1 COURSE OUTLINE

Course: **Fundamentals of Business Intelligence and Data Analytics for Business Professionals**

Contact hours: **24**

Prerequisite: **A foundation in both statistics and Excel.**

1.1 Abstract

The Caribbean is in the midst a technological revolution, bombarded with advancements such as big data, machine learning, cloud technology and AI. Local and regional companies from software to finance are starting to mimic their international counterparts in using data analytics not just to supplement but to dictate their business.

We have seen the impact of data from Google's targeted ads to Amazon's recommendations, data driven decision making is more than just a buzz word. Soon it will be a requirement for any business to succeed in our ever increasingly connected world. But to make sense of this vast untapped resource of data in the Caribbean relies on a breath of technical skills and business acumen. The individuals tasked with this lay at the forefront of a company's data, they are Data Analyst.

This course will serve as a gateway to introduce the core concepts and tools a data analyst uses as well as the logical and creative thinking associated with analytics to ensure you can take a company to the next level. Whether you're forecasting trends in finance, predicting the next quarter's performance or advising stakeholders' action this course will prepare you to take the first steps as a data analyst

1.2 Target Audience

Individuals aspiring to enter the field of data analytics, leverage data to maximize company performance or start their learning journey towards understanding data science and its potential to revolutionize industry. Whether you're a business professional, entrepreneurs, managers, administrative/IT/clerical staff this course is for you.

1.3 Learning Outcomes

Fundamentals of Data

- Students are expected to attain a full understanding of the s6 step data analytics Process as well as a foundational understanding of data (data growth and complexity)
- Learners will appreciate the data analytics position within a local, regional and international context as well as the role of analyst within various industries

Statistical Data Analysis

- Students will Appreciate the capacity of data analysis predicated on the dataset size and characteristics limited only by the tools available
- Students will Understand concepts associated with probability and statistical testing when approaching

Data Cleaning and Preparation, Mastering Excel

- Students will gain an understanding of the common approach to data cleansing, its
- importance and efficient practices
- Students will gain a capacity and fluency in the use of excel for generating reports,
- cleaning data and automating their workflow for reporting

Big data and Algorithms

- Students will gain an understanding of the common approach to data handling Big Data
- Students will gain a capacity to analysis

Data Management and Storage, Mastering SQL

- Students will gain an understanding of data management procedures and the importance of data flow within a company
- Students will appreciate concepts of ethics and privacy
- Students will gain an understanding of core database topics and a basic use of SQL

Data Visualization, Mastering Tableau

- Students will understand the importance of data visualization and appreciate the history regarding prevailing common techniques
- Students will apply data visualization techniques to create compelling narratives using tableau

Capstone Project and Job Preparation

- Utilize all previous knowledge to a project and host project as a demonstration of student's skill and capacity as a data analyst