# Developing Your Data Skills Programme

## Level 3

### Section 1: Introduction to Data Skills and Programming (months 1 and 2)

**Pre-Recorded Workshop (1h)**

Introduction to Data Skills and Programming:

**Online learning (18h)**

### 1. Introduction

- **Data Science Foundation: Fundamentals (2019)** by Barton Paulson
  - [linkedin.com/learning](https://linkedin.com/learning) (3 hours 41 mins)

### 2. Programming and Excel

- **Learning Data Analytics** by Robin Hunt
  - [linkedin.com/learning](https://linkedin.com/learning) (1 hour 39 mins)

**Coding - Choose ONE:**

- **Master Advanced Excel Data & Analytics Skills**
  - [linkedin.com/learning](https://linkedin.com/learning) (12 hours)
  - Excel VBA: Managing Files and Data
  - Excel VBA: Process Modeling
  - Building a Dynamic Heat Map in Excel
  - Visualizing Geospatial Data with Power Map in Excel
  - R for Excel Users
  - Logistic Regression in R and Excel
  - Business Analytics: Data Reduction Techniques Using Excel and R

**OR:**

- **Master R for Data Science Pathway**
  - [linkedin.com/learning](https://linkedin.com/learning) (12 hours)
  - Learning R
  - Data Wrangling in R
  - R Essential Training: Wrangling & Visualizing Data
  - Social Network Analysis
OR:

**Master SQL for Data Science Pathway**
*linkedin.com/learning (12 hours)*
- Learning SQL Programming
- SQL Essential Training
- SQL: Data Reporting & Analysis
- Presto Essentials: Data Science
- Advanced NoSQL for Data Science
- SQL Tips, Tricks & Techniques

OR:

**Master Python for Data Science Pathway**
*linkedin.com/learning (12 hours)*
- Learning Python
- Python for Data Science – Essential Training Part 1
- Python for Data Science – Essential Training Part 2

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**Section 2: Statistics and Data Analysis (months 3 and 4)**

**Pre-Recorded Workshop (1h)**
*Statistics and Data Analysis:*

**Online learning (12h)**

**3. Statistics, Analysis and Data Mining**

Choose EITHER:

**a) R Essential Training Part 2: Modeling Data** by Barton Paulson
*linkedin.com/learning (3 hours 59 mins)*

**OR:**

**b) The Essential Elements of Predictive Analytics and Data Mining** by Keith McCormick
*linkedin.com/learning (1 hour 28 mins)*

**c) Data Science Foundations: Data Mining** by Barton Paulson
*linkedin.com/learning (4 hours 40 mins)*

**4. Managing Data Analysis**
*Managing Data Analysis – Johns Hopkins University Coursera (4-6 hours total)*
[https://bit.ly/1kJyX81](https://bit.ly/1kJyX81)
## Section 3: Presenting Your Data (months 5 and 6)

### Pre-Recorded Workshop (1h)

Presenting Your Data:

### Online learning (4h)

#### 5. Presentation Skills

- **a)** Learning Data Visualization by Bill Shander  
  linkedin.com/learning (3 hour 50 mins)  

- **b)** Creating Interactive Presentations with Shiny and R by Martin John Hadley  
  linkedin.com/learning (1 hour 53 mins)  
  AND:  
  Creating Reports and Presentations with RMarkdown and RStudio by Martin John Hadley  
  linkedin.com/learning (2 hours 40 mins)  

- **c)** PowerBI Essential Training (2020) by Gini von Courter  
  linkedin.com/learning (3 hours 20 mins)  

- **d)** Tableau Essential Training (2020) by Curt Frye  
  linkedin.com/learning (4 hours 36 mins)  

### Windup:

Total duration for workshops and online learning: 38h