

AUDITING AND GOVERNANCE RISK AND COMPLIANCE | COURSE BROCHURE

# Data Analysis for Internal Auditing

5 days | Classroom training | English

**SMART HORIZON**

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# Course content

## Why attend

This course equips internal auditors with essential data analysis skills to enhance audit effectiveness. Participants will learn to apply analytical techniques, interpret data patterns, and leverage tools for informed decision-making, ultimately improving compliance and risk management within their organisations.

Internal auditors face increasing demands for data-driven insights to support compliance and risk management. Understanding data analysis allows auditors to identify anomalies, trends, and areas of concern more effectively, leading to more informed audit conclusions. This course addresses the critical need for auditors to enhance their analytical capabilities in a data-rich environment, enabling them to make data-backed decisions that improve operational efficiency and compliance outcomes. By mastering data analysis, auditors can better assess risk, detect fraud, and provide actionable insights that contribute to the overall governance framework of their organisations.
Participants will engage in practical exercises that simulate real-world auditing scenarios, enabling them to apply data analysis techniques directly to their work. They will learn to use statistical tools to interpret complex data sets and develop visualisations that communicate findings effectively. By mastering these skills, auditors can improve their ability to assess financial integrity, operational efficiency, and regulatory compliance, thus adding significant value to their organisations. The course will empower auditors to integrate data analysis into their audit processes, ensuring that their findings are not only accurate but also relevant and impactful.

## Professional Problems This Course Is Designed to Solve

- Difficulty translating subject knowledge into practical workplace decisions.
- Inconsistent approaches to the activities covered in the course outline.
- Lack of a structured plan for applying and reviewing new skills.

## Course methodology

The course employs a blend of hands-on workshops, case studies, and practical exercises to reinforce learning. Participants will work with real datasets to conduct analyses using statistical tools and software, facilitating a deeper understanding of data interpretation. Exercises will include data cleaning, statistical analysis, and report generation, allowing participants to produce tangible outputs such as analytical reports and visualisations. This approach ensures that participants not only learn theoretical concepts but also gain practical experience that they can apply immediately in their auditing roles, enhancing their overall effectiveness and efficiency in data-driven audits. The focus on real-world applications solidifies their learning and prepares them for immediate implementation.



# Course content

## Course objectives

By the end of this course, participants will be able to:
• Analyse data sets to identify trends and anomalies relevant to internal audits.
• Evaluate the effectiveness of various data analysis tools in auditing processes.
• Construct data visualisations that clearly communicate audit findings and insights to stakeholders.
• Prioritise audit areas based on data-driven risk assessments and findings.
• Justify the selection of specific analytical techniques for different audit scenarios and objectives.
• Assess the impact of data integrity on audit conclusions and recommendations for improvement.
• Develop actionable insights from data analysis to inform audit strategies and enhance compliance.

## Target audience

This course is suitable for:
• Internal Auditors seeking to enhance their analytical skills.
• Compliance Officers responsible for ensuring regulatory adherence.
• Risk Managers focused on identifying and mitigating organisational risks.
• Finance Professionals involved in internal audit processes.

## Target competencies

Participants will develop competencies in:
• Proficient in data analysis techniques applicable to auditing.
• Skilled in using analytical tools and software for audit purposes.
• Capable of interpreting complex data sets for audit insights.
• Adept at communicating findings through data visualisations.
• Experienced in conducting risk assessments based on data analysis.
• Knowledgeable about data integrity and its implications for audits.
• Competent in developing data-driven audit strategies.

## Course outline

### Day 1: Foundations of Data Analysis in Auditing

Applied activity: Participants will review a fictional audit case and identify potential data sources for analysis. They will discuss the relevance of each data type to the audit objectives and outline an initial data analysis plan, considering ethical implications.
Output: A preliminary data analysis plan outlining data sources and analysis objectives.



