COURSE OVERVIEW IT0175
Advanced Data Analysis & Reporting Using Power BI

Course Title
Advanced Data Analysis & Reporting Using Power BI

Course Date/Venue
February 01-05, 2026/Plaza 2 Meeting Room, Radisson Blu Hotel, Jeddah Plaza, Jeddah, KSA

Course Reference
IT0175

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description

This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using the "Microsoft Power BI" application.

This course is designed to provide participants with a detailed and up-to-date overview of Advanced Data Analysis and Reporting Using Power BI. It covers the advanced Power BI architecture, advanced data connectivity and data transformation at scale (advanced power query); the advanced data modeling concepts, performance optimization in data models and data quality and governance foundations; the DAX evaluation context and advanced DAX functions; the advanced measures and KPIs, time-series and trend analysis; the what-if analysis and scenario modelling and proper debugging and optimizing DAX.

Further, the course will also discuss the advanced visual design principles and advanced built-in visuals; the use of custom visuals safely and the advanced interactivity, analytical dashboards design and visualization performance optimization; the Power BI service architecture, advanced security models and data refresh and automation; and the app creation and distribution, sharing strategies for large organizations, version control practices and managing user access and permissions.

During this interactive course, participants will learn the auditing, monitoring and usage analytics; the governance and enterprise BI best practices and advanced analytics integration; the Power BI and Excel / external tools integration including automation and advanced features; and the common advanced Power BI mistakes, performance and scalability, future trends in BI and analytics and roadmap for continuous skill development.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an advanced data analysis and reporting using Power BI
- Discuss advanced Power BI architecture, advanced data connectivity and data transformation at scale (advanced power query)
- Explain advanced data modeling concepts, performance optimization in data models and data quality and governance foundations
- Carryout DAX evaluation context and identify advanced DAX functions
- Employ advanced measures and KPIs, time-series and trend analysis as well as what-if analysis and scenario modeling
- Apply proper debugging and optimizing DAX, advanced visual design principles and advanced built-in visuals
- Use custom visuals safely and illustrate advanced interactivity, analytical dashboards design and visualization performance optimization
- Describe Power BI service architecture, advanced security models and data refresh and automation
- Discuss app creation and distribution and apply sharing strategies for large organizations, version control practices and managing user access and permissions
- Carryout auditing, monitoring and usage analytics, governance and enterprise BI best practices and advanced analytics integration
- Apply Power BI and Excel / external tools integration including automation and advanced features
- Identify the common advanced Power BI mistakes, performance and scalability, future trends in BI and analytics and roadmap for continuous skill development

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides a basic overview of all significant aspects and considerations of data analysis and reporting using Power BI for risk managers, financial analysts, accountants, strategic planners and treasury, budgeting and planning specialists.

Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

Certificate Accreditations

Haward's certificates are accredited by the following international accreditation organizations:

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET - USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Mr. Konstantin Kaminaris, MSc, BSc, is a **Senior IT Specialist** with **20 years** of extensive experience in the areas of **Artificial Intelligence**, **Digitalization**, **Digital Transformation** Strategy & Implementation, **Power BI**, **VMware Virtualization** (ESXi, vCenter, vGPU, VCF), **Microsoft Enterprise** Systems, **Microsoft Servers**, **Microsoft Hyper-V**, **Microsoft Exchange**, **Microsoft 365 Cloud** Services (Exchange Online, Teams, OneDrive), **Microsoft Azure & Hybrid Active Directory** Environments, **VMware** Events, **VMware** ESXi/vCenter, **Enterprise Infrastructure & Virtualization**, **Data Center** Infrastructure, **Data Center Architecture & Digital Transformation** Projects, Mission-critical IT Systems, **Data Center** Design & Management, **File Server & Corporate Document** Management, ERP (SAP) & Oracle Database Systems, Oracle OVM, Oracle DB, Active Directory, SAP ERP, VMware vSphere 6.0 Installation & Configuration, Microsoft Windows Server 2012 R2, Microsoft Exchange Server 2012, Red Hat Linux Administration, AutoCAD and GIS ArcView.

During his career life, Mr. Kaminaris has gained his practical and field experience through his various significant positions and dedication as the **Head of Systems Department**, **IT Professional**, **Information Technology Specialist**, **Central Infrastructure & User Support** and **Senior Instructor/Trainer/Lecturer**, **Certified OAED Instructor** and **Technical Trainer** from various companies such as the Independent Power Transmission (ADMIE) and Renewable Energy Sources & Guarantees of Origin Administrator (DAPEEP).

