

Data Literacy Certificate: A Journey to Data Analytics

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About This Instructor-Led Certificate Program

Data is the driving force for most management decisions and many leaders will tell you it is their most valuable asset. For many organizations, it is also their most uncontrolled asset. Over the decades, organizations have created and accumulated an inordinate amount of data and the amount grows daily. The challenge for many organizations is three fold: we do not know what data we have, how many copies we have, nor where those copies are located. Proper data management starts with an accurate and complete inventory of all data and information assets. Internal audit's ability to guide our organizations starts by improving our own data literacy.

This certificate program is designed to ensure the internal audit community possesses the fundamental data literacy competencies to effectively assess an organization's data governance and management practices, including their data analytics capabilities.

Participants who complete the course are eligible to sit for the certificate exam which is administered on The IIA's LMS platform.

Course Objectives

This certificate and its objectives are divided into four parts:

Part 1 - An Auditors Primer to Data Governance and Management

- Explore the origin of data and information.
- Recognize the characteristics of strong data governance.
- Describe the primary deliverable from an effective governance process.

• Identify the primary considerations and activities associated to solid data management.

- Discuss variations on how data governance and management
- is approached based on organization size and industry.Consider the value of data analytics and methods for
- managing data obtained during the audit activity.
- Understand preliminary concepts related to data literacy.

Part 2: The Art of Gathering and Validating Data for Analytics

- · Explore common data gathering techniques.
- · Identify where data exists and how (and when) to request it.
- Recognize the importance of validating data before starting analysis and methods to validate and deal with exceptions and outliers.
- Discuss the key steps in data analysis.
- Describe the key differences between continuous monitoring

and continuous auditing.

Part 3 - Using Data Analytics to Assess Enterprise Control Effectiveness

- Discuss the advantages and concerns when data is
- consolidated and normalized from multiple devices.
- Discuss how internal audit can perform data analysis on data coming from multiple integration points.
- Recognize the potential of using data analytics to uncover business problems, beyond fraud.
- Describe how internal audit can address business requests for analytics and maintain compliance with the IIA standards.

Part 4: Effectively Applying Data Analytics In Assessing High Volume Data Environments

- Describe opportunities and challenges when using data
- analytics in highly communitive systems.
- Discover internal audit's role in data analytics for automation-related activities.
- Explore opportunities for gathering data and performing data analytics regarding macros, business process automation (BPA), automated workflows, artificial intelligence,
- Recognize opportunities for internal auditors to utilize data
- analytics during digital transformation

Who should attend?

This program is designed to enhance your data literacy skills and provide you with the tools necessary to develop an effective data literacy and analytics program for your internal audit program. This program will also enable you to evaluate an existing data literacy and analytics program for your organization. This program is for internal auditors who want to gain recognition of their data literacy knowledge and for audit leaders implementing a data literacy program within their audit function or plan to perform an organizationwide data literacy assessment. Participants who successfully complete this program are eligible to plus themselves by obtaining The IIA Data Literacy Certificate- a wonderful addition to both your resume and LinkedIn profile.

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Price € 2300

€ 1220 (members

IIA Greece)

Venue virtual seminar via tele-conference

CPE's: (

Certificate Topics

Origin of Data and Information

- History Lesson.
 Data and Datasets.
- Data types.
- Data formats.
- Dark Data.
- Meta Data.

Data Governance

- · Data Classification Policy.
- Master Data.
- · Data Dictionary.
- Data Ethics.

Data Management

- Data and Information Inventory.
- Data Storage.
 Data Backup and Retention.
- Encryption and digital keys
- · Establishing data analytics as a function or task within IA.
- Managing data and information once obtained by the internal audit department.

Data Gathering Techniques

- Common terms and their business meaning.
- · Good practices on how to set up a data and information request process between IA and IT.
- Data location specific considerations.
- Considerations regarding shadow IT (end-users).
- Tips for communicating with data scientists and stewards.

Data Validation

- Ensuring accuracy and completeness.Checking for duplicates.
- · Looking of other data exceptions or anomalies.

Data Analysis Primer

- Steps to conduct data analysis.
- Selection of population or sample.
- Tour of common characteristics amongst tools.
- Tips for ensuring integrity is maintained during the analysis process.
- analysis results.
- Reliance of continuous monitoring efforts by the business, IT, or a third party provider.
- Using analytics for continuous
- assurance

Data Analysis with Multiple Integration Points

- Dealing with data from multiple integration points.
- Normalizing data from disparate sources.

Sustainability Reporting

Uses in sustainability assessments.

Using Data Analytics to Identify Business Problems

- · Common audit requests from the business
- How analytics can help in assessing any business problems that may exist.

Identifying Data Analytics Opportunities In Diverse Platforms

- Opportunities and changes in
- conducting data analytics with highly communitive systems Mobile.
- Voice-enabled.
- Internet of Things (IoT) / Connected Systems
- Industrial Control Systems (ICS).
- SCADA.

Exploring Data Analytics Opportunities in Automation and Transformation

- IA role in automation, artificial
- intelligence, and digital transformation. • Macros.
- Business Process Automation.
- Automated Workflows.
- Artificial Intelligence.
- Digital Transformation.

Βιογραφικό Εισηγητή

Mr. Zois P. Sompolos is an experienced Internal Auditor with over 12 years of expertise in Internal Audit, particularly focusing on Information Systems. His professional journey began with significant academic involvement, participating in various research and teaching projects at the University of Patras, Greece, from 2001 to 2005. In 2006, he joined the National Bank of Greece Group and in 2012, he was selected to join the Group Internal Audit Department, where he currently holds the role of Audit Manager. Additionally, he has been serving as an educator for the Institute of Internal Auditors since 2022.



Mr. Sompolos's educational background is extensive and diverse. He holds a BSc and PhD in Physics and an MSc in Environmental Sciences from the University of Patras, as well as a BSc in Computer Science and an MBA in

Business Administration from the Hellenic Open University. Further enhancing his expertise, he completed a specialization in Artificial Intelligence and Machine Learning for Financial Services at the National and Kapodistrian University of Athens in 2020.

Certified in various professional domains, Mr. Sompolos is a Certified Internal Auditor (CIA), Certified Information Systems Auditor (CISA), and holds multiple other certifications, including Analytics Certified Data Analyst (ACDA), IT General Controls (ITGC), Auditing the Cybersecurity Program (ACP), and Data Analytics and Literacy (DAL).

His main interests lie in the security and control of information systems, data analysis, data visualization, and the application of advanced techniques such as machine learning, benchmarking, and outlier detection to extract valuable insights from data.



- Methods of confirming validity of

Using analytics for continuous auditing.