

## ACCA CERTIFICATE IN DATA ANALYTICS

Think Ahead

### ABOUT ACCA

ACCA is the Association of Chartered Certified Accountants and we're the world's most forward-thinking accountancy body.

We believe that accountancy is vital for economies to grow and prosper – which is why we work all over the world to build the profession and make society fairer and more transparent.

We have more than 227,000 fully qualified members and 544,000 future members worldwide. They're among the best and most highly sought-after accountants, and they work in every sector you can imagine.

We have global partnerships, including businesses large and small, governments, educational establishments and opinion formers. This network gives us unrivalled insight into where the accountancy profession is today, and what the future holds.

**227,000** fully qualified members



544,000 future members worldwide



# RESHAPING THE WORLD OF ACCOUNTANCY AND FINANCE



#### Advances in technology are reshaping the world of accountancy and finance



The use of data to understand the performance of an organisation is a long-established principle.

As technology has developed, the exponential increase in computing power and its affordability has meant that so too have the tools we use to capture, refine and interpret data.

With greater access to the variety and volume of data in our everyday lives we've seen a gradual growth of data analytics over time. And the increased availability of data and tools for analysis have opened up significant opportunities for the finance function.

Large amounts of data can be manipulated and developed into more strategically aligned decision-making models, providing opportunities for individuals and organisations alike.

As accountancy and finance professionals we can bring even greater insights to our stakeholders across a broader agenda.

#### LEVERAGING DATA ANALYTICS FOR DECISION-MAKING

More than ever, business leaders need to be sure that the decisions they make are rooted in a deep understanding of the latest issues and trends.

As organisations become ever more customer centric, it's important that finance teams, as guardians of organisational data, are leveraging data analytics to provide the forward-looking insights required to support decision-making.

The link between business purpose, business strategy, data analytics and decision-making is fundamental. And the evolution of tools for data analytics will further support that linkage.

As finance teams become more adept at data analytics, the ability for forward planning becomes greater - meaning more value for stakeholders and a further cementing of the finance function as a true strategic partner.

ACCA Professional Insights:

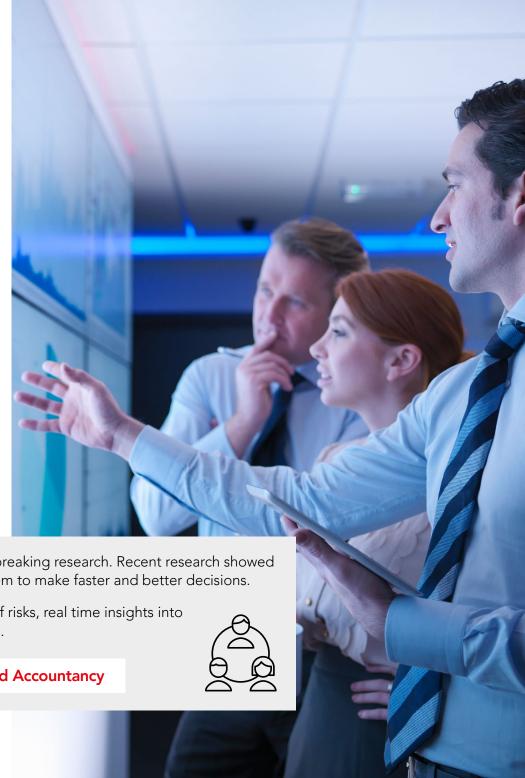
Analytics in Finance and Accountancy

Our global network allows us to carry out groundbreaking research. Recent research showed finance professionals thought analytics helped them to make faster and better decisions.

Other advantages included better management of risks, real time insights into performance, and better forecasting and planning.



Read the report Analytics in Finance and Accountancy



## THE ACCA CERTIFICATE IN DATA ANALYTICS

The ACCA Certificate in Data Analytics is an online course aimed at business professionals who wish to develop their understanding of data, and the skills and techniques available for data analytics.

Using real practical business examples, learners are able to develop an understanding of how data analytics and data modelling can be used to garner business insights.

Learners will learn about big data, the various sources of data, types of analytics, and become familiar with the range of tools and techniques required to extract, manipulate, interpret and present data. They'll also learn about the need to be both sceptical and ethical when working in the data analytics field.

Many of the data tools introduced in the certificate are widely and freely available, such as spreadsheet or database software. Learners will also be introduced to popular statistical and programming tools such as SQL, R and Python, as well as an introduction to artificial intelligence and machine learning.



**KEY LEARNINGS** 

KEY DETAILS



Explaining how to use commercial awareness to articulate business questions



- Identifying and manipulating relevant data and deeply analysing such data by applying appropriate techniques.
- Explaining how findings from analysis can and should be visualised and communicated, enabling relevant stakeholders to make sound business decisions
- Learning and understanding ethical security issues around data analytics.

