



Quality-One International

Lean Course Outline

- Introduction to Lean
 - Lean Operations
 - Lean Manufacturing
 - Lean Design
- History of Lean
 - Lean Principles to Improve Design
 - Product Development in a Lean Environment
- Lean Principles
 - 7 Wastes
 - Achieving More Value with Less Effort
- Lean Design Principles
 - Practical Application Techniques of Lean
 - Measuring Waste (Muri, Mura, Muda) in a Design Activity
- Value Stream of Design Process
- The Product Plan (Muri)
 - Safety, Quality, Cost, Velocity
 - Cadence
 - Design Task (Design Review)
 - Measurement of Risk
- The Process Plan (Muri)
 - Surrogate Process Selection
 - Measurement of Capability
 - Planning and Executing the New Manufacturing Cell Around the Theoretical Seven Wastes
- Validation of Plans and / or Improvements (Mura)
- Relentless Never Ending Continuous Improvement (Muda Feedback)