

Hypothesis Testing

Training Overview:

This Hypothesis Testing course equips participants with the skills to make data-driven decisions by validating assumptions and reducing guesswork. Participants learn how to select appropriate tests, analyze data, and draw conclusions that improve process performance.

Through practical exercises and real-world examples, participants apply statistical tests to evaluate changes and confirm results. The course emphasizes measurable impact, including avoiding ineffective solutions, improving yields, and ensuring resources are focused on proven improvements.

Training Objectives:

- Define hypothesis testing and its role in data-driven decision-making
- Understand key concepts such as null hypothesis, p-value, and significance level
- Select appropriate tests based on data and business needs
- Differentiate between one-tailed and two-tailed tests
- Perform common tests such as t-tests and chi-square
- Interpret results to make informed decisions
- Quantify savings from avoiding ineffective solutions
- Connect test results to ROI and process improvements
- Apply hypothesis testing within improvement projects
- Use data to support business cases for change