

# APQP for Aerospace Course Outline

## Lesson 1 | APQP Purpose & Structure

- To understand why the APQP process is crucial to the viability of the organization's business.
- Become familiar with the structured approach for implementing APQP.

## Lesson 2 | APQP Phase 1: Planning

- Explain how customer needs and expectations can be translated into a value-added (and competitive) offering.
- Become familiar with the design, reliability, and quality goals of the Planning Phase.

## Lesson 3 | APQP Phase 2: Product Design and Development

- Understand how to use technical, quality, and cost requirements to validate the product design.
- Be aware of how to conduct a preliminary feasibility assessment of whether the manufacturing process is capable of producing the product.

## Lesson 4 | APQP Phase 3: Process Design and Development

- Understand how the production process is defined, established, and verified.
- Be exposed to the primary tools and techniques used to verify the capability of the production process.
- Learn what is involved in conducting the PRR (Production Readiness Review) and how to address shortcomings if any are found.

## Lesson 5 | APQP Phase 4: Product and Process Validation

- Know how to validate that the designed product meets all requirements and that the manufacturing process is capable of consistently producing conforming products at the customer's desired rate.
- Understand the role of Production Process Runs (PPRs) and First Article Inspections (FAIs) in preparing the Production Part Approval Process (PPAP).

## Lesson 6 | APQP Phase 5: On-going Production, Use, and Post-Delivery Service

- Describe how inputs are collected and compiled for improving the product and process.
- Explain techniques for reducing common cause variation, addressing customer satisfaction issues, improving delivery and service issues, and applying lessons learned.

## Lesson 7 | Best Practices

- Know about best practices that help get the most out of the APQP structured improvement approach.