Data Science

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Professional Foundations Programme

(your first 3 months)

What is Professional Foundations?

Professional Foundations is a foundational programme that helps young professionals develop the essential skills needed to excel in their careers.

Over 3 months, learners engage in a programme designed around practical skills and knowledge, specifically tailored to the modern tech workplace. Through a mix of individual projects, team-based challenges, and real-world applications, this programme builds a solid foundation for professional success.

Why is this Programme Important?

In today's job market, technical skills alone are not enough for a successful career. Employers seek well-rounded professionals who possess both technical know-how and soft skills—like communication, problem-solving, and leadership.

The Professional Foundations programme bridges this gap, empowering learners to navigate complex work environments with competence and confidence. This programme provides a complete toolkit for building the vital skills professionals need to succeed in a career in any industry.

Career Readiness

Learners gain critical professional skills that help them stand out in the workforce and succeed in tech-focused roles.

Collaborative Learning

Learners work in squads, encouraging peer-to-peer learning, teamwork, conflict resolution, and a culture of continuous growth. This experience also helps build a professional network, and networking skills, that will help learners grow their future careers.

Practical Application

The programme features hands-on exercises and deliverables that allow learners to immediately apply their newly acquired skills, making learning both engaging and relevant to the real world.

Key Components of the Programme

Professional Foundations emphasises 8 key Meta-Skills across Leadership, Analysis, and Execution—essential skill sets for thriving in today's workplace.

Tech Skills

Managing Complex Tasks

Entrepreneurial Thinking

Leading Self

Critical Thinking

Quantitative Reasoning

Leading Others

14 Months (20-40 hrs per week)

What is Data Science?

Data Science involves developing proficiency in data analysis and interpretation through hands-on training in Python programming, SQL databases, and tools like Power BI. This 14-month immersive learning programme (3 months of Professional Foundations + 11 months of Data Science) equips individuals to build data infrastructure and apply data-driven methods for analysis and decision-making, regardless of prior experience.

Why Data Science?

There is a growing need for skilled professionals capable of leveraging data analytics to drive strategic decisions across various industries. Our Data Science programme is meticulously designed to shape budding data scientists with hands-on projects that cultivate real-world problem-solving abilities.

Programme Objectives

- Prepare learners for entry-level roles in data science and related fields by equipping them with essential skills.
- Ensure learners are capable of working with unstructured datasets to extract meaningful insights.
- Offer expert mentorship and a supportive learning environment for successful completion.

Why Choose Us?

Professional Foundations

Before starting the Data Science programme, learners complete our 3-month foundational training, where they acquire vital skills such as self-awareness, teamwork, communication, and critical thinking, essential for success in tech.

Future-Ready Training

Our programme caters to both beginners and seasoned professionals, offering foundational skills that are not only in demand today but also adaptable to future technological shifts.

Real-World Application

We prioritise practical, hands-on projects, allowing learners to directly apply their newfound skills to solve authentic data challenges and develop critical problem-solving acumen.

Tools Learners Get to Use


Google Sheet


PowerBI

MySQL

Jupyter Notebook

scikit-learn


Anaconda


Python

Recommended Computer System Requirements for Data Science programme:

- **OS:** Windows 10 (64-bit) or later
- **RAM:** 8 GB minimum (16 GB recommended for larger datasets)
- **Storage:** SSD with at least 256 GB free space
- **Processor:** Multi-core (Intel i5 / Ryzen 5 or better)
- **Display:** 1920 × 1080 resolution:

Note: Learners whose systems fall below these requirements often experience installation failures, sluggish performance, and an inability to proceed with their programme.


14-Month
Programme


100%
Digital (Online) Learning programme


20-40 hrs
Per Week

Specialisation

Assessments
Weekly Assessments

Learning Webinars
Weekly Learning Webinars

Content Breakdown

Data Analytics Track

- Explore 101
- Preparing Data
- Querying Data
- Visualizing data

Python Track

- Introduction to Python
- Python Data Structures
- Introduction to packages in Python
- Python Visualisations
- Statistics with Python

Machine Learning Track

- Regression
- Natural Language processing and classification
- Unsupervised Learning