



MICROSOFT TRAINING

Advanced DAX in Power BI Course Overview

Master advanced DAX functions and data modeling in Power BI to create powerful, insightful reports and analytics for business intelligence.

DURATION

24 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

Unlock the full potential of your Power BI reports and dashboards with our Advanced DAX in Power BI Course. Designed for intermediate to advanced Power BI users, this intensive 24-hour program dives deep into Data Analysis Expressions (DAX), empowering you to create sophisticated data models, complex calculations, and highly optimized analytical solutions. You will master intricate DAX functions, understand evaluation contexts, and implement advanced time intelligence, all crucial for transforming raw data into actionable business intelligence.

This course focuses on practical application and performance tuning, enabling you to build robust, scalable, and efficient Power BI solutions. By the end of this training, you'll be adept at tackling challenging data scenarios, resolving complex business questions with precision, and significantly enhancing the analytical depth of your Power BI projects. Elevate your data modeling skills and become a true Power BI DAX expert, ready to drive impactful data-driven decisions within your organization.

Duration	24 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: DAX Fundamentals Review & Evaluation Contexts Deep Dive

- Revisiting DAX Basics: Calculated Columns vs. Measures
- Understanding Row Context and Filter Context
- Introduction to Context Transition
- Understanding SUMMARIZE and SUMMARIZECOLUMNS
- Using ALL, ALLEXCEPT, and ALLSELECTED

02 Module 2: Advanced Table Functions & Iterators

- Mastering CALCULATE and CALCULATETABLE
- Using Iterator Functions: X-Functions (SUMX, AVERAGEX, etc.)
- FILTER function for complex filtering scenarios
- VAR and RETURN statements for readability and performance
- Creating disconnected tables for advanced slicing

03 Module 3: Time Intelligence Mastery

- Advanced Date Table Best Practices
- Year-to-Date, Quarter-to-Date, Month-to-Date Calculations
- Period-over-Period Comparisons (Previous Year, Previous Month)
- Running Totals and Moving Averages
- Handling non-standard fiscal calendars

04 Module 4: Advanced Relationships & Data Modeling with DAX

- Understanding Many-to-Many Relationships with DAX
- Handling inactive relationships using USERELATIONSHIP
- Bidirectional Cross-filtering considerations
- Role-playing dimensions and DAX solutions
- Optimizing data models for DAX query performance

05 Module 5: Performance Tuning & Error Handling

- DAX Query Performance Best Practices
- Utilizing DAX Studio for Query Optimization
- Identifying and resolving common DAX performance bottlenecks
- Error handling techniques in DAX (IFERROR, BLANK)
- Understanding storage engine vs. formula engine interactions

06 Module 6: Advanced Scenario Analysis & Dynamic Measures

- Implementing What-If Parameters with DAX
- Creating dynamic segmentation and grouping
- Parameterizing measures for user interaction
- Building advanced ranking and percentile calculations
- Introduction to advanced table manipulation with DAX

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior Business Intelligence Developer**
- > **Advanced Data Analyst Specialist**
- > **Financial Data Modeler (Power BI focus)**

FREQUENTLY ASKED QUESTIONS

Q: How does this Advanced DAX course significantly enhance my Power BI capabilities beyond basic training?

This advanced course moves beyond fundamental DAX syntax to focus on complex evaluation contexts, performance optimization, and intricate data modeling challenges. You will learn to construct highly sophisticated measures, implement advanced time intelligence for non-standard calendars, resolve many-to-many relationship complexities with DAX, and master performance tuning techniques using tools like DAX Studio, enabling you to build truly robust and high-performing Power BI solutions for challenging business requirements.

Q: What are the essential prerequisites for enrolling in this Advanced DAX in Power BI course?

To get the most out of this course, participants should have a solid foundational understanding of Power BI Desktop, including experience with basic data loading, transformation, visualization, and creating simple DAX measures and calculated columns. Familiarity with core DAX functions like SUM, AVERAGE, COUNT, and FILTER, along with a grasp of basic data modeling concepts, is highly recommended. This course assumes you have already worked with Power BI and are ready to elevate your DAX skills.

Q: Will the advanced DAX techniques learned in this course be immediately applicable to real-world Power BI projects?

Absolutely. This course is designed with a strong emphasis on practical application. You will work through numerous hands-on exercises and case studies that mirror real-world business scenarios. The techniques taught, from advanced time intelligence to performance optimization and complex context transitions, are directly transferable skills that you can immediately apply to enhance existing Power BI reports, build more sophisticated analytical models, and solve intricate

business questions within your current or future projects, leading to more insightful and efficient data solutions.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

Location

1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email

info@computer-pride.co.ke

Phone

+254 705 900 900

www.computer-pride.co.ke