



# An Introduction to Internal Audit Data Analytics

## Course Schedule – Topics & Activities

### Day One

- Introduction to Data Science & Analytics
  - What is analytics
  - Identify and define key data analysis terms
  - List common issues regarding data types
  - Tools overview
  - Explain necessary preparation to get started on a data analysis project
  
- Analytics in the context of IA
  - Why / value
  - Marketplace perspectives
  - Use Cases
  - Maturity model
  - Strategic considerations
    - People
    - Process
    - Methodology
    - Data Mgmt
  - Project identification

### Day Two

- Data science & analytics techniques
  - Methodology & CRISP-DM
  - Predictive Analytics (unsupervised and supervised)
  - Social network analysis & link analysis
  - Text analytics
  - Poisson and binomial analysis
  - Event history analysis
  - Other methods
  - Leading practices

### Day Three

- Visual analytics
  - Why visualizations
  - Visualizations in the business world
  - Validity in decision making
  - Exploiting cognitive ability for decision making to create effective data visualizations
  - Leading practices on creating visualizations
  - Visualization Tool Overview and Comparison

- Presenting observations & Story telling
  - Why we tell stories
  - The Science: Approach to Developing Stories
  - The Art: Developing Data-Driven Content

#### **Day Four**

- End to end use case

\*Topics and activities may vary by class and instructor.

**Course Duration:** up to 4 days

**CPE:** up to 32

## Submit an Inquiry