# Course content

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|---|---|
| 09:00–09:54 | Introduction to data analysis concepts relevant to auditing and its significance. |
| 09:54–10:48 | Overview of key data analysis tools and software used in audits. |
| 10:48–11:00 | Understanding different data types and sources applicable to audit contexts. |
| 11:00–11:30 | **Coffee break** |
| 11:30–12:12 | Understanding different data types and sources applicable to audit contexts. (continued) |
| 12:12–13:06 | The role of data analysis in enhancing audit effectiveness and compliance. |
| 13:06–14:00 | Ethical considerations in data handling and analysis for auditors. |

## Day 2: Data Collection and Preparation

Applied activity: Using provided datasets, participants will clean and prepare the data for analysis, addressing any identified quality issues. They will document their process and decisions made during data preparation, ensuring clarity and reproducibility.
Output: A cleaned dataset and a documented data preparation report.

| | |
|---|---|
| 09:00–09:54 | Techniques for effective data collection in audits, including sampling methods. |
| 09:54–10:48 | Data cleaning and preparation methods for accurate analysis outcomes. |
| 10:48–11:00 | Identifying and addressing data quality issues that may affect audits. |
| 11:00–11:30 | **Coffee break** |
| 11:30–12:12 | Identifying and addressing data quality issues that may affect audits. (continued) |
| 12:12–13:06 | Using software tools for data extraction, transformation, and manipulation. |
| 13:06–14:00 | Documenting data preparation processes to maintain audit trails and transparency. |

## Day 3: Descriptive Analytics and Reporting

Applied activity: Participants will analyse a cleaned dataset to create summary statistics and visualisations. They will prepare a brief report summarising their findings and insights relevant to the audit, focusing on clarity and impact.
Output: A descriptive analysis report with visualisations and key findings.

| | |
|---|---|
| 09:00–09:54 | Introduction to descriptive statistics and their application in audits for summarising data. |
| 09:54–10:48 | Techniques for summarising and visualising data to highlight key findings. |
| 10:48–11:00 | Creating effective audit reports based on descriptive analysis and insights. |



# Course content

| | |
|---|---|
| **11:00–11:30** | **Coffee break** |
| **11:30–12:12** | Creating effective audit reports based on descriptive analysis and insights. (continued) |
| **12:12–13:06** | Interpreting summary statistics to inform audit findings and recommendations. |
| **13:06–14:00** | Communicating results to stakeholders clearly and effectively through visual aids. |

## Day 4: Advanced Data Analysis Techniques

Applied activity: Participants will apply regression analysis to a dataset to identify key predictors of audit risk. They will interpret the results and discuss their implications for the audit process, considering how to apply these insights.
Output: A report detailing regression analysis findings and their relevance to audit risk.

| | |
|---|---|
| **09:00–09:54** | Exploring inferential statistics for audit decision-making and hypothesis testing. |
| **09:54–10:48** | Using regression analysis to identify relationships and predictors in data. |
| **10:48–11:00** | Applying data mining techniques to uncover hidden patterns and trends. |
| **11:00–11:30** | **Coffee break** |
| **11:30–12:12** | Applying data mining techniques to uncover hidden patterns and trends. (continued) |
| **12:12–13:06** | Understanding the role of predictive analytics in enhancing audit effectiveness. |
| **13:06–14:00** | Evaluating the effectiveness of advanced analytical methods in real-world scenarios. |

## Day 5: Integrating Data Analysis into the Audit Process

Applied activity: In teams, participants will develop a comprehensive audit plan incorporating data analysis techniques learned throughout the course. They will present their plan, highlighting the role of data analysis in addressing audit objectives and improving outcomes.
Output: A comprehensive audit plan that integrates data analysis strategies.

| | |
|---|---|
| **09:00–09:54** | Developing a data-driven audit strategy that incorporates analytical techniques. |
| **09:54–10:48** | Integrating data analysis findings into audit planning and execution phases. |
| **10:48–11:00** | Using data analysis for continuous monitoring and improvement of audit processes. |
| **11:00–11:30** | **Coffee break** |
| **11:30–12:12** | Using data analysis for continuous monitoring and improvement of audit processes. (continued) |
| **12:12–13:06** | Case studies of successful data-driven audits and lessons learned. |



# Course content

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|---|---|
| **13:06–14:00** | Best practices for sustaining data analysis capabilities in auditing functions. |

The timings provided are estimates and may vary depending on the number of participants and the discussions taking place during the sessions. They are indicative only and do not constitute a binding commitment.

## Dates, venues and fees

Current published course plans. Fees are per participant in GBP, excluding unconfirmed taxes.

