

# **PwC Business School**



PwC Digital Academy Curriculum

2022





# Introduction



PwC's Data Analytics Academy provides a range of big data training designed to help organizations enable new and existing internal resources to make the most of key data science tools and platforms.

Data Science courses are designed to deliver the basic requirement for any data scientist and big data analysts to make business impact. The courses cover core data science programming tools and applications to entrench the necessary backgroundknowledge.

The training sessions are delivered in comfortable conference room at direct serene locations across the country and around the world. Training course participants should be reasonably proficient in Excel and are also required to bring their own machines (laptops) and install the necessary tools in advance of any of the courses.

## PwC D&A Academy programs offer:

- Hands-on, in-person training.
- 2. Printed training material.
- Morning Snacks, Lunch, Afternoon Snacks and Refreshments. 3.
- Guaranteed small class size. The programs are confirmed with a minimum of ten (10) participants and sealed at a maximum of twenty (20) participants. With such small class sizes there will be plenty of time to ask questions and receive personal attention from the faculties.
- A highly consultative engagement. There will be plenty of time to discuss your specific projects and learning objective to provide immediate return on investments upon completion of any of the programs.



# Data Science for Business Professionals





## **Course Overview**

In this complex, digital world, clients want help to understand their data to drive greater insight, improved performance and competitiveness. The course will introduce participants to the important techniques and methods to become more efficient in delivering their daily objectives and also improve their work ethics.

#### PwC's Data & Analytics Academy course for business professionals is designed for:

- **Graduate Trainees**
- **Data Analysts**
- **Business Analysts**
- Professionals looking to change career path

## **Course Modules**

|   | Module |  |  |
|---|--------|--|--|
|   | 1      |  |  |
| L |        |  |  |

**Data Science for Business Professionals** (Beginners) - DSBP I

- General introduction to PowerBI
- Connecting to multiple data sources
- Core data visualization concepts
- Introduction to DAX and use of measures.

| Pre-requisites | Date |
|----------------|------|
| N/A            | TBD  |

Fee

N100,000

| Duration | Time             |
|----------|------------------|
| 3 days   | 10am - 2pm daily |
|          |                  |

Module

**Data Science for Business Professionals** (Intermediate) - DSBP II

- Data modelling and preparation
- Advanced DAX

| Pre-requisites | Date |
|----------------|------|
| DSBP I         | TBD  |

Fee

N100,000

| Duration | Time             |
|----------|------------------|
| 2 days   | 10am - 2pm daily |

Module

**Data Science for Business Professionals** (Advanced) - DSBP III

- R scripting in PowerBI
- Python scripting in PowerBI
- Advanced DAX

**Pre-requisites** Date DSBP I & II **TBD** Fee

N100,000

**Duration Time** 3 days 10am - 2pm daily

# Data Science for Beginners

02



## Course Overview

In this complex, digital world, clients want help to understand their data to drive greater insight, improved performance and competitiveness. The course will introduce participants to the important techniques and methods used by data scientists.

#### PwC's Data & Analytics Academy course for beginners is designed for:

- **Graduate Trainees**
- Data Analysts
- **Business Analysts**
- Professionals looking to change career path

#### **Course Modules** Data Science for Beginners - DSB I Pre-requisites Date Module Introduction to R/Python DSBP I & III Introduction to model building and **TBD** Regression analysis Fee N100,000 **Duration Time** 3 days 10am - 2pm daily Data Science for Beginners - DSB II **Pre-requisites Date** Module Introduction to Statistical Inference DSB I Intermediate regression analysis **TBD** managing features/feature engineering Fee N100,000 **Duration Time** 2 days 10am - 2pm daily Data Science for Beginners - DSB III **Pre-requisites Date** Module Advanced regression analysis DSB I & II Introduction to Time Series Analysis **TBD** Visualization of Model results using Fee PowerBI N100.000 **Duration Time**

2 days

# Data Science for Intermediate

03



## Course Overview

Becoming a senior data scientist takes more than the understanding of basic skills like statistics and programming in various languages. The need to develop one area of technical analytic expertise (e.g. machine learning), while being conversant in many others is very critical. This is the major objective of this course.

#### By the end of this intermediate data science course, you'll be ready to:

- · Build data solutions that integrate with other systems.
- Implement advanced data science concepts like machine learning and inferential statistics to address critical business problems and influence corporate decision making.
- · Participate successfully in data science competitions.

