Statistical Process Control (SPC) Course Outline

- Brief History of Quality Control
  - Craftsmanship
  - Guilds

- Normal Inspection Processes
  - 100% inspection
  - Lot Sampling

- Rise of Continuous and Discreet Processes and Product Assurance
  - Cost of Quality (Failure, Appraisal, Prevention)

- Data Types
  - Attribute
  - Variable

- Statistical Principles

- Central Tendency
  - Mean
  - Median
  - Mode

- Variation
  - Range
  - Standard Deviation
    - N
    - N-1

- Creation of Histogram

- Control Charts
  - X Bar and R
  - Median Range

- Stability Tests
  - Out of Control
  - Basic Probability of Events

- Capability
  - Cp, Cpk,
  - Pp, Ppk

- Special Control Methods
  - Poke Yoke'
    - Error Proofing
    - Mistake Proofing
  - Stop Light Controls
  - Short Lot
  - Cpk Control Charts