



Data Science Practitioner (NQF 5) Certificate



Careers Business Institute has been empowering the community since its inception in 1991. We provide a comprehensive range of Management, Office Administration, Financial and IT courses that have been designed to help you launch your successful career. The Careers Training Group has campuses in Umhlanga Ridge and at the Chatsworth Centre in Kwazulu Natal

Data Science Practitioner Certificate (NQF 5)

What is a Data Science Practitioner?

A Data Science Practitioner is an analytics professional who is responsible for collecting, analyzing and interpreting data to help drive decision-making in an organization. The data scientist role combines elements of several traditional and technical jobs, including mathematician, scientist, statistician and computer programmer. It involves the use of advanced analytics techniques, such as machine learning and predictive modeling, along with the application of scientific principles.

In businesses, data scientists typically mine data for information that can be used to predict customer behavior, identify new revenue opportunities, detect fraudulent transactions and meet other business needs. They also do valuable analytics work for healthcare providers, academic institutions, government agencies, sports teams and other types of organizations.



Data science was first used as a job title in 2008, simultaneously at Facebook and LinkedIn; four years later, a Harvard Business Review article famously called it "the sexiest job of the 21st century." The demand for data science skills has grown significantly over the years, as companies look to glean useful information from increasing volumes of big data and take

advantage of artificial intelligence (AI) and machine learning technologies to enable new types of analytics applications.

The Data Science Practitioner Solution by Quality Council for Trades & Occupations (QCTO)

The QCTO is responsible for overseeing the development, implementation and maintenance of occupational qualifications within the South African National Qualifications Framework (NQF).



As an integral part of South Africa's education and training system, the QCTO is responsible for ensuring that the skills development programmes meet the required standards and are in line with South Africa's economic and social goals. By setting and maintaining high standards, the QCTO contributes to the overall improvement of skill development and workforce quality.

Is a Data Science Practitioner Career for me?

Data Science Careers have the following characteristics; Adaptability, resourcefulness, and the ability to troubleshoot and problem-solve in high-pressure situations. They also have good communication and teamwork skills.

If you are any of these archetypes, you may be well suited to be a Data Science Practitioner.

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Data Science Practitioner Certificate at Careers Business Institute

The Data Science Practitioner (NQF 5) certificate equips you to become a vital asset in the world of data science – a Data Science Practitioner. Here, you'll gain the foundational skills to handle the crucial first steps in the data science lifecycle. Learn to collect data from various sources, ensuring it's properly stored and organized. You'll delve into data transformation and cleaning, mastering the art of preparing raw data for analysis by removing inconsistencies and ensuring accuracy.



Students will also explore basic data analysis tasks and visualization techniques. This empowers you to communicate data insights effectively, bridging the gap between raw data and clear, actionable information for stakeholders. By understanding data science principles and tools, you'll become an essential partner to data scientists, ultimately contributing to data-driven decision making within organizations. Careers Business Institute have been producing professional graduates for over 30 years, being Nationally & Internationally accredited has assisted our alumni in finding employment sooner!

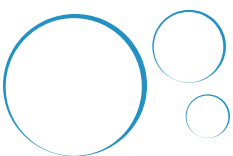
I'm a Certified Data Science Practitioner, What now?

Certified Data Science Practitioners have a wide range of Career Opportunities available. We have listed some of the more widely available careers for certified Data Science Practitioners;

- Data Consultant
- Data Architect
- Statistician
- Business Analyst



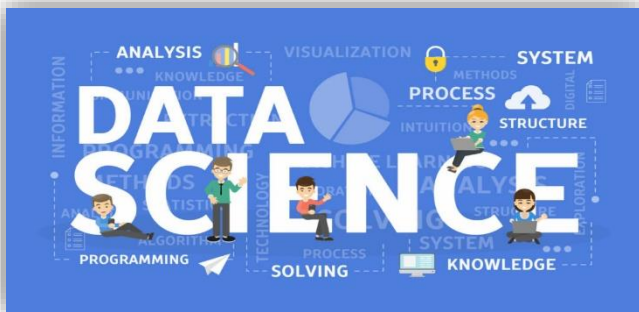
Students have the option of specialization through Information Technology (IT) programs offered at Careers Business Institute. Are you looking for a Career in Robotics or a Cyber Security Specialist? Join the Robotic Processing Automation (RPA) Developer Certificate (NQF 5) or move onto the Cyber Security Expert (NQF 5) Qualification to have access to higher level IT employment opportunities. Contact a Careers Business Institute Campus to find more about these courses and their requirements!



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Course Breakdown: Knowledge Modules

- Introduction to Data Science and Data Analysis
- Logical Thinking and Basic Calculations: Refresher
- Computers and Computing Systems
- Computing Theory
- Basic Statistics for Data Analytics
- Statistics Essentials for Data Analytics
- Data Science and Data Analysis
- Data Analysis and Visualization
- Introduction to Governance, Legislation and Ethics
- Fundamentals of Design Thinking and Innovation
- 4IR and Future Skills



Course Breakdown: Practical Modules

- Use Software to Communicate and Visualize Information
- Apply Logical Thinking and Math Refresher
- Apply Code to Use a Software Toolkit/Platform in the Field of Study or Employment
- Use Spreadsheets to Analyze and Visualize Data

- Use a Visual Analytics Platform to Analyze and Visualize Data
- Apply Statistical Tools and Techniques
- Collect and Pre-Process Large Amounts of Unruly Data
- Apply Data Analysis Techniques to Uncover Patterns and Trends in Datasets
- Prepare and Present Descriptive Analytic Reports for Decision Making
- Participate in a Design Thinking for Innovation Workshop
- Collaborate Ethically and Effectively in the Workplace

Course Breakdown: Work Experience Modules

- Data Collection and Pre-processing Processes
- Statistical Data Analysis Processes
- Data visualization and Reporting Processes
- Capstone Project Using an Appropriate Toolkit

Minimum Requirements & Details

Minimum Requirements: Any NQF 4 Qualification (English and Mathematics)

Full - Time: 2 Years (Part time also available)

SAQA ID: 118708 Credits: 185

Assessment method: External Integrated Summative Assessment (EISA).

Includes FREE Learning Materials – No hidden costs!

Course Fees

Careers Business Institute has developed easy payment options for all courses. Please enquire for a full fee schedule