Mr. Kaminaris is currently taking up his **Master's** degree in **Digital Culture**, **Smart Cities**, **IoT & Advanced Digital Technologies** and has a **Bachelor's** degree in **Computer Science** and a **Diploma** in **Computer Science**. Further, he is a **Certified Instructor/Trainer** and holds a **Certificate** in **Programming & Computer Operation**. He has delivered numerous trainings, courses, workshops, conferences and seminars internationally.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Fee

US$ 7,000 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: ***Sunday, 01st of February 2026***

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Advanced Power BI Architecture*** *Power BI Desktop, Service, and Mobile Deep Dive • Import versus DirectQuery versus Composite Models • Performance and Scalability Considerations • Enterprise BI Architecture Best Practices*
0930 – 0945	*Break*
0945 – 1030	***Advanced Data Connectivity*** *Connecting to Large Databases and Data Warehouses • Using SQL Views and Stored Procedures • Parameters and Dynamic Data Sources • Handling Incremental Refresh Scenarios*
1030 – 1130	***Data Transformation at Scale (Advanced Power Query)*** *Complex Transformations and Custom Functions • Conditional Columns and Advanced M Expressions • M Query Optimization Techniques • Error Handling and Data Validation*
1130 – 1215	***Advanced Data Modeling Concepts*** *Star versus Snowflake Schemas • Fact and Dimension Table Optimization • Role-Playing and Disconnected Tables • Handling Many-to-Many Relationships*
1215 – 1230	*Break*
1230 – 1330	***Performance Optimization in Data Models*** *Cardinality Management • Reducing Model Size and Memory Usage • Relationship Direction and Filtering Strategies • Optimizing Refresh Performance*
1330 – 1420	***Data Quality & Governance Foundations*** *Data Profiling and Anomaly Detection • Naming Conventions and Documentation • Data Lineage and Traceability • Governance-Ready Model Design*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2: Monday, 02nd of February 2026

0730 – 0830	***DAX Evaluation Context*** *Row Context versus Filter Context • Context Transition Explained with Examples • CALCULATE and Context Manipulation • Common DAX Context Pitfalls*
0830 - 0930	***Advanced DAX Functions*** *Iterator Functions (X Functions) • Time Intelligence Beyond Basics • Logical and Statistical DAX Functions • Virtual Tables and Table Functions*
0930 – 0945	*Break*
0945 – 1100	***Advanced Measures & KPIs*** *Dynamic KPIs and Target Comparisons • Conditional Logic in Measures • Scenario-Based Measures • Multi-Level Aggregations*
1100 – 1215	***Time-Series & Trend Analysis*** *Rolling Averages and Moving Totals • Year-Over-Year and Period-Over-Period Analysis • Seasonal Trend Modeling • Custom Fiscal Calendars*
1215 – 1230	*Break*
1230 – 1330	***What-If Analysis & Scenario Modeling*** *Creating What-If Parameters • Sensitivity Analysis Using DAX • Scenario Comparison Techniques • Decision-Support Dashboards*
1330 – 1420	***Debugging & Optimizing DAX*** *Using Performance Analyzer • Identifying Inefficient Measures • Reducing Calculation Complexity • Best Practices for Reusable Measures*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3: Tuesday, 03rd of February 2026

0730 – 0830	***Advanced Visual Design Principles*** *Data Storytelling for Executives • Choosing the Right Visual for Insights • Avoiding Visual Clutter and Bias • Consistent Corporate Dashboard Design*
0830 – 0930	***Advanced Built-in Visuals*** *Matrix and Table Advanced Formatting • Drill-Down, Drill-Through, and Tooltips • Conditional Formatting Using Measures • Dynamic Titles and Annotations*
0930 – 0945	*Break*
0945 – 1100	***Custom & AI Visuals*** *Using Custom Visuals Safely • Decomposition Tree and Key Influencers • Smart Narratives and AI Insights • Visual Performance Considerations*
1100 – 1215	***Advanced Interactivity*** *Bookmarks for Storytelling • Page and Report Navigation • Dynamic Slicers and Filters • User-Driven Report Experiences*
1215 – 1230	*Break*
1230 – 1330	***Analytical Dashboards Design*** *Operational versus Analytical Dashboards • KPI Hierarchies and Scorecards • Exception and Alert-Based Reporting • Executive Summary Dashboards*

1330 – 1420	***Visualization Performance Optimization*** *Reducing Visual Rendering Time • Optimizing Slicers and Filters • Limiting High-Cardinality Visuals • Best Practices for Large Datasets*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4: Wednesday, 04th of February 2026