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Istanbul<br>Confirmed dates | 16 Nov 2026 | 20 Nov 2026 | **£2,650.–** |
| Online<br>Confirmed dates | 16 Nov 2026 | 20 Nov 2026 | **£1,250.–** |
| Rome<br>Confirmed dates | 23 Nov 2026 | 27 Nov 2026 | **£2,450.–** |
| Online<br>Confirmed dates | 23 Nov 2026 | 27 Nov 2026 | **£1,250.–** |
| Amsterdam<br>Confirmed dates | 7 Dec 2026 | 11 Dec 2026 | **£2,540.–** |
| Online<br>Confirmed dates | 7 Dec 2026 | 11 Dec 2026 | **£1,250.–** |
| Singapore<br>Confirmed dates | 14 Dec 2026 | 18 Dec 2026 | **£2,820.–** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Online<br>Confirmed dates | 14 Dec 2026 | 18 Dec 2026 | **£1,250.–** |
| London<br>Confirmed dates | 4 Jan 2027 | 8 Jan 2027 | **£2,450.–** |
| Online<br>Confirmed dates | 4 Jan 2027 | 8 Jan 2027 | **£1,250.–** |
| Dubai<br>Confirmed dates | 18 Jan 2027 | 22 Jan 2027 | **£3,150.–** |
| Online<br>Confirmed dates | 18 Jan 2027 | 22 Jan 2027 | **£1,250.–** |
| Frankfurt<br>Confirmed dates | 1 Feb 2027 | 5 Feb 2027 | **£2,650.–** |
| Online<br>Confirmed dates | 1 Feb 2027 | 5 Feb 2027 | **£1,250.–** |
| Kuala Lumpur<br>Confirmed dates | 15 Feb 2027 | 19 Feb 2027 | **£1,450.–** |
| Online<br>Confirmed dates | 15 Feb 2027 | 19 Feb 2027 | **£1,250.–** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Barcelona<br>Confirmed dates | 22 Feb 2027 | 26 Feb 2027 | **£2,840.–** |
| Online<br>Confirmed dates | 22 Feb 2027 | 26 Feb 2027 | **£1,250.–** |
| Paris<br>Confirmed dates | 1 Mar 2027 | 5 Mar 2027 | **£2,860.–** |
| Online<br>Confirmed dates | 1 Mar 2027 | 5 Mar 2027 | **£1,250.–** |
| Istanbul<br>Confirmed dates | 15 Mar 2027 | 19 Mar 2027 | **£2,650.–** |
| Online<br>Confirmed dates | 15 Mar 2027 | 19 Mar 2027 | **£1,250.–** |
| Amsterdam<br>Confirmed dates | 5 Apr 2027 | 9 Apr 2027 | **£2,540.–** |
| Online<br>Confirmed dates | 5 Apr 2027 | 9 Apr 2027 | **£1,250.–** |
| Singapore<br>Confirmed dates | 19 Apr 2027 | 23 Apr 2027 | **£2,820.–** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Online<br>Confirmed dates | 19 Apr 2027 | 23 Apr 2027 | **£1,250.–** |
| Cape Town<br>Confirmed dates | 26 Apr 2027 | 30 Apr 2027 | **£1,890.–** |
| Online<br>Confirmed dates | 26 Apr 2027 | 30 Apr 2027 | **£1,250.–** |
| London<br>Confirmed dates | 3 May 2027 | 7 May 2027 | **£2,450.–** |
| Online<br>Confirmed dates | 3 May 2027 | 7 May 2027 | **£1,250.–** |
| Dubai<br>Confirmed dates | 17 May 2027 | 21 May 2027 | **£3,150.–** |
| Online<br>Confirmed dates | 17 May 2027 | 21 May 2027 | **£1,250.–** |
| Frankfurt<br>Confirmed dates | 7 Jun 2027 | 11 Jun 2027 | **£2,650.–** |
| Online<br>Confirmed dates | 7 Jun 2027 | 11 Jun 2027 | **£1,250.–** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Kuala Lumpur<br>Confirmed dates | 21 Jun 2027 | 25 Jun 2027 | **£1,450.–** |
| Online<br>Confirmed dates | 21 Jun 2027 | 25 Jun 2027 | **£1,250.–** |
| Cape Town<br>Confirmed dates | 28 Jun 2027 | 2 Jul 2027 | **£1,890.–** |
