Quality and Process Improvement
Additional Public and/or On-site Training Classes

CATALYST CONNECTION
Your Strategic Partner for Manufacturing Growth

	Orientations / Introductions to Various Management System Standards **(ISO 9001, AS9100, IATF 16949, ISO 13485, ISO 14001 and ISO 45001)** Each presentation steps through the standard clause by clause yet affords the opportunity to infuse examples and discussion regarding the requirements and typical approaches for conformance. These sessions can be tailored to address various levels of detail (2 hour management overview, 8 hour in-depth review, etc.).
	Internal Auditor Training **(ISO 9001, AS9100, IATF 16949, ISO 13485, ISO 14001 and ISO 45001)** These courses were developed considering the ISO 19011 standard and are designed to introduce the student to the applicable management system standard and prepare them to conduct effective internal audits. Interpretation of the requirements and recognition of appropriate objective evidence to verify system implementation and effectiveness are addressed. The "human factor" and ethics of auditing along with effective auditing techniques are presented along with case studies and other exercises to reinforce the concepts presented.
	Root Cause / Corrective Action Analysis The best approach to corrective action involves a thorough examination of possible causes, followed by careful analysis to isolate the root cause(s). Some of the most effective and practical tools for generating possible causes are discussed (brainstorming, 5-Why, Is/Is Not, 8D, and others). Application examples of each of these tools are presented and explained. Techniques for identifying options for corrective action and dealing with constraints are presented. The session includes a discussion of the characteristics of effective systems that support continual improvement, as opposed to ineffective systems that consume resources and provide little or no return.
	Failure Modes and Effects Analysis (FMEA) Participants are introduced to the use of Failure Modes and Effects Analysis (FMEA) to analyze a design or process in order to identify potential failures and consider improvement needs. By assessing the severity of a potential failure, the likelihood that the failure will occur, and the probability of detecting the failure, potential issues can be prioritized for improvement. **Reverse pFMEA Training (offered on-site only)** This class builds on the FMEA class described above. Additional days are utilized to work with FMEA team(s) to develop actual pFMEA's at the client's facility. Subsequent to the pFMEA completion, validation of the pFMEA is performed in the actual process environment.
	Risk Management This training session introduces the definition of risk, the purpose of risk management and discusses steps necessary for the effective management of risks. Discussion of risk management requirements from various management system standards are presented. Discussion of risk principles, management program framework and the development of a risk management process are introduced via the ISO 31000:2009 – Risk Management standard. Examples and exercises are utilized to develop a general understanding of the subject. Several risk management tools are presented to help participants set up a risk profile and management plan for their companies.
	Statistical Process Control Properly applied, Statistical Process Control (SPC) will allow for more effective tracking and evaluation of output data, facilitate timely response to process issues and drive quality improvement. Concepts and practical application of SPC techniques will be presented. While statistical formulas are important, the class focuses on recognizing out-of-control conditions and appropriate responses to bring a process back into a state of statistical control. Attendees are trained in the development and interpretation of several control charts that will enhance their knowledge of SPC.