

CODE: Q1604

# STATISTICS FOR INDUSTRY

## INTRODUCTION

This course expresses statistical concepts and applications for industry that are essential for process improvement and various data analysis. This course focus on statistical process control, data analysis, understand key principles of sampling, and select appropriate tests. This course helps aspiring participants to understand how statistics helps to continual improve organisational management system using its best practice. Participants learn the details of each clauses of the standard requirement to be able to apply within their organization.

## OBJECTIVE

- To describe the concept overview of statistics for industry.
- To provide knowledge on statistics and describe how it is applied.
- To explain the importance of this tool in quality management system and continual improvement.
- To build awareness and encourage continual improvement within organization.

## CONTENT



- **Session 1: Introduction**

Describe overview of statistics. Provide understanding of the statistics for industrial process.

- **Session 2: Terms and Definitions**

Describe relevant terms and definitions that normally use improvement in the quality, statistics and related fields.



- **Session 3: Fundamental of statistics**

Describe data analysis in quality, probability, type of data in statistics.

Describe variation, normal approximation for data, a technique that is used in many statistical procedures. Binomial distribution and the basics of random variables.



- **Session 4: Process capability**

Describe the process capability principle, Cp, Cpk matrices. Explain how to differentiate between the different types of histograms present in statistical analysis.

## PREREQUISITES

Basic knowledge in mathematics is more useful. Experience in any industry will be more benefit.

