Control Plan Development Course Outline

- Introduction to Control Plan Development
- What is a Control Plan
- Three types of Control Plans
    - Prototype
    - Pre-launch
    - Production
- Control Plans / APQP Relationship
    - Linkage to DFMEA
    - Linkage to DVP&R
    - Linkage to PFMEA
- Control Plan Development Step-by-Step
    - Collection of Legacy Information
    - Process Flow Chart
    - Past Failures
    - Special Characteristics
    - Surrogate / Similar / Family Control Plans
- Path 1: Preliminary Information
    - Process Flow Chart / Value Stream Map Linkage
    - Part / Process Number
    - Process Name / Description
    - Machine, Device, Tools, Jig for Manufacturing
- Path 2: Characteristics and Evaluation Techniques
    - Product Characteristics
        - Dimensions
        - Performance Measures
        - Properties of Materials
    - Linkage to specifications/Drawings or Process FMEA Failure Modes
    - Process Characteristics
    - Parameters of Processes
        - Time, Temperature, Pressure, etc.
    - Linkage to Product Characteristics and Process FMEA Causes
    - Special Characteristics Class
        - Critical, Significant, Major, Minor, OS, HIC
- Specifications and Tolerances (Product or Process Characteristics)
- Evaluation and/or Measurement Techniques
    - Linkage to Gage Studies and Evaluation Techniques

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- Path 3: Direction for Quality and Manufacturing Control Activities
- Quality Control Sensitivity
    - Sample Size
    - Frequency of Inspection
    - Control Methods linkage to Process FMEA Process Controls Detection
    - Reaction Plan
- Legacy / Family Control Plan and Lessons Learned

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