

## CI102 Intermediate Use of IDEA Data Analysis

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### Course Overview

The CI101 Intermediate Use of Data Analysis course is designed to incorporate all IDEA functionality needed to reach Certified IDEA Data Analyst (CIDA) status. Delegates gain experience using CaseWare IDEA 10 to solve problems beyond the basics of 'who spent what' and calculation cross-checks, to offer value added audits.

The course comprises of 3 comprehensive audit / testing scenarios of increasing complexity, to cover some of the more challenging real life data issues.

We have carefully selected multiple datasets to highlight risk prone data. This course allows delegates to self-explore data complexity and relationships and includes industry standard tests, such as those outlined by David Coderre, author of 'Internal Audit' and 'Computer Aided Fraud - Prevention and Detection'.

The purpose of this course is to introduce advanced analytical techniques, to enable delegates to utilise IDEA 10 to solve their **own** complex problems. Our aim is to guide delegates through the scenario solutions whilst equipping them with the sophisticated knowledge to create their own value added testing scenarios. Delegate Requirements

No prior knowledge of IDEA is required, but it is preferable for delegates to be familiar with the concept of data analytics. Competency in basic use of Windows Office applications is desirable.

### Delegate Requirements

Delegates are expected to have attended the 'CI101 Introduction to IDEA Data Analysis' course or be **fully** conversant with the following IDEA functionality - Summarisation, Stratification, basic Database Connectivity (Joins) and basic Data Manipulation (Equation Editor).

### Training Scenarios

#### Personnel Audit of a Mid-sized Consultancy firm

- Analysis of Leavers
- Conflict of Interest
- Diversity
- Equal Pay
- Unusual Salaries

#### Stock Control

- Re-Ordering Analysis
- Statistical Analysis of System Performance
- Valuation Analysis

## Local Authority Benefit Fraud

- Multiple claims
- Statistical analysis of claims

## Course Benefits

Participation in this course will allow delegates to expand the use of data analytics in audit, finance and other industries, as well as:

- Apply advanced data analytics techniques and best practices;
- Automate data analytics; and
- Improve governance and controls and reduce risk in their organisation.

*What's Covered overleaf.*

## What's Covered

Our advanced statistical analyses exceed the CaseWare certification examination requirement and include a comprehensive introduction to the tests known as the 'Nigrini Cycle'. We also introduce advanced sampling techniques and the following:

Day 1	Day 2
<b>Imports / Exports</b> <ul style="list-style-type: none"> <li>• Additional import types</li> <li>• Copying and saving templates, equations and files across projects</li> <li>• Greater complexity of PDF importation</li> </ul>	<b>IDEA Scripting (Basic Introduction)</b> <ul style="list-style-type: none"> <li>• Extraction of code from History</li> <li>• Introduction to automation</li> <li>• Visual script</li> </ul>
<b>Extractions</b> <ul style="list-style-type: none"> <li>• Duplicate Key Exclusion (plus Join for full detail)/</li> </ul>	<b>Extractions</b> <ul style="list-style-type: none"> <li>• Fuzzy Duplicates</li> <li>• Indexed Extractions</li> <li>• Key Value Extractions</li> <li>• Top Records Extractions</li> </ul>
<b>Database Connectivity</b> <ul style="list-style-type: none"> <li>• Database Compare</li> <li>• Join - Advanced usage – different types of Join (both days)</li> <li>• Visual Connector - usage and best practice (both days)</li> </ul>	<b>Database Connectivity</b> <ul style="list-style-type: none"> <li>• Action Fields</li> <li>• Database Searches</li> <li>• Join (advanced usage – different types of Join)</li> <li>• Visual Connector (usage and best practice)</li> </ul>
<b>Advanced Sampling Techniques and Advanced Statistical Analysis</b> <ul style="list-style-type: none"> <li>• Appending Field Statistics</li> <li>• IDEA Pivot Tables</li> <li>• Standard Deviation</li> </ul>	<b>Advanced Sampling Techniques and Advanced Statistical Analysis</b> <ul style="list-style-type: none"> <li>• Attribute Sampling</li> <li>• Benford's Law</li> <li>• Correlation</li> <li>• Monetary Unit Sampling</li> </ul>
<b>Field Manipulation and Equations</b> <ul style="list-style-type: none"> <li>• @AGE, @COMPIF, @FIELDSTATISTICS, @IF, @ISINI, @LEFT, @REGEXP, @REPLACE, @REVERSE, @RIGHT, @ROUND, @SPLIT, @STRIP, @UPPER, @YEAR</li> </ul> <p><i>(Some of these may be covered on day 2)</i></p>	<b>Field Manipulation and Equations</b> <ul style="list-style-type: none"> <li>• Complex Logic (including multiple @Functions within equations)</li> </ul>

Each day consists of a mid-morning break, lunch, and an afternoon break.