-and-effect diagram, check sheet, histogram, run chart, Pareto chart, scatter diagram, flowchart/process maps, affinity diagram, force field analysis, tree diagrams, process decision program charts (PDPC), matrix diagrams, interrelationship diagram, prioritization matrix, activity network diagrams and FMEA
Sept 20	Module 3: Statistical Process Control – variable and attribute control charts, interpretation rules, sub-grouping, Pre-Control, Control Plans
Sept 27	Module 4: Process Capability & Sampling – non-destructive testing, sampling, process & machine capability
Oct 4	Module 5: Measurement Systems – types of measurements, variable & attribute Gage R&R
Oct 11	Module 6: Cause-Effect Relationships I – multi-vari studies, hypothesis testing (t-tests, ANOVA, nonparametric tests)
Oct 18	Module 7: Cause-Effect Relationships II – simple linear regression and diagnostics
Oct 25	Module 8: Cause-Effect Relationships III – 2^k factorial designed experiments

- Cost:** \$100 for each module; \$750 for all 8 (ASQ members)
\$110 for each module; \$850 for all 8 (non ASQ members)
Checks should be made out to **ASQ, Section 1131** and brought to the training or paid via credit card when registering online (for additional \$5 fee/module)
- When:** 8 Wednesdays from September 6 to October 25, 2016, 7 – 9 pm (see above)
- Where:** At comfort of your **own desk via GoToMeeting** (link will be sent for each session after complete registration)
- Instructors:** Susan Schall, PhD, CQE, CMQ/OE and Randy Ruffner, CQIA, CMQ/OE
- Materials:** Electronic copies of the slides presented will be provided for each module, for no additional charge
The Quality Council of Indiana CQE Primer will be the main reference material used for the training. The Primer may be obtained directly from the Quality Council of Indiana @ <http://www.qualitycouncil.com> for \$80. **No Primers will be available for sale by NSV ASQ.**
- Registration:** To register for the training, go to: <http://asq1131.eventbrite.com> **by 5 pm EDT August 30, 2017**
Sign up early; registration limited to 15. Minimum of 5 participants required to hold training.
- Questions:** Susan Schall, Treasurer, ASQ Section 1131, Northern Shenandoah Valley Section
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