KOENIG SOLUTIONS · COURSE OUTLINE

Data Analytics Certificate Program

2 Days	7	58
DURATION	MODULES	TOPICS

COURSE OVERVIEW

Turn data into audit insight with this dynamic 16-hour certificate program designed to help internal auditors move from understanding analytics to confidently performing them. Through an immersive, lab-driven learning experience, participants will develop practical skills to analyze data, communicate meaningful insights, and apply analytics strategies that strengthen audit quality, decision-making, and organizational impact. Using Excel, Power BI, and Copilot, learners will build and automate real-world analytics workflows they can apply directly to their audit work. If you're ready to move beyond theoretical discussions of data—and start actually doing analytics—this program gives you the skills, tools, and confidence to make it happen. Participants who complete the course are eligible to sit for the certificate exam, administered through The IIA's learning management system (LMS). Each course segment includes a brief multiple-choice practice quiz, along with additional practice questions, to help reinforce learning and build confidence throughout the course. After completing all segments, participants must pass a 40-question multiple-choice exam and are allowed up to three attempts before a retake fee applies. All quizzes and exams are open-resource, allowing learners to focus on understanding concepts and applying them in practice rather than memorization. What You'll Learn By the end of the program, you will be able to: Apply data analytics at all stages of the audit process, aligned with the Global Internal Audit Standards.; Select the right tools and technologies for different analytical tasks.; Build data models, clean and transform datasets, and write SQL queries to extract and prepare data.; Identify anomalies, patterns, and fraud indicators using practical analytical techniques.; Analyze unstructured data in Excel.; Create compelling dashboards and data visualizations grounded in information-design principles.; Use Microsoft Copilot to enhance, simplify, and automate analytical tasks.; Develop reusable models in Excel.; Adopt a data-first mindset and build a business case for scaling analytics in your audit function..

WHO THIS COURSE IS FOR

- This course is ideal for internal auditors, risk management professionals, or compliance specialists responsible for using and analyzing data within their organizations.

PREREQUISITES

- Completion of the course “Data Literacy Certificate: A Journey to Data Analytics” or the equivalent understanding of data literacy.

LEARNING OBJECTIVES

What You Will Learn

- Understand the importance of applying data analytics throughout the audit process and the professional standards that guide its use.
- Understand a range of data analytics tools and technologies and develop the ability to select the most appropriate tools for specific analytical tasks, including programming languages commonly used for statistical analysis.
- Create SQL queries, build tables and data models in Excel, and identify insights in structured data using Excel and Power BI.
- Recognize patterns within unstructured data in Excel and use Copilot to support unstructured data analytics.
- Apply visual communication principles to create compelling dashboards and advanced visualizations that effectively convey data-driven stories.
- Use Microsoft Copilot to enhance, simplify, and automate analysis in Excel.
- Create reusable models, apply automation techniques for continuous auditing and monitoring, and build a business case for expanding analytics within the audit function.

COURSE SYLLABUS

7 Modules, 58 Topics

01

Data Analytics Overview

TOPICS

- Why data analytics is an essential part of modern internal auditing
- Why data analytics is an essential part of modern internal auditing
- How global internal audit standards relate to and support the use of data analytics
- Common data analytics terms used in the internal audit environment
- The difference between using samples and analyzing entire populations
- Types of data analytics
- Finding data sources
- Understanding data privacy
- Ethical data analytics and interpreting data
- Technologies and tools that support data analysis in auditing
- AI and the future of data analytics

02

Analyzing Structured Data in Excel

TOPICS

- Understanding data types
- Understanding data types
- The data analysis process
- Basics of performing data analytics in Excel
- Lab: Creating Excel data tables to organize data
- Data modeling in Excel
- Lab: Creating data models in Excel
- Data analysis best practices
- How to clean datasets
- Structured data transformation techniques
- Lab: Cleaning & Transforming data

03

Analytical Techniques in Excel

TOPICS

- Ratio and Financial Analysis
- Ratio and Financial Analysis
- Outlier and Trend Identification
- Lab: Finding outliers with data analytics
- Benford's Law
- Lab: Finding Fraud using a Benford Analysis
- Using Microsoft Copilot in Excel
- Lab: Using copilot for a 2-digit Benford Analysis
- Sampling
- Predictive analytics
- Lab: Sampling and forecasting

04

Advanced Structured Analytics in Excel

TOPICS

- Introduction to the SQL data query language
- LAB: Using SQL to query data with Excel
- Power BI basics and navigation
- Business intelligence tools for audit analytics
- Lab: Creating and using data models in Power BI

05

Analyzing Unstructured Data

TOPICS

- Interpret semi-structured data
- Examine file metadata
- Evaluate unstructured data
- Lab: Analyzing unstructured data in Excel
- Using Power BI to analyze unstructured data
- Creating word cloud visuals from unstructured data
- Lab: Using Copilot to support unstructured analysis in Excel

06

Telling a Story with Data

TOPICS

- Gestalt principles for information design
- Preattentive attributes in visual design
- Visual analysis techniques
- Ethics in data visualization
- Data visualization tools
- Data storytelling
- Lab: Creating dashboards in Power BI

07

The Data-first Mindset

TOPICS

- Creating a data first mindset in Internal Audit
- Partnering with stakeholders to uncover practical analytics opportunities
- Building a business case to expand analytics capabilities within internal audit
- Creating reusable data models in Excel
- Technology and best practices for automating analytics
- Future of data analytics

DELIVERY NOTE

How It Is Delivered

- Format: In-Person, Online
- This course contains multiple learner engagement activities per hour, including but not limited to: polling questions, full group Q&A, small group case studies and hands-on simulations.
- CPE hours available: 16

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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