| Online<br>Confirmed dates | 28 Jun 2027 | 2 Jul 2027 | **£1,250.–** |
| Paris<br>Confirmed dates | 5 Jul 2027 | 9 Jul 2027 | **£2,860.–** |
| Online<br>Confirmed dates | 5 Jul 2027 | 9 Jul 2027 | **£1,250.–** |
| Istanbul<br>Confirmed dates | 19 Jul 2027 | 23 Jul 2027 | **£2,650.–** |
| Online<br>Confirmed dates | 19 Jul 2027 | 23 Jul 2027 | **£1,250.–** |
| Amsterdam<br>Confirmed dates | 2 Aug 2027 | 6 Aug 2027 | **£2,540.–** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Online<br>Confirmed dates | 2 Aug 2027 | 6 Aug 2027 | **£1,250.-** |
| Singapore<br>Confirmed dates | 16 Aug 2027 | 20 Aug 2027 | **£2,820.-** |
| Online<br>Confirmed dates | 16 Aug 2027 | 20 Aug 2027 | **£1,250.-** |
| Vienna<br>Confirmed dates | 30 Aug 2027 | 3 Sept 2027 | **£2,940.-** |
| Online<br>Confirmed dates | 30 Aug 2027 | 3 Sept 2027 | **£1,250.-** |
| London<br>Confirmed dates | 6 Sept 2027 | 10 Sept 2027 | **£2,450.-** |
| Online<br>Confirmed dates | 6 Sept 2027 | 10 Sept 2027 | **£1,250.-** |
| Dubai<br>Confirmed dates | 20 Sept 2027 | 24 Sept 2027 | **£3,150.-** |
| Online<br>Confirmed dates | 20 Sept 2027 | 24 Sept 2027 | **£1,250.-** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Frankfurt<br>Confirmed dates | 4 Oct 2027 | 8 Oct 2027 | **£2,650.–** |
| Online<br>Confirmed dates | 4 Oct 2027 | 8 Oct 2027 | **£1,250.–** |
| Kuala Lumpur<br>Confirmed dates | 18 Oct 2027 | 22 Oct 2027 | **£1,450.–** |
| Online<br>Confirmed dates | 18 Oct 2027 | 22 Oct 2027 | **£1,250.–** |
| Paris<br>Confirmed dates | 1 Nov 2027 | 5 Nov 2027 | **£2,860.–** |
| Online<br>Confirmed dates | 1 Nov 2027 | 5 Nov 2027 | **£1,250.–** |
| Rome<br>Confirmed dates | 8 Nov 2027 | 12 Nov 2027 | **£2,450.–** |
| Online<br>Confirmed dates | 8 Nov 2027 | 12 Nov 2027 | **£1,250.–** |
| Istanbul<br>Confirmed dates | 15 Nov 2027 | 19 Nov 2027 | **£2,650.–** |



# Course content

## Dates, venues and fees (continued)

| Venue | Start date | End date | Fee (GBP) |
|---|---|---|---|
| Online<br>Confirmed dates | 15 Nov 2027 | 19 Nov 2027 | **£1,250.-** |
| Amsterdam<br>Confirmed dates | 6 Dec 2027 | 10 Dec 2027 | **£2,540.-** |
| Online<br>Confirmed dates | 6 Dec 2027 | 10 Dec 2027 | **£1,250.-** |
| Singapore<br>Confirmed dates | 13 Dec 2027 | 17 Dec 2027 | **£2,820.-** |
| Online<br>Confirmed dates | 13 Dec 2027 | 17 Dec 2027 | **£1,250.-** |

## Plan your next step

Dates, availability, exact venue, taxes, inclusions and payment terms require written confirmation. This brochure is not a quotation, registration, booking confirmation or visa invitation. Participants receive a Smart Horizon UK certificate of attendance; programmes are not externally accredited and do not award a professional qualification or designation. Confirm arrangements before booking travel.

For group or in-house training, contact our learning team to discuss your objectives and delivery arrangements.

## Contact Smart Horizon

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View the latest course details online