## **Course Modules**

Module

## Data Science for Intermediate - DSI I

- · Advanced Regression Analysis
- · Decision Tree
- · Cluster Analysis with practical use cases

Pre-requisites

Date

DSB I, II, III

**TBD** 

Fee

N100,000

**Duration** 

Time

2 days

10am - 2pm daily

Module

#### Data Science for Intermediate - DSI II

- Time Series Analysis
- Principal Component Analysis
- · Anomaly Detection
- Random Forest

Pre-requisites

Date

**DSII** 

**TBD** 

Fee

N100,000

**Duration** 

Time

2 days

10am - 2pm daily

Module

## Data Science for Intermediate - DSI III

- Text Mining
- Naïve Bayes
- Support Vector Machine
- Parrallel Computing in R

**Pre-requisites** 

Date

DSI II

**TBD** 

Fee

N100,000

**Duration** Time

2 days 10am - 2pm daily

# Data Science for HR Professionals





## Course Overview

Analyzing HR data to gain insights on workforce, policies and practices can ultimately inform more evidence-based decision making. This course delivers the basic requirements for HR professionals and aspiring HR analysts to make business impact in three days. It covers the core concepts of analytics and reporting with introduction to the use of a visualization tool (PowerBi) to entrench the necessary background Knowledge.

#### PwC's Data & Analytics Academy course for HR professionals is designed for:

- · Human Resource Professionals & Consultants
- HR Analysts

## **Course Modules**

| Modul | е |
|-------|---|
| 4     |   |

#### Data Science for HR Professionals I

- Introduction to HR Analytics
- Introduction to Data Analysis and working with HR data
- · Data Cleaning and HR Metrics
- · Data Analysis with HR data
- · Introduction to Visualization

## **Pre-requisites**

N/A

Fee

N80,000

#### Date

**TBD** 

Duration 2 days

Time 10am - 2pm daily

Module 2

## Data Science for HR Professionals II

 Data Visualization and Reporting using HR Data **Pre-requisites** 

DSHRP I

Fee

**TBD** 

Date

N80,000

**Duration** 

2 days

Time

10am - 2pm daily

Module

3

#### Intermediate HR Analytics - DSHRP II

 Building advanced analytics models for HR: Identifying drivers of employee engagement and other employee performance drivers **Pre-requisites** 

DSB I and DSHRP I

**Date** 

**TBD** 

Fee

N100,000

Duration

3 days

Time

10am - 2pm daily

Module

4

## Advanced HR Analytics - DSHRP III

- Building predictive models for HR:
- · Identify drivers of employee attrition
- Predict employee attrition
- Identify the optimal recruitment channels,

## **Pre-requisites**

**DSHRP II** 

Date

PII

**TBD** 

Fee

N100,000

Duration

Time

3 days 10am - 2pm daily

# Data Science for Public Sector





## Course Overview

The public sector makes numerous decisions daily. However, the public sector has not fully taken advantage of the prospects and beauty of analytics. This course will empower decision makers in the public sector on how to make reports, analyze data and make evidence-based decisions.

#### PwC's Data & Analytics Academy course for public sector is designed for:

- **Data Analysts**
- Public Sector Staff / Personnel
- Decision makers in the Public Sector

## **Course Modules**

Module

Data Science for Public Sector Beginners - DSP I

- General introduction to Data Science and its applications in Public Sector
- General introduction to PowerBI
- Connecting to multiple data sources
- Core data visualization concepts

**Pre-requisites** 

N/A

Fee

N100.000

**Duration** 

3 days

Date

**TBD** 

Time

10am - 2pm daily

Module

Data Science for Public Sector Intermediate - DSP II

- Data modelling and preparation
- Advanced DAX

**Pre-requisites** 

DSP I

Fee

N100,000 **Duration** 

2 days

Time

**TBD** 

Date

10am - 2pm daily

Module

Data Science for Public Sector Advanced - DSP III

- R scripting in PowerBI
- Python scripting in PowerBI
- Advanced DAX

**Pre-requisites** 

DSP I & II

Fee

N100,000

**Duration** 

3 days

**Date** 

**TBD** 

**Time** 



# Data Science for Tax Practitioners





## Course Overview

This course combines both tax technical skills, large data sets, and new technologies like visualization tools to draw insights and deeper understanding. This course will empower decision makers/tax managers and practitioners to make smart reports, analyze data and make evidence-based decisions.

