



## Failure Modes & Effects Analysis for Design (DFMEA)

### Workshop for Design & Development Teams

This training presents current ***world best practice in FMEA***. It offers a unique, logical and effective method to reduce the potential for failure by creating verified designs.

#### Benefits from This Training

- Reduce your design cycle time and number of subsequent design changes.
- Apply current world best practices for high quality outcomes to designs.
- Save development time by performing real work while learning. Team-based sessions maximize real and tangible learning, while generating important outputs to ensure that actual results are improved significantly.

#### Who Should Attend

Teams that are actively planning, designing, or developing a system or product. The workshop method requires that teams bring actual projects and related information so that FMEA output can be completed under expert guidance during the workshop. The workshop will show how FMEA will improve their design quality and reduce the number of subsequent post-design problems, design changes and, most importantly, unplanned post-design costs and excess capital expenditures.

#### Training Objectives

This training program delivers the skills and knowledge needed to understand how things can go wrong—and how to plan and act to reduce the likelihood of negative consequences. It goes beyond the traditional open brainstorming approach by starting with an extensive analysis of customer needs and product function. During this training, teams will:

- Discover how to gain insight that can directly improve customer satisfaction and minimize the impact of product failures that lead to customer dissatisfaction and warranty costs
- Learn how to emphasize the prevention of problems early in the design process instead of through Design Verification testing when the cost of failure is great
- See how standard forms guide the FMEA process

#### What You Will Learn

- Why FMEA must start with a deep understanding of the target product functions—and how to use deductive methods to deliver functionality
- How to ensure that causes and effects will never be confused—and eliminate this common source of excess cost from projects
- Why controls are critical and how controls drive Design Verification activities that are required by all major international quality standards
- What severity, occurrence, and detection mean, and how to estimate these factors
- How to understand and quantitatively assess risk
- How sound FMEA information makes product design and development processes more effective—and more efficient as well
- How a single failure mode can have many different causes and effects—and why you rarely need to worry about all of them