 Allows for flexible learning – learners can explore specialist areas or repeat exercises to gain confidence



- Learners can test their learning at various stages
- Course units: 10 units
- Duration: Approximately 4 hours
- Access time period: 6 months
- Award: Certificate awarded after an end of unit assessment
- Prerequisites: A basic knowledge of numeracy and statistics



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#### **COURSE UNITS**

- The CRISP framework for data analytics
  - a) Business understanding
  - b) Data understanding
  - c) Data preparation
  - d) Data modelling
  - e) Data Evaluation
  - f) Deployment

- Sources of data
  - a) Internal
  - b) External
- 4 Types of analytics
  - a) Descriptive Analytics
  - b) Predictive Analytics
  - c) Prescriptive Analytics

- Mainstream tools and key applications of data analytics
  - a) Tools and applications for Descriptive Analytics
  - b) Tools and applications for Predictive Analytics
  - c) Tools and applications for Prescriptive Analytics

- Scepticism in data analytics
- Ethical considerations in the use of data
- End of unit data analysis activity

- Big data and data analytics
  - a) What is big data
  - b) The 3 Vs of big data
  - c) The value and lessons to be learned from Big Data
- Data analytics methodologies
  - a) Robotics
  - b) Artificial intelligence
  - c) Machine learning

- 7 Data visualisation and communication
  - a) What is data visualisation?
  - b) The purpose of data visualisation
  - c) The benefits of data visualisation
  - d) The history of data visualisation
  - e) Types of visualisation Comparison
  - f) Types of visualisation Composition
  - g) Types of visualisation Relationship
  - h) What makes good visualisation?











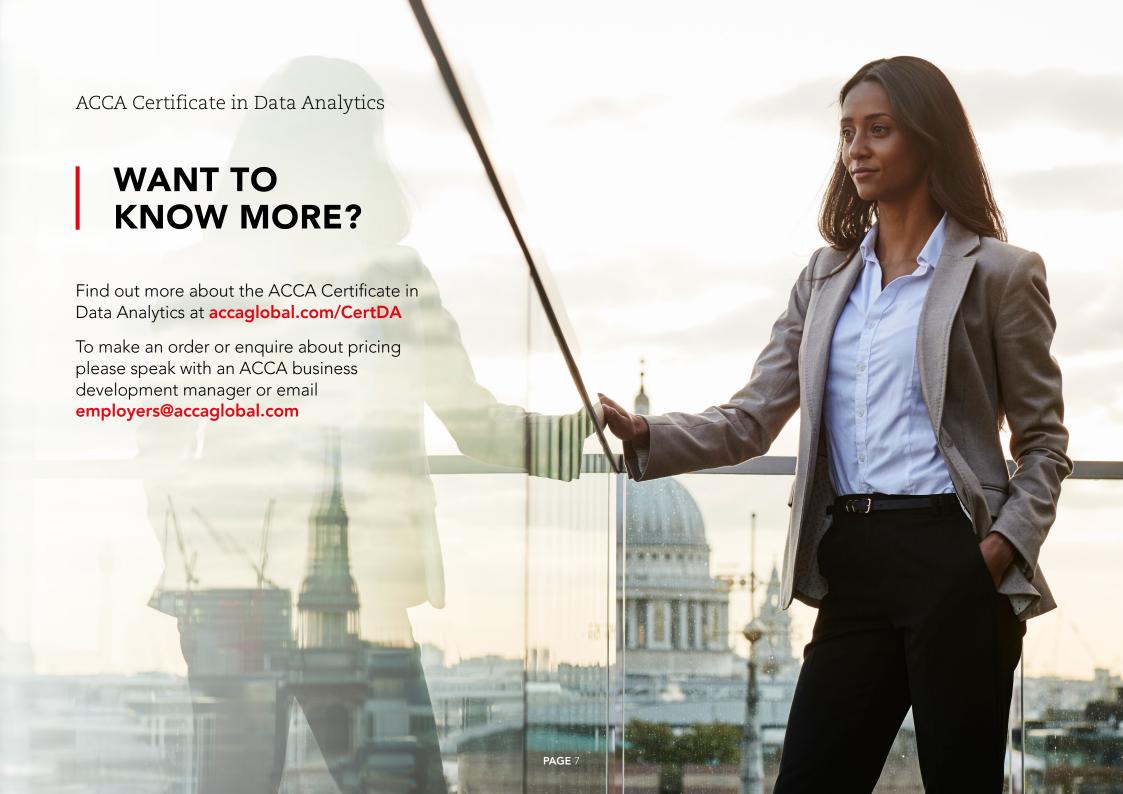














If you're ready to take the next step with ACCA, we'd love to talk to you.

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