# WSQ Microsoft Excel Mastery

## Course Overview

Microsoft Excel serves as a gateway to various data technologies and platforms widely utilised in the ICT sector, including databases, business intelligence tools, and data visualisation software.

Excel mastery-level allows professionals to seamlessly integrate Excel with these technologies, facilitating smooth data exchange, analysis, and reporting across multiple systems. This integration enhances collaboration, interoperability, and overall efficiency within ICT teams and across departments.

Excel mastery-level proficiency is crucial for ICT sector employees to maintain competitiveness, efficiency, and effectiveness in their roles.

The WSQ Microsoft Excel Mastery course aims to equip professionals with expertise in performing sophisticated data analysis using advanced formulas, functions, and visualization techniques. This proficiency enables them to identify patterns, trends, and anomalies more effectively, thereby supporting informed decision-making and problem-solving.

## Course Objectives

At the end of the course, you will be able to:

- Distinguish essential probability computations, distribution, and the logic of hypothesis testing.
- Analyse relationships and trends between categorical or numerical data sets using advanced statistical functions.
- Analyse data sets for big data analysis using advanced statistical tools.
- Interpret the relationships between data sets using data modeling techniques.
- Evaluate a series of array and summary functions to rectify issues in big data analytics.

**Course Code:**         TGS-2025054065

**Course Duration:**      2 days, 9am – 6pm
                        (15 hours of training, 1 hour of assessment)

**Course Dates:**   https://asktraining.com.sg/course-schedule/

# Course Outline

## Probability and Statistics

- Starting with the fundamentals of probability and statistics provides a solid foundation for understanding data analysis. It includes the basics of probability, how to calculate probability, and the concepts of probability distribution, which are crucial for analysing data variability and making predictions. This knowledge is essential for effectively utilising advanced statistical functions and tools in Learning Units 2 and 3.

## Advanced Statistical Functions

- Building on the foundational knowledge, this unit focuses on using advanced statistical functions to identify value deviation, determine the degree of variation, compute quartiles, and analyse correlations between variables. Additionally, learners will learn to identify ranked high and low values, enhancing their ability to perform sophisticated data analysis in Excel.

## Advanced Statistical Tools

- This unit provides practical learning to learners to perform natural language queries on data for intuitive analysis, conduct ANOVA (Analysis of Variance) to compare datasets, and calculate moving averages to identify trends. It also covers rank and percentile calculations to determine data positions and sampling techniques for accurate data representation.

## Managing PivotTable Reports

- This unit dives deeper into leveraging PivotTables for robust data analysis and reporting. The learners will learn to create integrated reports using data models, generate multiple reports from a single dataset, and drill down into details for deeper insights. It also covers applying built-in analysis calculations and working with custom-calculated fields to tailor reports to specific needs.

## Array and Summary Functions

- Leveraging the knowledge acquired from previous learning units, the learners will learn array functions and spill ranges, change data layouts using TRANSPOSE, and sort data dynamically with SORT and SORTBY. They will also learn to extract unique values with UNIQUE, perform data lookups using XMATCH and XLOOKUP, and compute summary values with AGGREGATE and SUMPRODUCT.

**Pre-requisites:**

- WPLN Level 5
- Attended our WSQ Microsoft Excel Intermediate and WSQ Microsoft Excel Advanced; OR
- Some knowledge of Microsoft Excel skills and know how to work with Microsoft Excel function

# Course Fees & Schedule

**Full Course Fee: $600 + $54 (9% gst) = $654 (Inclusive of gst)**

## Company Sponsored

- Absentee Payroll applicable for both SMEs & Non-SMEs
  - For course commencement Jan 2022, absentee payroll funding is $4.50 per hour capped at $100,000 per enterprise per calendar year

## Self-Sponsored

- SkillsFuture Credit is eligible for Singapore Citizens aged 25 and above.
- Singaporean aged 17 to 30 may use PSEA (Post-Secondary Education Account) for fee payment.
- You may use U-tap to defray 50% of the unfunded course fee, capped at $250/year. NTUC members aged 40 and above can enjoy higher funding support up to $500/year for courses attended between 01 April 2022 to 31 March 2023. Sign up https://ntuc.co/ask-edm

| Company Sponsored | | | Self-Sponsored | |
|---|---|---|---|---|
| SME | Non-SME | | | |
| Singaporean & PR (70% of course fees) | Singaporean & PR (50% of course fees) | Singaporean aged ≥ 40 (70% of course fees) | All Singapore Citizens and PRs aged ≥ 21 Years (50% of course fees) | Singapore Citizens Aged ≥ 40 Years (70% of course fees) |
| $180 + $54(gst) = $234 | $300 + $54(gst) = $354 | $180 + $54(gst) = $234 | $300 + $54(gst) = $354 | $180 + $54(gst) = $234 |

**Trainees are entitled to the training grant when they meet 75% of the training attendance and pass the requisite assessment.**