#### PwC's Data & Analytics Academy course for tax practitioner is designed for:

- Data Analysts
- · Tax Practitioners
- Decision makers/Tax Managers
- Tax Auditors

## **Course Modules**

Module

Data Science for Tax Practitioners Beginners - DSTP I

- General introduction to Data Science and Tax analytics
- · Relational Databases
- · Connecting to multiple data sources
- Core data visualization concepts
- · Working with visualization tools
- · Case Studies

**Pre-requisites** 

Date TBD

N/A

Fee

N100.000

**Duration** 

3 days

Time

10am - 2pm daily

Module

Data Science for Tax Practitioners Intermediate - DSTP II

- Data modelling and preparation
- Advanced DAX
- · Automating routine reports

**Pre-requisites** 

Date

TBD

Fee

DSTP I

N100,000

Duration

Time

2 days

10am - 2pm daily

Module

3

Data Science for Tax Practitioners Advanced - DSTP III

- · R scripting in PowerBI
- · Python scripting in PowerBI
- Advanced DAX

**Pre-requisites** 

Date

DSTP I & II

TBD

Fee

N100,000

Duration

Time

3 days



# Data Science for Finance Professionals

07



## Course Overview

The financial sector generates and houses huge amount of data every second, converting this information to meaningful insights that would aid decision making is however important. This course will empower finance professionals and decision makers in the financial sector on how to make reports, analyze data and make evidence-based decisions.

#### PwC's Data & Analytics Academy course for financial professionals is designed for:

- **Data Analysts**
- Finance Professionals
- Decision makers in the Financial Sector

## **Course Modules**

Module

**Data Science for Finance Professionals** Beginners - DSFP I

- General introduction to Data Science and its applications in Finance and Fintech
- **Relational Databases**
- Working with Visualization Tools
- Real Time Analytics
- Core data visualization concepts
- Case Studies

**Pre-requisites** 

**Date TBD** 

N/A

Fee

N100.000

**Duration** 

Time

10am - 2pm daily 3 days

Module

**Data Science for Finance Professionals** Intermediate - DSFP II

- Data modelling and preparation
- Access Management/Control
- **Automating Routine Reports**
- Advanced DAX

**Pre-requisites** 

**Date** 

DSFP I TBD

Fee

N100,000

**Duration** 

2 days

10am - 2pm daily

Module

**Data Science for Finance Professionals** Advanced - DSFP III

- R scripting in PowerBI
- Python scripting in PowerBI
- Advanced DAX

**Pre-requisites** 

**Date** 

**Time** 

DSFP I & II

**TBD** 

Fee

N100,000

**Duration** 

**Time** 

3 days



# Contacts



Femi Osinubi Partner & Leader Data and Analytics, PwC West Africa +234 813 058 8959 femi.osinubi@pwc.com



Raphael Yemitan, Ph.D Associate Director Data and Analytics, PwC West Africa +234 803 200 3058 raphael.yemitan@pwc.com



Pelumi Oguntunde, Ph.D Manager Data and Analytics, PwC West Africa +234 806 036 9637 pelumi.oguntunde@pwc.com



Maritha Agwu, ACIPM Senior Associate Data and Analytics, PwC West Africa +234 803 598 9508 Maritha.agwu@pwc.com



## **PwC Nigeria offices**

## Lagos

Head Office Landmark Towers 5B Water Corporation Road Victoria Island P.O.Box 2419 Lagos, Nigeria T: +234 1 271 1700 F: +234 1 270 3108

#### **Annexe**

17 Chief Yesufu Abiodun Way Oniru Estate Victoria Island, Lagos T: +234 1 271 1700 F: +234 1 270 3108

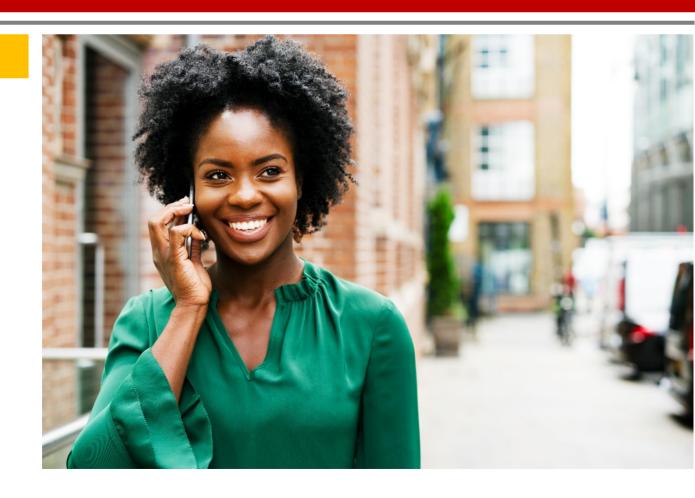
## **Abuja**

Second Floor, Muktar El-Yakub's Place Plot 1129 Zakariya Maimalari Street Opposite National Defence College (War College) Central Business District, Abuja T: +234 9 291 9301 - 4, 291 4588 F: +234 9 461 3747

## **Port-Harcourt**

35 Woji Road **GRA Phase II** Port-Harcourt, Rivers T: +234 84 571 513 F: +234 84 237 959

## You can reach us directly via





## About PwC

At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 155 countries with more than 284,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more by visiting us at www.pwc.com/ng

© 2020 PricewaterhouseCoopers Nigeria. All rights reserved. In this document, "PwC" refers to the Nigeria member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.