

# JMP & YIELD OPTIX FOR SEMICONDUCTOR DATA ANALYSIS

## Overview

A 3-day hands-on, expert-led course designed to give engineers and technicians the skills to analyze semiconductor test and yield data effectively.

Gain proficiency with JMP and YieldOptiX, accelerating debugging, detecting anomalies, and improving decision-making.

✦ *Prepare to become a certified yield analyst with practical, real-world capabilities.*

## Target Audience

- Test engineers and technicians
- QA professionals in semiconductor manufacturing
- Production engineers optimizing test processes
- New graduates or professionals transitioning into testing roles
- Engineers learning Advantest, Teradyne, or Chroma

## OBJECTIVES

By the end of this course, participants will be able to:

- Understand STDF data and key yield metrics
- Master JMP for test and yield data exploration
- Combine Excel and JMP for smarter test workflows
- Use YieldOptiX to accelerate debug, visualize yield, and detect anomalies
- Navigate large datasets quickly with YieldOptiX EasyLaunch
- Identify failing bins, explore wafers, and perform Pareto analysis
- Apply ML techniques in YieldOptiX for root cause insights and automation
- Automate screening, reporting, and limit simulation workflows

## ASSESEMENT

The following assessment activities are available to participants

- Participants who attend the full course will receive a SilTest Academy certificate of attendance.
- There will be a multiple-choice end of course test



# UNLOCK TEST AND YIELD INSIGHTS

# COURSE CURRICULUM

## **Day 1: Fundamentals of Yield and Test Data Analysis with JMP & STDF**

- Introduction to STDF, datalogs, test stages (FT, WS, SLT)
- JMP essentials for semiconductor: distributions, maps, binning
- Basic filtering, grouping, and drill-down
- Exporting summary reports

## **Day 2: Rapid Yield Improvement with YieldOptiX**

- *EasyLaunch: loading STDF files and session management*
- *Interactive wafer maps & bin distribution analysis*
- *Test Explorer: identify failing tests, generate bin Pareto charts*
- *Screen&Release module: managing risk in lot disposition*
- *Global Test Limits Control: limit simulation for better yield-quality tradeoffs*
- *Excel export with colors and filters*

## **Day 3: Advanced Analytics & Machine Learning in YieldOptiX**

- *Drift Analysis: qualify lot stability and detect trends*
- *Clustering: detect hidden fail patterns across tests and wafers*
- *Decision Trees & KNN for root cause exploration*
- *Real-time Process Window Characterization*
- *Automating reporting and sharing results in multi-site environments*
- *Case study: A-to-B comparison of production vs returns*

## INSTRUCTOR

Senior Executive with 16 years of experience working with JMP, Fab operations, Semiconductor Process technologies, statistical data analytics, and quality improvement. Held senior roles with companies like Apple, Global Foundries and Intel.

## FORMAT & DELIVERY

- **Duration & Schedule:**
  1. *Intensive:* 3 full days, 6–8 hours/day
  2. *Flexible:* 3 weeks, 2–3 hours/session (for working professionals)
- **Mode:** In-person or live online
- **Format:** Guided exercises, interactive discussions, case studies
- **Materials:** Course slides, datasets, and real-world case examples
- **Language:** English

## REGISTER NOW!