0730 – 0830	***Power BI Service Architecture*** *Workspaces and Deployment Pipelines • Dataset versus Report versus App Structure • Development, Test, and Production Environments • Workspace Governance Models*
0830 – 0930	***Advanced Security Models*** *Row-Level Security (RLS) Design • Dynamic RLS Using User Roles • Object-Level Security Concepts • Security Testing and Validation*
0930 – 0945	*Break*
0945 – 1100	***Data Refresh & Automation*** *Scheduled and Incremental Refresh • Gateway Configuration and Troubleshooting • Handling Refresh Failures • Monitoring Dataset Health*
1100 – 1215	***Collaboration & Sharing*** *App Creation and Distribution • Sharing Strategies for Large Organizations • Version Control Practices • Managing User Access and Permissions*
1215 – 1230	*Break*
1230 – 1330	***Auditing, Monitoring & Usage Analytics*** *Usage Metrics and Adoption Tracking • Monitoring Report Performance • Audit Logs and Compliance • Optimizing User Engagement*
1330 – 1420	***Governance & Enterprise BI Best Practices*** *Dataset Certification and Endorsement • Governance Frameworks • BI Center of Excellence (CoE) Concepts • Compliance and Regulatory Readiness*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

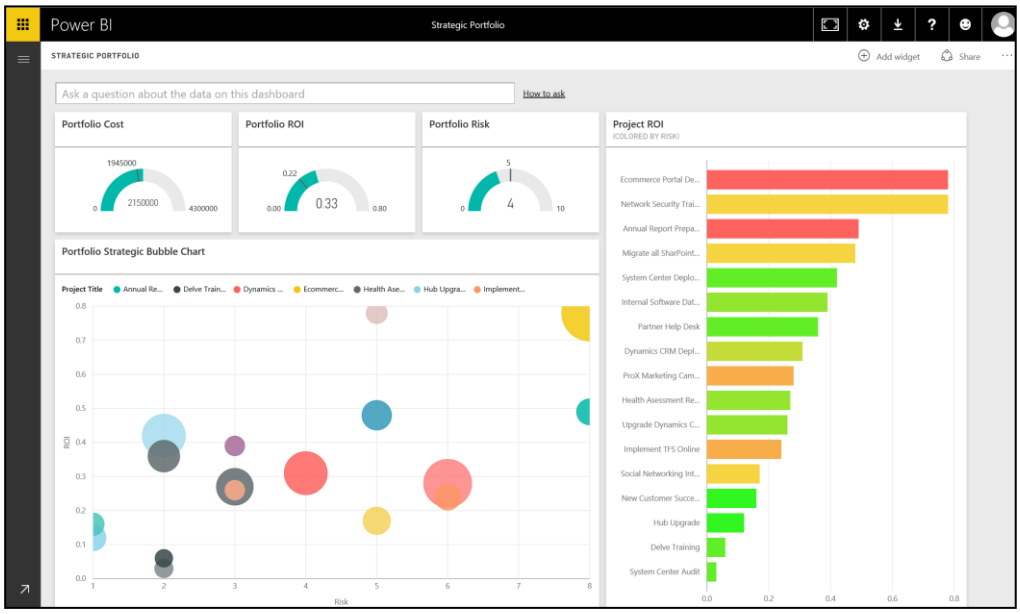
Day 5: Thursday, 05th of February 2026

0730 – 0830	***Advanced Analytics Integration*** *Integrating Statistical Analysis • Predictive Insights in Dashboards • Trend Detection and Anomaly Analysis • Analytical Storytelling Techniques*
0830 – 0930	***Power BI & Excel / External Tools Integration*** *Analyze in Excel • External Tools for Model Optimization • Dataset Reuse Across Reports • Cross-Platform Analytics Strategies*
0930 – 0945	*Break*
0945 – 1100	***Automation & Advanced Features*** *Power BI Subscriptions and Alerts • Data-Driven Alerts and Notifications • Integration with Automation Workflows • Automated Reporting Use Cases*

1100 – 1215	***Industry Use Cases & Case Studies*** *Financial Performance Reporting • Operations and Maintenance Analytics • Sales and Marketing Intelligence • Executive Decision-Support Dashboards*
1215 – 1230	*Break*
1230 – 1300	***End-to-End Capstone Project*** *Business Problem Definition • Data Modeling and Advanced DAX • Interactive Dashboard Development • Insight Presentation and Storytelling*
1300 – 1345	***Best Practices, Pitfalls & Future Trends*** *Common Advanced Power BI Mistakes • Performance and Scalability Lessons Learned • Future Trends in BI and Analytics • Roadmap for Continuous Skill Development*
1345 – 1400	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Hands-on Practical Sessions

Practical session will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the "**Microsoft Power BI**".



"**Microsoft Power BI**"

Course Coordinator

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